

# **EUWID**

## **Special: Wood-Based Panels**



*Mergers & Acquisitions – Investments*

*Particleboard – MDF/HDF – OSB*

*Surface materials – Kitchen furniture*



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(photo credit: Oscar Ruf)

## *Markets navigating choppy waters again*

The wood-based panel and surfaces industry has displayed signs of weakness over the past few months, echoing developments in other sectors of the economy. The decor paper, decor printing and foil businesses have suffered even more of a slump than particleboard, MDF/HDF and OSB as inventory effects are coming into play more for surfaces. An improvement in the supply situation and the end of a long-lasting upswing in prices have prompted many buyers to curb their purchasing activity, which used to be more long-term in nature, and reduce their inventories at the same time. Cooler demand as a result has been exacerbated by the economic downswing. The collapse of formerly key export markets, such as Turkey, also had ramifications for a variety of segments.

The tides have turned on raw material markets, as well. Rising prices for chemical feedstock, such as methanol, melamine and titanium dioxide, have given way to a downward trend. This improvement on the cost front has combined with slowing markets for wood-based panels and surface materials to usher in price adjustments that are having an impact on businesses' revenues and earnings.

The surfaces segment has encountered particular changes within the industry over the past few months. Following transactions in rapid succession in the laminate industry, the decor printing business is now seeing more movement, as well. The Interprint group is up for sale, and Surteco has experienced changes in its shareholder structure.

By contrast, the situation has calmed a little in the wood-based panel industry. Masisa has completed its withdrawal from Argentina, Brazil and Mexico. Roseburg has sold another MDF mill. In Europe, Ikea's Lure particleboard mill is now under new ownership. On the other hand, there is no news of progress being made in the hunt for a new owner for the Pfeleiderer group.

This fifth edition of EUWID Special: Wood-Based Panels once again provides an overview of the latest developments in the wood-based panel industry and related sectors. The next two issues will be published in June and September.

I look forward to your feedback and suggestions. You can contact me by emailing [aruf@euwid.de](mailto:aruf@euwid.de).

Yours sincerely  
Andreas Ruf  
Publisher



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The MDF/HDF joint venture  
Laminate Park GmbH & Co. KG  
is set to cease operations at its  
site in Heusweiler-Eiweiler by  
the end of 2019.  
(Photo credit: EUWID)

## Imprint

**Publisher and Editor**  
Andreas Ruf

"EUWID Special: Wood-Based Panels"  
is published by  
EUWID Europäischer  
Wirtschaftsdienst GmbH  
Bleichstrasse 20-22  
76593 Gernsbach, Germany  
Tel.: +49-7224/9397-120  
Fax: +49-7224/9397-910  
Email: service@euwid.de  
www.euwid.de  
www.euwid-holz.de  
(German website)  
www.euwid-wood-products.com  
(English website)

## Advertising

EUWID Europäischer  
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**Printed by**  
Stober GmbH

Single copies: €25  
10 copies: €75

"EUWID Special: Wood-Based Panels" is a  
special edition of our weekly newsletter  
"EUWID Wood Products and Panels".  
Subscription price of EUWID Wood  
Products and Panels (50 issues per year):  
Print subscription €640 (three months trial  
subscription €190), Premium subscription  
€740 (€215), plus VAT and postage.

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## Ten CPS+ presses put into operation

By the end of 2018, Dieffenbacher GmbH Maschinen- und Anlagenbau had sold a total of 20 of the CPS+ continuous presses it had presented at the Ligna 2015. According to Dieffenbacher, ten presses are already up and running. The first unit started up at Kronospan CRO d.o.o. of Bjelovar, Croatia, on 1 October 2016; the forming and pressing line with CPS+ installed there replaced a multi-opening line. The next two CPS+ systems were put into operation at works of Metro-Ply Group of Nonthaburi, Thailand. The particleboard line installed at the company's Prachinburi works produced its first panel at the end of March 2017. June marked the start of production on the THDF plant at Advance Fiber Co. Ltd. of Kanchanaburi, also part of Metro-Ply Group.

The CPS+ systems commenced operation in September and October 2017 at Swiss Krono AG of Menznau, Switzerland, and Panel Plus MDF Co. Ltd. of Hat Yai, Thailand, respectively. The CPS+ systems delivered to other companies such as Placas do Brasil S.A. (Pinheiros, Brazil), Kronospan Luxembourg S.A. (Sanem, Luxembourg), and S.B.P. Panel Industries Co. Ltd. (Surat Thani, Thailand) also produced their first boards last year.

The CPS+ units sold so far provide Dieffenbacher with references for all panel

types (particleboard, MDF/HDF, OSB) and all panel widths. Particle board is to be produced on eight of the total 20 plants, three are earmarked for straw particleboard. Seven CPS+ systems will be used for MDF production, and one for OSB. The panel type has not yet been disclosed for a CPS+ ordered by the Kronospan group for a project in eastern Europe.

Six of the CPS+ sold so far have been set up in Europe. One system is heading for Turkey. Thailand is the biggest single market with five sold presses. Four units are being supplied to China; besides the three straw-particleboard plants for Wanhua Ecoboard, Dieffenbacher also sold a first THDF line with CPS+ there last year. A CPS+ is being set up in North Africa for MDF production. South America is represented with two units in the reference list for the CPS+ system. In North America, the first CPS+ has been started up at the particleboard works built by Arauco North America in Grayling, Michigan.

The longest press to date has been sold to Kronospan Luxembourg. The CPS+ ordered by the company for the replacement investment project at the Sanem OSB works is 57.9 m long. In contrast, a press with a length of 14.5 m and a width of 6 ft will be used at the works planned by Panneaux d'Algérie S.à.r.l. of El Tarf, Algeria. □



CPS+ at Kronospan's Bjelovar plant

(Photo credit: Dieffenbacher)

## Siempelkamp Qingdao lands three new orders

Siempelkamp Qingdao Machinery & Equipment Co. Ltd., which is part of the Siempelkamp group and based in Qingdao, Shandong Province, has sold three partial or complete lines to make MDF in China during 2018. Thus the company has won five direct orders until the end of 2018. The first two contracts had been awarded by the Chinese firm Lian Jiang Huasen Wood Industry Co. Ltd. at the end of 2016 and by the Thai company Vanachai Group Public Company Ltd., headquartered in Bangkok, in October 2017.

Xinyi Dake New Materials Co. Ltd. ordered a forming and press line with a 4ft x 42.1m continuous press, final assembly and a warehouse system from Siempelkamp Qingdao back in February. The line is to make MDF 12-40 mm thick suitable for milling and have an annual capacity of 144,000 m³. Commissioning is set to happen in April 2019.

The contract awarded by Jiangsu High-Hope Arser Co. Ltd. in July comprises an EcoSifter, a mat pre-heating system and a forming and press line with an 8ft x 28.8m ContiRoll press. The line can make MDF 1.5-40 mm thick and have a feed rate of up to 2,000 mm per second, and thus have an annual capacity of approximately 300,000 m³. Delivery is to commence in April 2019, with commissioning slated to happen in January 2020. Until now, Jiangsu High-Hope Arser has made plywood, blockboard and laminated MDF; the company intends to manufacture raw MDF, which it has purchased from other firms until now, by installing the new production line.

Linyi Huan Ge Co. Ltd. ordered a forming and press line with a 9ft x 28.8m ContiRoll press, final assembly and fully automated inventory system in September. The line is to make products 1-9 mm thick and has an annual capacity of 315,000 m³. The first machinery will be delivered starting in June 2019 and the first piece is to be made as soon as November 2019. Linyi Huan Ge is owned by the plywood manufacturer Linyi Fu Da Wood Co. Ltd., which will start making MDF as a result of this project. □



## ***FMT taken over by Kurt Schuhmacher***

Kurt Schuhmacher Industriemontagen GmbH & Co. KG of Neukirchen-Vluyn, Germany, geared partly to assembly and refitting projects in the wood-based panel industry, took over the assets of FMT Instandhaltung GmbH of Meerbusch, Germany, on 1 February 2019 through an asset deal. FMT Instandhaltung had filed for the opening of insolvency proceedings before Düsseldorf district court in November 2018. The provisional insolvency administrator appointed on 28 November, the Düsseldorf lawyer Georg Kreplin, was able to conclude the subsequent search for a buyer within the space of two months. The first contact with Schuhmacher Industriemontagen had been established at the beginning of December.

One of the last projects that FMT Instandhaltung had been involved in was the assembly of the continuous forming and press line set up at Kronospan Luxembourg S.A., Sanem, as a replacement for the existing multi-opening OSB-plant. Difficulties in handling the project contributed to FMT Instandhaltung's payment difficulties. This was unable to be com-

pensated for by the superordinate company Christof Industries GmbH of Graz, Austria, because another project, the construction of the Swiss Krono Group's new MDF/HDF plant at the laminate-flooring works in Barnwell, was delayed as well.

Roughly 60 of FMT Instandhaltung's former 70 employees have switched to Kurt Schuhmacher Industriemontagen, raising the number of employees in Germany to a total of 123. FMT Instandhaltung's Meerbusch site is to continue to be operated. Another 18 people work at the Skawina facility in Poland, which trades under the name of Kurt Schuhmacher Polska Sp. z o.o. The number of employees there is to be raised to 30 in the medium term. In addition, the US subsidiary KS Industrial Corp. of Alpharetta, Georgia, founded at the end of 2018, opened for business in January.

One of the focal points of Kurt Schuhmacher Industriemontagen's activities is in North America at the moment where the company is currently assembling the MDF production line of CalPlant I LLC in Willows, California, for Siempelkamp

Maschinen- und Anlagenbau GmbH. In the OSB segment, a project-planning contract was recently concluded for a new OSB line at an existing facility. Kurt Schuhmacher Industriemontagen is also participating in the tendering process for assembling the particleboard works in Lexington, North Carolina, planned by the Egger group of St. Johann, Austria.

In Europe in the last two years, Kurt Schuhmacher Industriemontagen had been involved in setting up the particleboard works built by the Polish container furniture manufacturer Fabryki Mebli Forte S.A. of Ostrów Mazowiecka at its Suwalki facility, the continuous production line installed in Fuentes, Cuenca, by Losán Pina S.A., part of the Spanish group Grupo Losán of La Coruña, as a replacement for a multiple-opening plant, and the Egger particleboard works in Biskupiec, Poland. The company is currently assembling the meanwhile fifth short-cycle press at Egger Panneaux & Décors of Rambervillers, France. In Horn-Bad Meinberg, Kurt Schuhmacher Industriemontagen is involved in dismantling the particleboard plant shut down permanently by Sonae Industria SGPS S.A. of Maia, Portugal, in the first quarter of 2014. □

## ***Siempelkamp sells OSB line to China***

The Chinese wood-based panel manufacturer Jiangsu Hui Dian New Materials Co. Ltd. of Shuyang, Jiangsu province, placed an order with Siempelkamp Maschinen- und Anlagenbau GmbH for a forming and press line for OSB along with various upstream and downstream plant components in the first quarter of 2019.

The plant will be equipped with five forming machines, enabling wood-based panels with a central layer of coarse particles and fine-particle surface layers to be manufactured besides standard OSB. These panels are to be subsequently laminated and then used mainly producing furniture.

Besides the forming station, the contract awarded to Siempelkamp also

includes an 8.5 ft x 38.8 m ContiRoll Generation 8, sifting and reducing the size of chips and particles with an EcoPulser, glue dosing and gluing station, a double diagonal saw, and various SicoScan quality-control systems as well as the "Prod-IQ" process-control system. According to Siempelkamp, the plant, geared to an annual capacity of around 300,000 m<sup>3</sup> is to be set up from spring 2020. □

## ***Siempelkamp plant now in operation at Yekalon***

At the beginning of February 2019, Siempelkamp Maschinen- und Anlagenbau GmbH produced the first panel on the MDF/HDF thin-panel plant installed at Yekalon-Jiufangyuan Panels Inc. of Huanggang in Hubei, China. The order

had been placed in the fourth quarter of 2016. Start of assembly that had actually been scheduled for summer 2017 ultimately took until April 2018. According to a recent release from Siempelkamp, the plant is able to produce panels starting from a thickness of 1.0 mm, enabling to achieve an annual capacity of 300,000 m<sup>3</sup>. At the time the order had been placed, production capacity had been given as 250,000 m<sup>3</sup>.

Siempelkamp supplied components such as the glue-dosing unit with Ecoresinator, a compacter including a mat-preheating system, a 9 ft x 33.8 m ContiRoll, the finishing line, and the "Prod-IQ" process-control system. Büttner Energie- und Trocknungstechnik GmbH supplied a flash tube drier, and CMC Texpan s.r.l. of Colzate, Italy, a fibre sifter. □

## Wemhöner raises group revenues to €140m

Wemhöner Surface Technologies GmbH & Co. KG, based in Herford, Germany, delivered a growth in consolidated group revenues to almost €140m in the 2018 financial year. This represents an increase of about 16% compared with 2017's total of approximately €120m. It was also higher than the spring forecast of €130m-135m. By way of comparison, group revenues fell short of the original goal of €130m in 2017. The company attributed this to longer lead times and resulting delays in commissioning and handing over projects. Wemhöner had generated revenues of some €110m in 2016. Wemhöner intends to post similar revenues to 2018 this year amidst what is still a relatively large order cushion.

The holding firm, based in Herford, Germany, booked revenues of over €100m for the first time in 2018, a rise of 10% compared with the previous year. The company did not disclose any exact figures for these two years. In 2016, Wemhöner Surface Technologies GmbH & Co. KG's revenues passed the €90m mark for the first time since 2006 (€91.2m) with a total of €95.0m. Revenues had taken a dive from 2007 to 2010 in the wake of the global economic crisis. They then rebounded sharply in the next three years after bottoming out at €42.2m in 2010. Wemhöner had booked annual revenues of €85m-90m between 2013 and 2015.

Wemhöner (Changzhou) Machinery Manufacturing Co. Ltd., which was founded in 2006 and is headquartered in Changzhou, Jiangsu Province, booked revenues of a good €36m last year. This company, which initially only made membrane presses for the Chinese market and added short-cycle presses to its product range in March 2009, now books some 30% of its revenues on the export market. The export rate stands at around 90% in Herford. The group employs about 500 workers, consisting of 330 or so in Herford and 170 in China.

The reorganisation of production and assembly areas at its Herford headquarters starting in the first half of 2018 should be completed by mid-2019, as planned. Part manufacturing is to be pooled in a separate enlarged 5,000 m<sup>2</sup> section of the factory on the other side of the road that was created by building two new halls. The 14,000 m<sup>2</sup> headquarters will thus primarily be used to assemble and pre-commission presses and surface lines made in Herford. Construction work on a long-planned second factory in China - which will do business as Wemhöner Changzhou Technologies Co. Ltd. and make printing and lacquering lines - is to commence this summer after delays in recent years. Completion is slated to happen in summer 2020. □

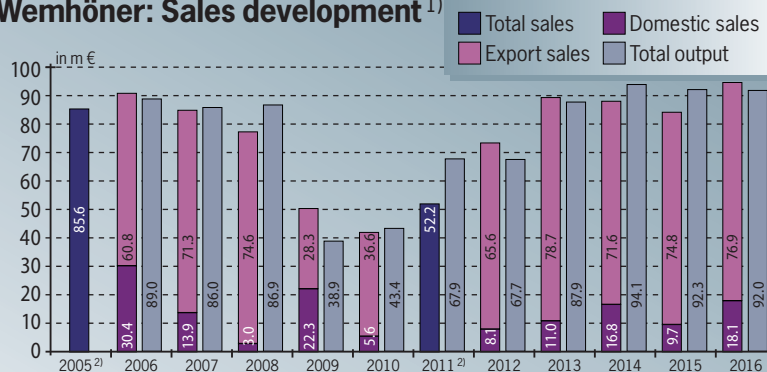
## Deuring holds all shares in Deurotech Group again

The private equity firm Hannover Finanz GmbH, headquartered in Hanover, Germany and Vienna, Austria, sold a 74% stake that it acquired in Deurotech Group GmbH (DTG), based in Langenfeld, Germany, in late April 2015 to WD DTG Beteiligungsgesellschaft, based in Bregenz, Germany, with effect from 7 December 2018. WD DTG is owned by Werner Deuring. It used to own a 26% stake, but now has all of the shares in Deurotech Group in its hands. Werner Deuring has been Deurotech Group's sole shareholder again since closing. He also remains the sole managing director.

The Deurotech Group includes Vits Technology GmbH (Langenfeld, Germany), a company focusing on treating, lacquering and coating technology, and the dosing, weighing and mixing systems and adhesive and impregnating resin production systems specialist IFA Technology GmbH (Rain am Lech, Germany), the exhaust air technology firms Wessel-Umwelttechnik GmbH (Hamburg, Germany) and Airprotech s.r.l. (Magenta, Italy) as well as Deurotech America Inc., a US sales and service entity based in Charlotte, North Carolina that was founded in November 2016.

Wessel-Umwelttechnik had been completely acquired by the Deurotech Group in September 2014, a good six months before Hannover Finanz came on board. The purchase of a majority stake in Airprotech closed in early February 2018. Its environmental technology unit, which has so far encompassed Wessel-Umwelttechnik and Airprotech, is to be expanded in the future. Deurotech Group is pursuing a strategy drawn up when Hannover Finanz got on board of expanding its existing portfolio through targeted acquisitions and unlocking synergies in the products it offers and buyer industries it serves. Conversely, in December 2016, Deurotech Group sold the additive production and distribution specialist Deurowood Produktions GmbH, based in Hard, Austria, to Pinova Capital, headquartered in Munich, Germany, retroactively to 1 January 2016. □

### Wemhöner: Sales development <sup>1)</sup>



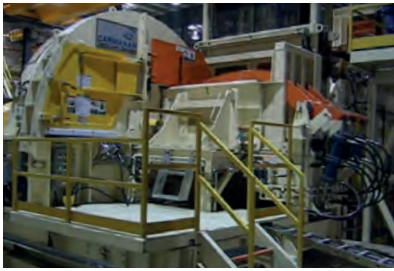
1) Wemhöner Surface Technologies GmbH & Co. KG, without Wemhöner Changzhou Machinery Manufacturing Co. Ltd.

2) For the years 2005 and 2011, total sales were not differentiated between domestic and export sales.

Source: EUWID, according to information from the Wemhöner annual reports



## ***Carmanab sold five stranders to China in 2018***



(Photo credit: Kadant Carmanab)

The US machinery manufacturer Kadant Inc., based in Westford, Massachusetts, has announced that its Wood Processing Systems division landed another strander order from China in the fourth quarter of 2018. The company said that the customer in question is a furniture manufacturer. No other order details have been released to date. Chinese customers thus ordered five stranders in four separate contracts during 2018. One OSB strander each is also going to Thailand and Chile. The orders landed in previous quarters included both stranders and roundwood feed machinery. □

## ***Raute reports strong growth in new plant business***

The Finnish plant and machinery manufacturer Raute Oyj, based in Nastola, raised its revenues to a new record high of €181.0m (2017: 148.1m) in the 2018 financial year, a 22% year-on-year improvement. The new plant business experienced disproportionately strong growth with a 28% hike to €126m (99m). Around two thirds of this figure came from deliveries to plywood manufacturers, with the other third generated from machinery and plants to make LVL. Technology Services revenues climbed 11% to €55m (49m).

In terms of the different sales regions, Raute booked 43 (56) % of its revenues in Europe. South America also lost share to 3 (4) %. Other regions enjoyed growth. While business with Russia improved to a share of 26 (24) %, North America and the Asia-Pacific regions saw their shares increase to 18 (14) and 10 (2) % respectively. □

## ***Grecon enters measuring system partnership***

Fagus-GreCon Greten GmbH & Co. KG, that specialises in fire protection and measuring technology, has forged a strategic partnership for spectroscopy-based measuring systems with the measuring technology producer Apos GmbH, headquartered in Wedel, Germany. In addition to the partnership for market development announced on 10 October 2018, the companies also want to work together on service and support in future. Joint product developments are also planned.

Apos makes spectroscopy systems developed especially for the wood-based panel, pulp and paper industries. The manufacturer said that these systems can measure wood moisture as well as ash content and calorific value. The ReceivingOPT measuring systems are used for purposes including roundwood acceptance. Wood chips, sawdust and recycled wood can also be checked at the point of receipt.

Its ProcessOPT systems are used to determine substances and the hardwood/softwood ratio in order to optimise the process during wood-based panel production. Moisture measuring systems deliver a high level of measuring accuracy across the entire calibrated measurement bandwidth that may also include fibre saturation, according to the company. Apos noted that dryer control can be optimised, for instance, by using separate measuring systems on the wet and dry side. At customer's request, a variety of parameters can be identified and evaluated using a measuring system. Near infra-red (NIR) technology is mainly used in the different systems.

GreCon also sells a system based on NIR technology: the IR 5000 moisture analyser. Since 2013, the firm has also had a measuring system based on microwaves in its portfolio to determine moisture. The MM 6000 moisture meter analyser was developed and produced by Döschner Microwave Systems GmbH, based in Hamburg, Germany, in which GreCon has held a minority stake since 1 July 2017. GreCon's measurement division

also includes a measuring system based on x-ray technology that can gauge the distribution of base weight on the forming belt and the weight of raw board after the press when making wood-based panels. Besides detecting splits using ultrasound technology, it also offers contact and contactless thickness gauges for use in final assembly. □

## ***Dürr putting acquisition plans on ice for now***

As company valuations are very high at present, Dürr AG of Bietigheim-Bissingen has put its deliberations concerning another major acquisition on ice in autumn 2018. Similar to the takeover of Homag Group AG of Schopfloch completed in 2014, Dürr's intention behind such an acquisition was to establish another mainstay outside its existing core fields of business. In an investor presentation given in August, Dürr had named mechanical engineering, automation, measurement systems, and environmental technology as potential target sectors for such a "Homag II" acquisition. The target company was to have a leading competitive position on a global scale too and generate annual sales revenue of up to €1.5bn. Considerable improvements were to be achieved in results by integration into the Dürr group and the ensuing potential synergies. An acquisition of a company requiring restructuring was ruled out by Dürr, however. In the presentation, Dürr also drew attention to the fact that the acquisition strategy was only to be fleshed out with reasonable company valuations.

By putting the acquisition plans on hold, Dürr also adjusted its long-term corporate targets at an investor conference held on



(Photo credit: Dürr)

18 October. According to the previous plans, sales revenue was to have been raised to up to €5bn by 2020 by means of the acquisition strategy; the group's intention was to achieve an EBIT margin of 8-10%. The new sales revenue target for 2020 is €4.0-4.2bn; sights have been set on an EBIT margin of 7-8%. The sales revenue targets given for 2018 remain unchanged, however. Receipts of orders are expected to amount to €3.650-3.950bn, and sales revenue €3.750-3.950bn. □

### Five more engineering firms join Adamos

At the start of 2019, Adamos (Adaptive Manufacturing Open Solutions), a joint venture created by Dürr AG, based in Bietigheim-Bissingen, Germany, with four partners from the world of machinery and plant construction and software with effect from 1 October 2017 unveiled five new partners that have been added since autumn 2018. According to a statement published on 23 January 2019, the open Industrial Internet of Things (IIoT) platform of the same name will be used by the mechanical engineering firms Illig Maschinenbau GmbH & Co. KG (Heilbronn), Mahr GmbH (Göttingen), Oerlikon Textile GmbH & Co. KG (Remscheid) and Weber Maschinenbau GmbH (Breidenbach) in the future. The fifth partner - a well-known engineering company - was not named. Dürr reported that the Adamos group now has 12 members from the machinery, plant and component construction business.

The founding members of Adamos GmbH, headquartered in Darmstadt, Germany, were Dürr together with the machinery builders DMG Mori AG (Bielefeld, Germany) and ASM Pacific Technology Ltd. (George Town, Cayman Islands),



(Photo credit: Adamos)

the optical system group Carl Zeiss AG (Oberkochen) and Software AG, based in Darmstadt. Each partner held a 20% stake. The mechanical engineering firms Engel Austria GmbH (Schwertberg, Austria) and Karl Mayer Holding GmbH & Co. KG (Obertshausen, Germany) came on board in the first half of 2018, meaning that seven partners now hold equal shares in Adamos.

Adamos is a manufacturer-neutral IIoT platform specifically tailored to the mechanical engineering sector and its customers. It aims to allow users of machinery and production machines to digitalise their production in a flexible and simple manner. Machines can be connected via this platform, allowing them to share information over the Internet. With the help of data generated by Adamos, users can use digital services and thus enhance the efficiency of their manufacturing operations. □

### SCM Group buys Diversified Machine Systems



(Photo credit: DMS)

The Italian machinery producer SCM Group S.p.A., based in Rimini, has bought the US CNC machine producer Diversified Machine Systems LLC (DMS), headquartered in Colorado Springs, Colorado. The company makes and develops standard machines with three or five axes as well as customer-specific milling and machining solutions for items including plastic, composites and wood. Tanya Williams was named CEO in connection with the deal, having served as DMS's chief financial officer (CFO) since October 2011. Founder Patrick Bollard will continue to manage the development of DMS's existing portfolio of products as chief technology officer (CTO) in the future. Both will report to Matt Dietrich, CMS North America's CEO. SCM

Group's plastic and composite material machining activities are pooled under the CMS umbrella. Its woodworking machinery are sold under the SCM umbrella brand. DMS has a staff of 120 workers at its sole location in Colorado Springs and generates full-year revenues of about US\$30m. A DMS statement put SCM Group's full-year revenues for 2018 at €700m and its workforce at about 4,000 people.

SCM Group generated revenues of €650m in the 2017 financial year. This was a good 8% higher than 2016's figure of nearly €600m. This growth in revenues was fuelled by factors including its July 2017 purchase of a stake in the CNC machine producer HG Grimme Systech GmbH, based in Wiedergeltingen, Germany. A 51% stake in the company, which mainly develops and makes milling machines and cutting technology for machining plastic, composite materials and wood, should primarily boost its plastic and composite material machining operations. □

### Chinese CSG Group acquired Maka Systems

The Chinese technology Group CSG Smart Science & Technology Ltd., which is based in Shanghai and listed on the Shenzhen Stock Exchange, wants to become the owner of the CNC system manufacturer Maka Systems GmbH, headquartered in Nersingen, Germany. An agreement to this effect was inked on 23 August 2018; the transaction closed by the end of October. The sellers are the private investors Dr Paul Lerbinger and Dr Thomas Rubbe who had acquired the firm from the private equity firm Proximity Capital Partners GmbH, based in Ummendorf and Frankfurt, Germany, in October 2013. Proximity Capital Partners had purchased the company together with Dr Lerbinger as a co-investor in a transferred reorganisation in May 2010; the firm was then renamed Maka Systems. Its previous incarnation Maka Max Mayer Maschinenbau GmbH had filed an application for the opening of insolvency proceedings on 8 March 2010 after a sharp downturn in revenues and earnings in the 2009 financial year. □





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*Mechanical engineering sector as a whole will end up falling well short of the forecast*

## *VDMA woodworking machinery association sticking to production forecast for 2018*

**The Woodworking Machinery Association within the German Mechanical Engineering Industry Association (VDMA), based in Frankfurt, Germany, is sticking to its forecast of an 8% growth in production last year.**

This projection had been issued in October 2017. The German woodworking machinery industry would thus have increased its production from €3.18bn in 2017 (+10.4%) to €3.43bn in 2018 as a whole. The association within the VDMA bases this estimate on figures published to date by the German Federal Statistical Office for the period up until the end of September. The German woodworking machinery industry raised its output by roughly 10% in the first nine months combined when compared with the prior-year period - a similar growth rate to 2017. The VDMA association estimated that the assumed level of production in 2018 will be roughly maintained this year.

The German woodworking machinery industry's exports increased by 3.6% to

about €1.7bn up until the end of September, according to figures from the German Federal Statistical Office. The VDMA association expects total exports to reach €2.42bn in the full year based on this figure. This would correspond to a growth of around 3% compared with the previous year's exports of €2.35bn.

Exports within Europe edged 4.7% higher to €980m in the nine-month period, according to the German Federal Statistical Office. Shipments to Poland experienced relatively strong growth. Exports to Italy also improved, whereas woodworking machinery deliveries to France fell lightly and shipments to the UK dropped a little more. North American exports leapt another 20.2% to €273m as several major wood-based panel projects were processed.

The strong growth in exports to Asia in recent years gave way to a 6.5% decrease to €348m in the first nine months of last year. The VDMA association primarily attributed this turn of events to a base effect since wood-based panel projects secured

in South-East Asia in 2016 and 2017 had resulted in a relatively high starting level. On the other hand, the Chinese market remained strong last year. The VDMA association believes that the Chinese market will also undergo a correction in 2019 since the slowdown in Chinese property markets and the trade war with the US are already curbing investment activity in China's wood, wood-based panel, furniture and building elements industries. It is also evident that investment projects are starting to be transferred to other Asian countries. Exports to Latin America dropped by 7.4% to €59m in the first nine months combined. Shipments to Oceania tumbled by 23.6% to €21m. By contrast, exports to Africa leapt by 39.5% to €16m.

In contrast to the woodworking machinery industry, production of Germany's mechanical engineering sector as a whole will end up falling well short of the forecast made by VDMA. The association had originally anticipated a 5% growth in output. The German Federal Statistical Office in Wiesbaden had registered an increase in production to the tune of 3.7% for the first ten months of the year. However, the final two months of the year ended up being much worse than one year earlier. This downturn is the result of mounting uncertainty about the economic outlook and of mechanical engineering companies battling a shortage of material, staff and capacity.

According to the VDMA, the German mechanical engineering sector's order intake had climbed by 5% in real terms in 2018 as a whole. Business within Germany (+6%) fared a little better than the export market where German companies landed 4% more orders. The VDMA announced that the smaller growth in exports was fuelled by the high underlying level registered in 2017. On the other hand, business within Germany had not picked up considerably until the second half of 2017. □



Woodworking machinery production grew by 8% in 2018.

(Photo credit: EUWID)



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## *Commissioning of several saws for Kronospan, Arauco, Homanit and Kastamonu*

# *Anthon delivers first high-performance saw to Asian wood-based panel industry*

**Anthon GmbH Maschinen- und Anlagenbau, a plant manufacturer specialising in cut-to-size and loading systems based in Flensburg, Germany, has delivered its first high-performance through-feed saw to South-East Asia in the past few weeks.**

This type of technology, which was added to its portfolio in 2014, has so far mainly been delivered to major European wood-based panel manufacturers, especially to the Kronospan group. The Thai particleboard manufacturer Green River Panels Thailand Co. Ltd. is the first customer in South-East Asia. With a daily capacity of up to 2,800 m<sup>3</sup>, the cut-to-size saw has been installed since mid-February behind a continuous particleboard line from Siempelkamp Maschinen- und Anlagenbau GmbH, based in Krefeld, Germany, installed in Trang. Commissioning is slated to happen in the middle of 2019.

Boards made by this type of machine first go through the sanding line and lon-

gitudinal trim saw. Bundles are then put together and split cross-wise. Anthon said that this allows for a high degree of cutting accuracy and high throughput. Kronospan has so far used this type of machinery at a particleboard mill doing business as Falco CC, based in Szombathely, Hungary, and at an OSB mill run by Kronospan Romania S.r.l., based in Brasov, Romania. In November 2018, a sanding/sawing line installed behind the new OSB line started operating at Kronospan Luxembourg S.A., based in Sanem, Luxembourg, which will also ultimately cut 2,800 m<sup>3</sup> per day. In January, Anthon first delivered a cut-to-size saw to an OSB mill operated by Kronospan OSB spol. S.r.o., based in Jihlava, Czech Republic. This saw splits board both lengthwise and cross-wise.

Anthon has wrapped up several more projects in the wood-based panel industry over the past few months. In North America, a high-performance pressure beam saw was installed in a particleboard mill built by Arauco North America, based in

Atlanta, Georgia, in Grayling, Michigan. Installation work was completed during the third quarter of 2018, with commissioning now in progress. An additional angular saw and two feeding/stacking stations were installed at Homanit Polska Sp. z o.o., based in Karlino, during the course of last year. These feeding and stacking stations supply thin board to two laminating lines delivered by Hymmen GmbH Maschinen- und Anlagenbau, based in Bielefeld, Germany, and by Robert Bürkle GmbH, headquartered in Freudenberg, Germany. Anthon supplied Kastamonu Entegre Agac San. ve Tic. A.Ş., based in Istanbul, with a new sanding line for a particleboard mill run by Kastamonu Bulgaria A.D., based in Gorno Sahrane, Bulgaria. The existing multi-opening line was replaced by a continuous forming and press line, which Kastamonu had acquired out of the insolvency assets of the French particleboard manufacturer Darbo S.A.S., based in Linxé, in March 2017. This year, Anthon will supply a cut-to-size saw to the particleboard manufacturer AB Klaipėdos Mediena.

Anthon commissioned three more cut-to-size saws and sanding/saw lines in South-East Asia in the past year. The Vietnamese MDF manufacturer FSC Vietnam Corp. made the first board at its site in Tân Lập, Bình Phước in the first half of the year; this line has run three shifts since mid-2018. Cut-to-size saws installed in Thailand in rapid succession behind the newly installed MDF lines by S. Kijchai MDF Co. Ltd. (Rayong), Vana-chai Group Public Company Ltd. (Surat Thani) and Panel Plus MDF Co. Ltd. (Hat Yai) started operating in the autumn. In China, Anthon delivered three cut-to-size saws for straw particleboard projects conducted in rapid succession by Wan-hua Ecoboard Co. Ltd., based in Yantai, Shandong Province, in the second half of the year. This technology is currently in the commissioning process. □



*Through-feed saw for Kronospan*

*(Photo credit: Anthon)*



*Business focused more on the ContiPlus press in recent years*

## *SWPM has more than tripled its revenues since becoming part of Dieffenbacher*

Shanghai Wood-Based Panel Machinery Co. Ltd. (SWPM), headquartered in Shanghai, China, generated revenues equalling almost €80m and employed some 500 people last year. The company has been part of Dieffenbacher GmbH Maschinen- und Anlagenbau, based in Eppingen, Germany, since the second quarter of 2009.

The Chinese market was responsible for about 65% of this sum, with the export rate listed at roughly 35%. Exports are split almost in equal halves between orders placed directly with SWPM by customers outside China and deliveries to the Dieffenbacher manufacturing network, which is made up of plants in Eppingen (Germany), Brno (Czech Republic) and Windsor (Canada). SWPM makes both heavy construction parts and more basic components for Dieffenbacher's Wood division.

These deliveries mainly comprise mat-forming machines, pre-presses, heating plates, press frames and foot brackets. However, manufacturing of parts requiring technical expertise, including the CPS+ press unveiled in May 2015, still exclusively takes place at the Eppingen headquarters. SWPM makes an average of two to three composite presses for China's automotive industry each year on behalf of Dieffenbacher's Composites division.

### ***Shanghai Electric is still minority shareholder***

SWPM had delivered similar revenues to last year in 2016 and 2017. This means that revenues have more than tripled over the past decade, while its number of employees has halved in the same period. At the time of its acquisition, SWPM had employed around 1,000 employees and generated re-



SWPM's headquarter in Shanghai-Anting

(Photo credit: EUWID)

venues of around €26m at a facility in Anting that is located directly adjacent to a car factory run by Volkswagen China Group.

SWPM, a machinery builder that used to be wholly owned by Shanghai Electric Co. Ltd., had established a joint venture with Siempelkamp Maschinen- und Anlagenbau GmbH, based in Krefeld, Germany, in the late 1990s – although it was dissolved in 2002. Kronospan became SWPM's majority shareholder in August 2004. By acquiring a 70% stake, Kronospan had boosted its plant construction business, which had used to mainly comprise the handling and transport systems specialists Kronomech spol. s.r.o., based in Jihlava, Czech Republic, and Polytrans sro, headquartered in Presov, Slovakia. A 30% stake remained in the hands of Shanghai Electric, which had focused more on its core businesses of power plant and turbine construction again by parting ways with its majority stake in the woodworking machinery manufacturer.

Kronospan had sold its stake in SWPM to Dieffenbacher in the second quarter of 2009. Shanghai Electric held on to its 30% shareholding. The transaction had also included three separate SWPM supplier companies: Shanghai Wood-Based Panel Electric Co. Ltd., Shanghai Wood-Based Panel Hydraulic Co. Ltd. and Shanghai Wood-Based Panel After-sales Co. Ltd. Kronospan had previously owned all shares in these companies so they were acquired in full by Dieffenbacher. Starting in the fourth quarter of 2008, Dieffenbacher and Kronospan entered into talks about the acquisition and reached a fundamental agreement at the end of April 2009. The acquisition agreements were signed in mid-May 2009 once closing conditions were determined, including approval from the minority shareholder and Dieffenbacher's advisory council.

SWPM had at first continued to be led by its existing management team after Dieffenbacher came on board. A change in management then occurred



*Production hall at SWPM's facility  
(Photo credit: EUWID)*

during its subsequent integration into Dieffenbacher. The company is now managed by David Ye who joined Jinxiang Wang in being appointed to SWPM's management team in October 2015. Ye has been the sole managing director since October 2016; Wang retired at the same time.

### ***Little changes in SWPM's portfolio***

Dieffenbacher had maintained SWPM's portfolio with little in the way of changes after the acquisition. At that time, the company had set its focus on multi-opening lines for making particleboard and MDF as well as laminating and HPL presses. In the second half of the 2000s, SWPM also developed a continuous press with the involvement of several Kronospan entities. This ContiPlus press has been offered on the free market too since 2008. Dieffenbacher had only marketed ContiPlus in a 4 ft version, thus tapping into an additional segment. However, Dieffenbacher had offered a wider press in the form of the CPS press, which has been gradually

replaced by the CPS+ since its launch in 2015. Dieffenbacher has now backed away from its original plans to transfer the ContiPlus to the CPS+ concept since it feels that ContiPlus covers a segment of the market that is virtually inaccessible for presses made in Europe.

ContiPlus is mainly attractive to smaller and medium-sized wood-based panel manufacturers in China with its simpler design than the CPS and CPS+, standard width of 4 ft and several standard lengths between 20 m and 58 m, according to Dieffenbacher. The press should

also be sold in other Asian markets in the future.

SWPM has sold a total of 55 ContiPlus presses since 2007. An average of five presses therefore leave the Shanghai facility each year. SWPM had landed a total of 24 orders in the five years between 2007 and 2011. Some 20 of these contracts involved technology to make MDF/HDF, three were for particleboard lines and one for oriented structural straw board (OSSB). The company had won another 31 contracts by 2018. The focus of these projects has shifted from exclusively MDF/HDF in the early years to particleboard projects in the past few years since, according to Dieffenbacher, ContiPlus offers greater benefits than its MDF/HDF lines, which tend to have a standard design. SWPM also sold the Chinese particleboard producer Wanhua Ecoboard Co. Ltd., based in Yantai, Shandong Province, a ContiPlus press to make OSSB in mid-2016.

SWPM had manufactured the first three ContiPlus presses for the Kronospan group. Two of these three presses were



*Press frame produced by SWPM  
(Photo credit: EUWID)*



*4 ft-wide ContiPlus for MDF production  
(Photo credit: EUWID)*

delivered before Dieffenbacher made its investment. SWPM had delivered an 8 ft-wide ContiPlus for a replacement project carried out at the particleboard mill in Zvolen, Slovakia during 2007; start-up took place at the start of October 2007. A new MDF/HDF mill that was built in Strzelce Opolskie, Poland was equipped with a 4 ft-wide press during 2009.

Shortly before selling its stake in SWPM to Dieffenbacher, Kronospan had ordered another ContiPlus press from SWPM, which was originally supposed to be used in a new build or expansion project in Eastern Europe. It was later slated to be used in an OSB line envisaged at Kronospan's mill in Egorievsk, Russia. However, this project ended up being completed with a second-hand multi-opening line from North America. The third Kronospan ContiPlus press was then stored with SWPM due to the decision not to use it at that time. Kronospan had then used this technology in an OSB project in Mogilev, Belarus during 2013.

### ***ContiPlus production has been focussed on 4 ft-width***

SWPM has since almost only made continuous presses that are 4 ft wide. The majority of these lines have been delivered to the Chinese wood-based panel industry. The OSSB production line installed at Novofibre Panel Board (Yangling) Co. Ltd., based in Yangling, Shaanxi Province, in 2009 was one of the first 4 ft-wide ContiPlus presses. The first international contract for a ContiPlus outside the Kronospan group involved a particleboard line sold to the Thai firm Vanachai Group Public Co. Ltd., based in Bangkok, in autumn 2010.

In addition to ContiPlus presses, SWPM's current portfolio mainly involves a variety of components upstream and



downstream of the press. The standard scope of SWPM orders generally includes gluing stations, screening and sifting technology, the forming station, pre-press, press, final assembly, saws and warehouse system. SWPM now equips continuous MDF lines with hot air pre-heating technology, which was added to its portfolio in 2015, as almost standard. These pre-heating systems, which the company claims can raise capacity by up to 30%, have increasingly been retrofitted into existing lines, sometimes even in front of other manufacturers' presses.

When it comes to front-end technology, SWPM only delivers refiners, recently dispatching two to three units per year. Most of its sales are in China. A few deliveries have also been destined for other markets. For instance, the Algerian company Panneaux d'Algérie S.à.r.l., based in El Tarf, recently ordered a refiner from SWPM as part of a complete order placed with Dieffenbacher in 2017. SWPM no longer covers other areas of front-end technology. The Dieffenbacher subsidiary B. Maier Zerkleinerungstechnik GmbH, based in Bielefeld, Germany, generally supplies knife-ring flakers for particleboard projects. SWPM also used to make short-cycle presses. The group plans to step up these activities in the future.

Multi-opening presses had been SWPM's main business up until a few years ago. The company had also repeatedly landed contracts from wood-based panel manufacturers outside China until recently, principally in India, Pakistan, the Middle East and South America. Examples include MDF orders placed in 2008 and 2009 by the Brazilian companies Guararapes Paineis Ltda. (Caçador, Santa Catarina), Industria de Compensados Sudati Ltda. (Palmas, Paraná) and Florapla Industrial MDF Ltda. (Paragominas, Pará), the Mexican company Industrias Emman de Ocotlán S.A. de C.V. (Ocotlán, Jalisco), which received two MDF multi-opening lines from SWPM in 2009 and 2012 and an MDF line commissioned at the Indian firm Rushil Décor Ltd. (Ahemdabad, Gujarat) in 2012.

The number of multi-opening lines delivered to make wood-based panels has gradually declined as the company expanded its ContiPlus business. SWPM still handles around two to three orders each year. The business in multi-opening presses for laminate manufacturing is relatively stable. In 2017, SWPM sold two laminate presses to Brazil and Thailand. Last year, the Malaysian group Maica Laminates Sdn. Bhd., based in Butterworth, Penang, ordered a press of this kind. □

## ***Tronox planning to sell Ashtabula works to Ineos***



(Photo credit: Tronox)

The planned acquisition of the titanium dioxide activities of Cristal Global, Jeddah, Saudi Arabia, by the US titanium-dioxide manufacturer Tronox Inc. of Stamford, Connecticut, has been further prolonged. Both companies had already signed a contractual agreement in February 2017, setting their sights on closing the deal before the end of the first quarter of 2018 at that time. The transaction was subsequently approved by the competition authorities in Australia, China, New Zealand, Turkey, South Korea, Columbia, and Saudi Arabia. The European Commission had conditionally approved the takeover in August 2018. Due to stipulations by the EU Commission, Tronox will hand its European paper-industry business to Venator Materials plc of Wynyard, UK, hived off from Huntsman Corp. of The Woodlands, Texas, via an IPO at the beginning of August 2017. The US Federal Trade Commission (FTC) of Washington D.C. is still causing difficulties, however. In mid-December, the US agency had spoken out against the transaction again in an Initial Decision in spite of Tronox' planned spin-off of the Cristal works in Ashtabula, Ohio. The FTC believes a merger between Tronox and Cristal Global would lead to considerably impaired competition on the North American market for chloride-grade titanium dioxide.

Tronox had actually wanted to sell the Ashtabula works, geared to production of chloride grades and an annual capacity of around 245,000 t, to Venator as well. Both companies had agreed on an appropriate right of first refusal for Venator in mid-July. The purchase price for the Ashtabula works had been set at US\$ 1.1bn; this price was to be reduced to US\$900m

in the case of delays caused by cartel law. The exclusivity for 75 days agreed with Venator in the memorandum of understanding expired at the beginning of October, however. Then, at the beginning of December, Tronox had presented an agreement with Ineos Enterprises AG of Rolle, Switzerland, which wants to take over the Ashtabula works at a purchase price of US\$700m. Taking over the Ashtabula works would mark Ineos Enterprises' debut in the titanium dioxide business. The company currently covers nine different fields of business, amongst them "Ineos Melamines" (melamine resins) and "Ineos Paraform" (methanol derivatives). With these two segments, Ineos Enterprises is already a raw-materials supplier for the coatings/paints industry, the laminating industry, and the paper industry. □

## ***Venator to close its plant in Pori by 2021***

Venator Materials plc, based in Wynyard, UK, intends to permanently close its titanium dioxide facility in Pori, Finland by 2021. This plant had suffered considerable damage in a fire at the end of January 2017. A decision to this effect was announced on 12 September 2018. By way of explanation, Venator noted that completely rebuilding the facility was not cost-efficient because of spiralling costs and the process taking much longer than had been originally planned. The Pori facility should continue to operate with a capacity of around 25,000 tonnes per year for the time being, representing roughly 20% of its original total capacity. Production will be gradually scaled back until it closes permanently in 2021. On the other hand, manufacturing of around 45,000 tonnes of speciality titanium dioxide made in Pori to date each year will move to other Venator locations. These speciality products are primarily used in the printing ink, cosmetics and pharmaceuticals businesses.

Venator put the total costs of this closure at approximately US\$430m, including around US\$130m on winding up the site, about US\$150m on actual closure and US\$150m on upgrading other locations. Around two-thirds of these closure costs

will not be due until after 2020. The company booked restructuring charges of US\$415m to cover these costs in the third quarter, including US\$367m for accelerated impairment losses, US\$39m for payments to affected workers and US\$9m for impairment losses on other assets. Some US\$385m of the US\$415m in restructuring expenses was non-cash.

By the end of June, Venator had spent US\$247m on repairs carried out in Pori to date. On the other hand, it had received insurance payments of €468m or US\$551m; a final payment of €191m or US\$236m included in this sum had been received on 13 April. Venator had received €225m or US\$253m in insurance payments during 2017 and €243m or US\$298m during the first four months of 2018. □

## ***Accsys exploring building a Tricoya plant in Malaysia***

The British chemical technology firm Accsys Technologies plc, headquartered in London, is reviewing whether to build a Tricoya plant in Malaysia via its subsidiary Tricoya Technologies Ltd. (TTL) through a feasibility study. Its local cooperation partner is Petronas Chemicals Group Bhd (PCG), based in Kuala Lumpur. Under an agreement disclosed on 9 January 2019, both companies want to evaluate the options for financing, designing, construction and operating a plant to make durable wood chips. Market studies will also identify sales opportunities for wood-based panels made out of this material in South-East Asia during the 18-month review period.

Accsys started selling Tricoya MDF on overseas markets in the first half of its 2018/2019 financial year. According to Accsys, it aims to tap overseas markets before the world's first Tricoya plant to make acetylated wood chips starts operating in Hull, England. The planned facility in Malaysia should make both Tricoya products and the interim product acetic acid hydride. Accsys reported that a joint venture run by PCG in Malaysia will supply the required acetic acid. The company



in question is BP Petronas Acetyls Sdn. Bhd. (BPPA), based in Kertih, Terengganu, in which PCG owns a 30% minority stake and the British group BP holds 70%. The plant run by BPPA has been able to make around 500,000 tonnes of acetic acid each year since the end of 2000.

BP is also involved in building the Tricoya plant in Hull via two subsidiaries. BP Chemicals Ltd., headquartered in Sunbury on Thames, has had a 30% stake in the operating firm Tricoya Ventures UK Ltd. (TVUK), based in London, with effect from 4 June 2018. TVUK's two other shareholders are the Irish MDF producer Medite Europe DAC Clonmel (8.2%) and TTL (61.8%). Like Medite, BP also owns shares in TTL through BP Technology Ventures Ltd., based in Sunbury on Thames. With a 75.4% stake, TTL's majority shareholder is Titan Wood Ltd., based in London, in which Accsys Technologies owns all shares. Besides Medite (11.7%) and BP Technology Ventures (8.7%), the investment companies Business Growth Fund Investments LP (2.7%) and 1798 Volantis Catalyst Fund II Ltd. (1.5%) are also among shareholders in TTL. □

### ***Helm, Proman, and SCC formed joint venture***

With effect from 1 July 2018, Helm AG (Hamburg), Proman AG (Wollerau, Switzerland), and Southern Chemical Corp. (SCC, Houston, Texas) formed a joint venture trading under the name of Helm Proman Methanol AG in which the three partners have pooled their worldwide methanol activities. The joint venture had previously emerged by transformation from the former Helm Swiss Chemicals AG of Wollerau. Helm Proman Methanol AG also has its headquarters in Wollerau; regional headquarters also exist in Houston and Singapore. Helm hold the majority share of 57% in the joint venture, Proman holds 38%, and the remaining 5% is held by SCC's CEO and shareholder, Jan Spin.

Helm AG says it is one of the world's biggest chemical trading companies. The company is represented with over 100 companies in roughly 30 countries

and has 1,521 employees worldwide. Helm generated sales revenue of around €7.4bn (€6.9bn) in its business year 2017. Sales revenue had previously decreased gradually from 2012 (€10.0bn) until 2016. The methanol business is assigned to Helm's Feedstocks division. The Proman Group, originally founded by as a project-management company, meanwhile has production plants in the USA, Trinidad & Tobago, and Oman. The company is currently in the process of building up activities in Mexico as well. In doing so, Proman sees itself as the second-biggest methanol producer in the world; the company is one of the ten biggest companies in the fertiliser sector. SCC distributes methanol and melamine on markets in North and South America.

Helm and Proman have been connected for quite some time via a joint holding in Methanol Holdings Trinidad Ltd. (MHTL) of Point Lisas, Trinidad & Tobago. In October 2014, both companies, which had jointly held a share of 43.47% (Proman 32.6%, Helm 10.87%) beforehand, acquired the outstanding 56.53% from the companies Clico and Clico Financial, previously nationalised after insolvency, in arbitration proceedings that began in 2009. Proman has held 75% in MHTL since then, and Helm 25%. MHTL operates five methanol plants in Point Lisas with a combined annual capacity of 4.1m t, an ammonia plant (650,000 t), a UAN plant (1.5m t), and two melamine plants (60,000 t), put into operation in June 2010. SCC sells MHTL methanol and melamine in North America. Helm handles distribution in Europe. □

### ***Methanex launched production at Chile IV plant***

Towards the end of the second quarter of 2018, Methanex Corp. of Vancouver in British Columbia, Canada, resumed at the Chile IV plant that had been built with an annual capacity of 840,000 t in Cabo Negro near Punta Arenas in 2005. As such, the two methanol plants remaining in Chile are producing again after they had to be shut down indefinitely in May 2014 due to gas-supply problems. Chile I,

which had been opened in 1988 with an annual capacity of around 800,000 t, had resumed operation in September 2014. According to Methanex, the combined annual capacity of both production plants meanwhile amounts to 1.720m t.

In its business year 2018, Methanex produced a total of 7.211m t (7.187m t) of methanol. Above all as a result of the resumed operation of the Chile IV plant in Cabo Negro near Punta Arenas, production in Chile increased by half to 612m t (414m t). This enabled a reduction in output in New Zealand (-17.3% to 1.606bn t) to be compensated for almost completely. Mostly minor increases were achieved by the other facilities. □

### ***OCI Nitrogen reports slight rise in melamine sales***



(Photo credit: EUWID)

OCI Nitrogen B.V., based in Geleen, the Netherlands, has experienced a gradual improvement in its melamine sales so far this year. A substantial downturn in the first two quarters of this year (Q1: -10.7% to 34,400 tonnes, Q2: -21.5% to 35,400 tonnes) gave way to a minor increase compared with the prior-year period to 36,900 (July-Sept. 2017: 35,500) tonnes in the third quarter. The slump in the first two quarters was connected to output losses and maintenance work at its two raw melamine lines in Geleen. Maintenance carried out between the start of May and the end of July at one of two ammonia lines in Geleen left its traces in the third quarter. The contract price rose by 7% compared with the prior-year period to €1,655 (1,540) per tonne, according to a quarterly report published by its parent firm OCI N.V., based in Amsterdam in mid-November; the price was unchanged compared with the second quarter. □

*Price cuts were a little bigger than methanol suppliers and converters had anticipated*

## *Methanol: European contract price slashed by 18.2% in the first quarter*

**The European contract price for methanol shipments in the first quarter of 2019 was trimmed significantly, as had been expected.**

The price was fixed at €350/t FOB Rotterdam on 21 December 2018. This represents a €78 or 18.2% markdown compared with the fourth quarter's price of €428/t. Price cuts were a little bigger than methanol suppliers and converters had anticipated when talks started in December. The Canadian company Methanex Corp., based in Vancouver, British Columbia, had lowered its European posted contract price (EPCP) to €360 on 31 December, a decrease of €68 compared to the fourth quarter. The contract price and the Methanex price are thus different for the first time since the fourth quarter of 2017. Prices had been the same in all four quarters of 2018. Buyers and sellers had agreed on a price of €380/t in the first and second quarters, before settling on €419 in the third quarter and €428 in the fourth quarter.

European spot prices - which had fallen more and more during the fourth quarter

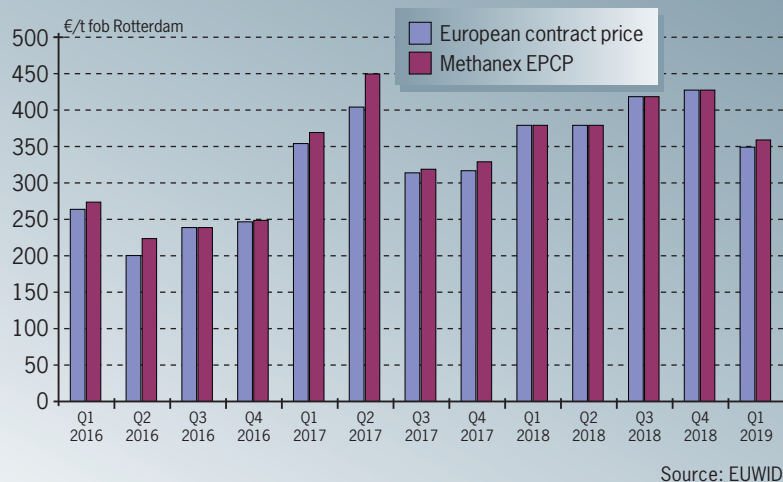
in the wake of a sharp reduction in import prices in China - have increased slightly after the contract price had been fixed. At the start of October, spot prices had stood at €375/t FOB Rotterdam. They fell to €345-355 at the start of November. Prices then reached €280-290 in mid-December, evening out at €270-280 after the contract price was fixed. Spot prices then rebounded slightly to €285-290 at the start of January. Sources in the methanol industry believed that this slight increase had been primarily connected to a plant in Tjeldbergodden run by Equinor ASA, based in Stavanger, Norway, going offline, and Shell Deutschland Oil GmbH, headquartered in Wesseling, Germany, temporarily idling a methanol line. Created in May 2018 when Statoil ASA was renamed, Equinor shut down methanol production in Tjeldbergodden after a fire on 19 December. Unconfirmed reports suggest that operations resumed in the second half of January. With an annual capacity of around 900,000 tonnes, Tjeldbergodden is Europe's biggest methanol facility and accounts for roughly a quarter of European methanol production. With a designed annual capacity of some

420,000 tonnes, the methanol line in Wesseling was out of service since the end of December. BioMCN B.V., a firm based in Delfzijl that is part of the Dutch OCI Group, has also yet to restart a methanol line that it shut down in June for a maintenance project originally slated to last four weeks. The recommissioning of a second line in Delfzijl, which was actually set to take place in the fourth quarter, has also been postponed. Earlier reports indicate that the two lines there each have an annual capacity of some 440,000 tonnes. Insiders in the methanol industry believe that OCI Nitrogen has partly offset the stoppage in Delfzijl by making deliveries from a plant run by its joint venture Natgasoline LLC, based in Beaumont, Texas, which started operating at the end of the second quarter of 2018.

All told, European methanol markets have been rather subdued in the first quarter. Demand was curbed by converters shutting down manufacturing over the Christmas and New Year period. Shipping along the River Rhine, which had been hindered by very low water levels between the middle of October and the end of November, returned to normal relatively quickly after rainfall at the start of December. As a result, inventories that had previously built up in Rotterdam have since receded. The production stoppage at Equinor has intensified this destocking.

Global methanol production in a number of regions has been hindered by gas supply problems customarily seen in winter. Conversely, delays that had arisen last year with new methanol plants commissioned in North America and Iran are having an impact on the market. Besides the Natgasoline plant (annual capacity: 1.75m tonnes), insiders are mentioning a facility built by Marjan Petrochemical Company in Assaluyeh, Iran (1.7m tonnes) in this vein. □

**Europe: Development of methanol prices**







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*Downward spiral in raw material costs looks set to slow over the coming months*

## *Adhesive and impregnating resin prices fell at the start of 2019 as expected*

**A significant correction in the European methanol contract price for the first quarter of 2019 and falling urea prices since November have resulted in another reduction in urea-formaldehyde (UF) resin prices in January and February.**

UF resin prices had already slipped by an average of almost €5/t in December. This price cut passed on a reduction in urea prices in November. By contrast, January's prices were shaped by the lowering of the methanol contract price, which was set in stone at €350/t FOB Rotterdam on 21 December 2018. This corresponded to a €78 markdown compared with the fourth quarter's price of €428/t. Around a third of the change in methanol prices is reflected in UF resin prices. Including the further decline in urea prices, UF resin prices were trimmed by nearly €30 in January. Additional markdowns to the tune of up to €5 were instituted in February. This turn of events was connected to a decrease of around €10/t in urea prices in January, around half of which is passed on to resin prices. Melamine-reinforced resin and

melamine-impregnating resin prices were also revised downward. These price cuts reflected changes in urea and methanol costs as well as the first-quarter decrease of almost €50/t in melamine contract prices.

Raw material costs tend to continue pointing lower, although this downward trend should slow significantly. Insiders projected that urea costs might stabilise in the weeks ahead before heading slightly higher. European methanol spot prices had initially stabilised after the contract price was fixed and then even increased slightly at the start of January. The contract price is expected to recede again slightly in the second quarter. A turnaround is presently considered to be rather unlikely. Converters feel that melamine prices will fall again in the second quarter due to relatively abundant supply over the past few months.

Demand for adhesive and impregnating resin had been rather sluggish at first in early January after a slow December, but has rebounded since then. Resin production returned to normal relatively quickly

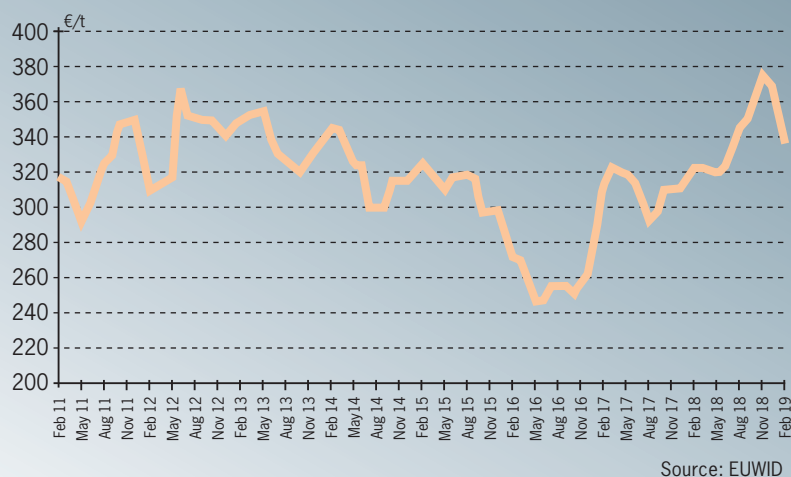
in the first half of December after being curtailed by methanol supply problems in October and November. During that period, wood-based panel manufacturers had a hard time sourcing adhesive resin.

Longstanding problems encountered when transporting chemical raw materials along the River Rhine made a significant dent into adhesive resin supply again. BASF SE, based in Ludwigshafen, Germany, had to curb its resin production markedly in the second half of October because of a lack of methanol deliveries. The company, which usually transports most of the methanol it needs to make resin in Ludwigshafen by ship, had increasingly switched to using the railway and heavy goods vehicles from the summer in response to falling water levels in the River Rhine.

This approach and installation of additional methanol tank farms in the first half of 2017 largely offset the decrease in ship deliveries. The shipping situation on the River Rhine had become even more serious during October so companies were no longer able to offset this effect. Production at the continuous adhesive plant in Ludwigshafen had to be scaled back as a result. The facility was running at minimal load, which cannot be reduced any further, in the second half of October and in November.

For wood-based panel producers shifting orders to make up for the shortfall at the BASF plant was very challenging and led to additional costs since other resin manufacturers were operating at a high capacity utilisation rate. A few other companies were also facing production irregularities. What is more, freight capacity for chemical goods was scarce. Production was furthermore restricted because of stoppages for maintenance that were carried out at several adhesive resin plants in October and November. □

**Europe: Development of UF resin prices**





*Some companies entering NAF production via new glue systems*

## *Panel manufacturers preparing for further reduction in formaldehyde limits*

**The discussions underway in various countries concerning a further reduction in formaldehyde emissions are increasingly prompting wood-based panel manufacturers and value-adders to take action.**

Here, the European wood-based panel industry, which has undertaken several, ultimately unsuccessful attempts towards establishing a new emission class below E1 in recent years, must sooner react to external influences at present. In the last two years, the introduction of new formaldehyde-emission thresholds for particleboard, MDF/HDF, and hardwood plywood prepared some considerable time ago by the US Environmental Protection Agency (EPA) of Washington D.C. has been a particular issue in connection with this. The EPA regulation, which largely conforms with the CARB 2 regulations applicable in California since January 2011, came into force as Title VI of the Toxic Substances Control Act (TSCA) with effect from 1 June 2018. Numerous European kitchen-furniture manufacturers had already decided to switch their wood-based panel intake completely to the EPA regulations in advance of this date. This switch has meanwhile been largely completed in many instances; as such, the kitchen-furniture manufacturers concerned are now only supplied with CARB 2 wood-based panels.

The Ikea group had already switched to CARB 2 wood-based panels on 1 January 2009. In the same year, Ikea had declared formaldehyde emissions like those for natural wood as its long-term objective. In spring 2017, Ikea presented its wood-based panel suppliers with its reupdated strategy for further reduction of formaldehyde emissions. Under the project title of "Halfway as Natural Wood", the aim is to reduce the threshold to 0.04 ppm by 2020. At the same time, Ikea intends



*(Photo credit: Sestec)*

to replace the perforator method, the currently recommended testing method, by emission measurement with the next update of IoS-MAT, also scheduled for introduction by 2020.

The perforator method, currently used most commonly by the wood-based panel industry in works' own production-control processes, has become an issue due to the growing inaccuracies in general but especially for low emission values. In Germany, the Federal Environment Agency (UBA) of Berlin has proposed new regulations for the testing procedures for formaldehyde emissions from wood-based panels, which, following the approval given by the federal/regional workgroup for chemical safety (BLAC), is to come into force with effect from 1 January 2020. The perforator method can no longer be used in Germany after this date. Various wood-based panel manufacturers have therefore already begun to replace the perforator method with emission measurement by gas analysis in recent months. A number of individual

companies want to complete this switch by the first quarter of 2019.

Through the external influences exerted by authorities, institutes, and buyers, things appear to be moving ahead more distinctly in wood-based panel production as well. The currently still predominant production of particleboard and MDF/HDF in compliance with E1 and CARB 2 regulations could be augmented to a greater extent after all by extended emission regulations hitherto limited to niche applications. Ikea recently launched a feasibility study aimed at examining the technical and economic possibilities for such reductions in emission. Established resin manufacturers and biotech companies have developed new glue systems and brought them to production maturity to enable the reductions to be achieved. There are meanwhile wood-based panel manufacturers in Europe, too, that want to start producing particleboard or MDF/HDF with "no added formaldehyde" (NAF) using such glue systems on a greater scale. □

## Swiss Krono Group fleshes out OSB projects



Sharya site

(Photo credit: Swiss Krono Group)

Swiss Krono Group made two investment decisions in a long-planned project to boost its OSB capacity in December 2018. The company will install a new OSB line with a manufacturing capacity of about 600,000 m<sup>3</sup> per year at its site in Sharya in the Russian Republic of Kostroma. Engineering work is currently under way. Under current plans, technology orders are to be placed during the summer. The first board is scheduled for production during the course of 2021. Two continuous particleboard lines and one MDF line are so far in operation at the complex.

Its OSB capacity in Wittstock-Heiligengrabe, Germany, which is currently listed at around 450,000 m<sup>3</sup>, is to increase by 150,000 m<sup>3</sup> to around 600,000 m<sup>3</sup> by

expanding the strand preparation area and carrying out additional measures in the areas upstream and downstream of the continuous press. Planned work to install technology is to take place in parallel with ongoing operations and during scheduled stoppages for maintenance, meaning that the entire project will last until 2021.

Up until now, Swiss Krono Group has made OSB in Wittstock-Heiligengrabe, Zary (Poland), Sully-sur-Loire (France), Vásárosnaményi (Hungary) and Kamjanka-Buska (Ukraine). An OSB project announced for its site in Krasnokamsk in the Russian region of Perm in spring 2013 was ditched some time ago. In return, the company announced its intention to install new lines in Eastern Europe and to carry out debottlenecking measures at existing facilities in June 2018. Besides the Sharya and Wittstock-Heiligengrabe projects, it had also considered installing an OSB line in one of its three Ukrainian mills. Decisions about these investments are to be made at a later point in time.

Installation of the new OSB line in Sharya and the expansion project in Wittstock-

Heiligengrabe are part of a programme of investments adopted in December, which will involve around €340m being spent in the years ahead. Swiss Krono Group reported having already invested some €550m in ongoing or completed work in recent years. The single-largest projects were and are investments in replacing technology at particleboard mills in Menznau (Switzerland) and Sharya, installation of a new MDF/HDF line at its laminate flooring mill in Barnwell, South Carolina and an increase in laminate flooring production there. The fourth profiling line in Barnwell was commissioned during the third quarter. The start-up of the continuous MDF/HDF line, which was to reach an annual capacity of about 280,000 m<sup>3</sup> in the first phase, was delayed by around nine months from the summer 2018 commissioning date planned when the project was unveiled in January 2016. Swiss Krono Group now thinks that commissioning will take place in spring 2019. The continuous particleboard lines in Sharya and Menznau got up and running in May and September 2017 respectively. During the same period, a double-belt press installed in Zary ramped up operations, marking Swiss Krono Group's foray into the laminate manufacturing business. □

## Boise ceasing LVL production in Roxboro

The US company Boise Cascade Co., based in Boise, Idaho, stopped making LVL in Roxboro, North Carolina, with effect from 31 December 2018. CEO Tom Corrick blamed this decision on its LVL manufacturing costs still not being competitive. However, the site will continue to make I-joists.

Boise Cascade had acquired this mill, which specialises in making engineered wood products (EWPw), together with an LVL facility in Thorsby, Alabama, from Georgia Pacific LLC, headquartered in Atlanta, Georgia, in March 2016. At that time, the Roxboro site had a listed annual capacity of 5m ft<sup>3</sup> of LVL and 80m running feet of I-joists. The Thorsby facility's LVL capacity had been listed at 4m m<sup>3</sup> per year.

As had been announced when the deal closed, the first of two LVL lines in Roxboro that had been idled indefinitely at the end of 2008 resumed operations during the second half of 2016. The changeover to regular production was then delayed several times because of mechanical and process engineering problems. The second LVL line was also put in a production-ready state, but Boise Cascade shelved original plans to restart it too at the start of 2018. At that time, the firm attributed this decision to factors including significant cost drawbacks compared with its own LVL sites in the region, located in Alexandria, Louisiana and Thorsby. This situation was in part connected to veneer production not starting up in Roxboro, as had been originally planned.

Boise Cascade reported that the decision to cease LVL production in Roxboro will not have any impact on the company's ability to make deliveries. Its customers will continue to be supplied from the Thorsby and Alexandria LVL mills. The company had enough capacity at both sites to maintain its current level of service and to support future growth.

Boise Cascade completed the sale of its particleboard mill in La Grande, Oregon and sawmills in north-eastern Oregon town of Pilot Rock and in La Grande to Woodgrain Millwork Inc., based in Fruitland, Oregon, on 2 November as part of its current efforts to focus on its core plywood and EWP business. Its sawmill and planing mill in Elgin, Oregon had closed at the end of July after previously curbing its output. □



### ***Juken fleshes out Triboard investments in Kaitaia***

The wood-based panel manufacturer Juken New Zealand Ltd. (JNL), based in Auckland, is poised to invest approximately NZD30m in modernising its Triboard plant in Kaitaia. The company had previously reached an agreement to shed a total of 20-30 jobs during consultations with trade unions. Conversely, production at the site is to switch to a five-day week, as trade unions had sought.

The company is curbing its output in response to inadequate roundwood supply at the site, which had led to considerable losses in the past. Juken had also held preliminary talks on this issue with competent authorities at the start of September. Shane Jones, New Zealand's Minister for Infrastructure, Forestry and Regional Economic Development, subsequently announced restrictions on New Zealand's roundwood exports at the end of September. According to the Wood Processors and Manufacturers Association of New Zealand (WPMA), about 75% of the country's roundwood had ended up in China in the twelve months to March 2018.

Juken also blamed the site's lack of competitiveness on the age of its production machinery. The company started making Triboard in 1985 when it commissioned a steam injection press delivered by Siempelkamp Maschinen- und Anlagenbau GmbH. This board has a core made out of non-oriented strands, which is pressed on both sides with a thin layer of fibre. Its Triboard manufacturing capacity had been increased in 1993 by installing a multi-opening press. By making investments in new technology and machinery as part of the modernisation project, the plant and the mill should return to profitability.

Besides Triboard, Juken's portfolio of products includes LVL, plywood, peeled veneers, lumber and solid wood panels. The company operates four production sites on New Zealand's North Island. It manages more than 30,000 ha of radiata pine plantations in the vicinity of the mills to provide roundwood. □

### ***Kronospan has a new manufacturing concept***

Kronospan Luxembourg S.A., based in Sanem, has implemented a new manufacturing concept with the start-up of a continuous OSB production line to replace a multi-opening line. This line differs from the production method that is customarily used in the OSB industry particularly in terms of the wood and drying process it uses. The company wants to use both fresh wood strands, fine fractions from strand preparation and coarse chips made out of waste wood in the core. To this end, Kronospan Luxembourg installed new waste wood preparation machinery that started operating in January 2019. Wood that cannot be used to make OSB will be extracted and incinerated to generate energy at one of two future biomass power plants at the site. Kronospan is taking this approach in an effort to raise its recycled wood fraction in OSB production to around 50% in the medium term. The fresh wood strands used mainly for the outer faces and the different fractions for the core will be dried in a belt dryer delivered by Stela Laxhuber GmbH, based in Massing. Since low-temperature drying can take place at a maximum of 120°C, Kronospan wants to significantly reduce VOC emissions compared with drum drying, which takes place in a much higher temperature range. Combined heat and power technology used at the two biomass power plants

will generate process steam and power. The waste heat will be used to operate the belt dryer.

Kronospan started commissioning the new OSB production line in the first half of November after completing work to install technology. The first board was also made in this period. Individual sections of the line have since been optimised and ramped up. Kronospan intended to reach continuous production during the second half of January. The changeover from the current multi-opening line to the continuous line should take place at that time. Start-up of the second biomass power plant has been scheduled for the first quarter.

In the next phase Kronospan intends to increase the capacities of the OSB plants in Jihlava (Czech Republic), Strzelce Opolskie (Poland) and Riga (Latvia) by expanding the wood preparation system and press extensions. During the next months Kronospan will also expand the particleboard plant in Novovolynsk (Ukraine) to include an OSB line. In June 2018 a similar project was concluded at the Russian location of Ufa, Republic of Bashkortostan. In the medium term, Kronospan also intends to launch OSB production at the Chirk location in Great Britain. □



*Sanem site*

*(Photo credit: Kronospan)*

## ***Pollmeier expands LVL production to spruce***

Pollmeier Furnierwerkstoffe GmbH, which belongs to the Pollmeier Group, both Creuzburg, is to manufacture laminated veneer lumber (LVL) panels made of spruce from the first quarter of 2019 onwards. Pilot operation involving the first attempts with spruce, which commenced approximately one year ago, on machinery originally installed for the processing of beech, is to be converted to regular operation over the next few months.

In contrast to the BauBuche range, which has been consistently expanded since the LVL plant was commissioned in 2014, with regard to spruce Pollmeier is restricting itself to panels with lengthwise-glued peeled veneer as well as panels with some 20% transverse layers. By using the ensuing cut timber, beams with small cross-sections can also be produced. Glueing to produced beams of larger dimensions, such as is the case of BauBuche, is currently not planned. The spruce-LVL is exclusively intended for construction purposes in the non-visible area.

Pollmeier has not provided any details concerning the production volumes of

spruce-LVL, nor concerning the spruce roundwood volumes required for the manufacture. Pollmeier has merely referred to the fact that the expansion to include spruce will not be in any way connected to a reduced production of BauBuche. Thus, when regular production of spruce-LVL commences, the plant will convert from the current extended one-shift operation to a three-shift operation.

Over recent months Pollmeier Furnierwerkstoffe has continued the conversion of its LVL plant. The veneer plant, which was constructed and assembled in the first half of the year by mechanical engineering company Hanses Sägewerkstechnik GmbH & Co. KG (Meschede) which belongs to the Pollmeier Group, remains in the commissioning phase and is being optimised for LVL production. For current BauBuche production, Pollmeier Furnierwerkstoffe has therefore continued to use the originally installed veneer lay-up line built by Raute Oyj (Nastola, Finland) over recent months. According to plans announced in 2017 concerning the conversion of the LVL plant, Pollmeier Furnierwerkstoffe intended to transfer production from the Raute line to the

Hanses in mid-2018. The exchange of the veneer kiln, also supplied by Raute, which took place in parallel to the replacement investments of the veneer lay-up line, has been completed, in contrast. The new machinery supplied by Grenzebach BSH GmbH (Bad Hersfeld) has been in regular operation since mid-2018. The Raute dryer has not yet been dismantled, however, and for the time being is to remain as a backup to the new machinery. The sales process for the lay-up line and dryer supplied by Raute, which was commenced at the end of 2017, is still suspended, therefore.

Despite the conversion measures carried out over the course of the year so far, Pollmeier Furnierwerkstoffe has been able to increase production significantly. The company does not wish to disclose precise figures, however. For 2017 BauBuche production had been indicated at a figure of 35,000-40,000 m<sup>3</sup>. When the plant was commissioned, a production capacity of 180,000 m<sup>3</sup>/annum on a four-shift operation had been stated. Sales of the various BauBuche products continued to be categorised into two thirds of the volumes for construction, and one third for interiors and furniture making. □

## ***Louisiana-Pacific puts OSB line into operation***

On 30 September 2018, the US company Louisiana-Pacific Corp. of Nashville, Tennessee, produced the first OSB on the production line installed at the Panguipulli facility in Chile. According to the company, a total of 54m US\$, and thus less than the last budgeted 60-65m US\$, was spent on extending the works. Mostly used for this purpose were Louisiana-Pacific's own used machinery from closed-down OSB facilities. The facility's second production line, equipped with a 12-opening press, is geared to an annual capacity of 300m sqft (3/8" basis), and is to be taken up to full capacity utilisation over a period of 2-3 years. The Panguipulli I production line, put into service in 2000, can produce 130m sqft of OSB and sidings per year.

Delays had occurred on several occasions whilst the expansion projection was being implemented. Louisiana-Pacific had already filed for the required permits at the beginning of 2014. At that time, the company had been assuming that building work would begin in the third quarter of 2014 and reach completion in 2016. The environmental approval then took considerably longer than expected. The board of directors of Louisiana-Pacific therefore did not give the go-ahead for the project until the middle of 2016. The investment budget was simultaneously increased from the initially estimated 50-60m US\$ to 60-65m US\$. Building work subsequently began at the beginning of 2017. This also took longer than originally planned, to the extent that the turn of the year 2017/2018 was unable to be kept as the date set for the start-up when the project was approved. □

## ***Georgia-Pacific invests US\$6m in Clarendon***

Georgia-Pacific LLC, headquartered in Atlanta, Georgia, spent some US\$6m on its OSB mill in Clarendon, South Carolina in 2018. In a next phase, the site will gain a new laminating line, Georgia-Pacific announced in November 2018. At the same time, the automation system will be modernised and a new 30,000-sqft warehouse will be built. Georgia-Pacific said that it intended to spend a total of approximately US\$4.5m on this work.

The company announced that modernising its plant automation system would allow it to switch OSB manufacturing to continuous operations. It will also increase its annual production capacity, which was recently put at 850m sqft (3/8" basis) or approximately 750,000 m<sup>3</sup>. The



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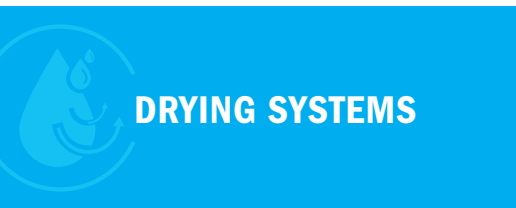
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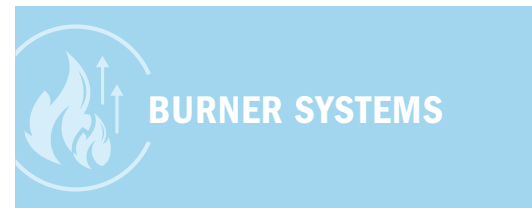
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Clarendon site

(Photo credit: Georgia-Pacific)

company will also start making speciality OSB in Clarendon with the addition of the laminating line. The firm offers laminated OSB under the Thermostat and Forcefield brands in this segment. These products have so far been made in Allendale (South Carolina), Fordyce (Arkansas) and Hosford (Florida). Georgia-Pacific also operates two other OSB mills in Brookneal (Virginia) and Engelhart (Ontario, Canada).

Georgia-Pacific acquired the sites in Clarendon, Allendale and Engelhardt together with a refining plant in Earlton (Ontario) from the insolvent firm Grant Forest Products Inc. (GFP), headquartered in Toronto, Ontario, in May 2010. At that time, the Clarendon site was not ready to operate after GFP suspended construction work on the new mill that had started in 2005 in 2007 and stopped it altogether in April 2008. Following its purchase of the site, Georgia-Pacific wrapped up the required investments in Clarendon starting in April 2011, investing some US\$30m in the process. However, the start-up of production, originally slated to happen at the end of 2011, did not happen until sometime in the first quarter of 2013. □

### ***Finnish plywood production higher towards end of 2018***

Finland manufactured slightly more plywood in the final quarter of last year after a somewhat weaker third quarter of 2018. Production evened out at the same level as in the first and second quarters at 310,000 m<sup>3</sup>, according to the Finnish Forest Industries Federation (FFIF), based in Helsinki, Finland. Finnish mills had also made 310,000 m<sup>3</sup> in each of these quarters. Output dropped to 290,000 m<sup>3</sup> in the third quarter. Manu-

facturing decreased compared with the prior-year period in both the third quarter (-2.9%) and the fourth quarter (-4.4%). Production had been roughly at the same level as the prior-year period in the first quarter. The FFIF reported a 3.8% growth in production for the second quarter. Finnish plywood production thus dipped 0.9% to 1.230m (2017: 1.240m) m<sup>3</sup> in the full year. Finland's plywood industry had made 310,000 m<sup>3</sup> between January and March 2017. Production had stood at 300,000 m<sup>3</sup> in the second and third quarters, before climbing to 330,000 m<sup>3</sup> in the fourth quarter.

The Natural Resources Institute Finland (Luke), headquartered in Helsinki, illustrated the trend in Finnish plywood production over a longer period of time, breaking down figures for softwood and hardwood plywood too. Luke also listed last year's total output at 1.230m (1.241m) m<sup>3</sup>. Softwood plywood production stayed the same at 840,000 (840,000) m<sup>3</sup>, while hardwood plywood softened to 390,000 (401,000) m<sup>3</sup>. □

### ***UPM posts a slight fall in 2018 plywood shipments***

UPM Kymmene Corp., headquartered in Helsinki, Finland, faced a slight decline in shipments and revenues from its Plywood division last year, its first in a while after growth in previous years. The company primarily blamed unspecified political strikes in Finland for the 2.4% decrease in shipments to 791,000 (2017: 811,000) m<sup>3</sup>. Plywood sales had increased 8,000 m<sup>3</sup> compared with the prior-year period to reach 209,000 m<sup>3</sup> in the first three months. Sales had dropped 8,000 m<sup>3</sup> to 206,000m<sup>3</sup> in the second quarter. A 4,000 m<sup>3</sup> decrease to 188,000 m<sup>3</sup> was registered in the third quarter. The fourth quarter was the weakest stretch with a 16,000 m<sup>3</sup> slump to 189,000 m<sup>3</sup>.

According to UPM-Kymmene's annual report, which was published on 31 January, price increases instituted to offset higher raw materials largely wiped out lower sales volumes. The Plywood division's total revenues were hence 0.8% lower at

€480m (484m) last year. External revenues were down 1.1% at €458m (463m). Total revenues improved marginally in the first quarter when compared with the prior-year period, before receding in the second quarter. The third quarter came close to replicating the previous year's performance, while the fourth quarter ended with a minor fall.

Earnings tumbled even more than revenues. UPM-Kymmene singled out falling sales as well as unfavourable currency effects as the factors sending earnings falling. Comparable EBITDA dropped 11.8% to €75m (85m), with the resulting margin declining to 15.6 (17.6) %. EBIT was down 16.2% at €52m (62m), while the margin stood at 10.8 (12.8) %. Both comparable EBITDA and EBIT fell more and more as the year went on. Figures were much lower than the prior-year periods and previous quarters in the third and fourth quarters. □

### ***Delignit beat revenue target for 2018***

The speciality plywood producer Delignit AG, headquartered in Blomberg, Germany, generated revenues of approximately €60m in 2018, according to preliminary figures published on 17 January 2019. This 14% growth compared with 2017's revenues of €52.7m was much higher than had been recently expected. Towards the end of November, the company raised its forecast for 2018 again slightly. At that time, Delignit had projected that it would slightly exceed last year's 8.5% growth. Delignit had previously set its sights on increasing revenues by more than 8%.

Even with the significant growth in revenues, the EBITDA margin would likely be close to the previous year's level of 9.2%. This is due to one-off start-up costs for new series delivery contracts together with project costs related to its decision to enter the caravan business, which was unveiled in early April.

Delignit's revenues were up 8.4% in the first half of the year. The Automotive divi-



sion delivered disproportionately strong growth of 15.4% on the back of sustained strong OEM business. The latest press release also said that higher released quantities in its Automotive division had allowed Delignit to far exceed its revenue forecast.

According to an investor presentation published in mid-December, Delignit managed to more than double its revenues from €25.7m in 2010. The compound annual growth rate (CAGR) reached 11%. A CAGR of 20% was even booked for EBITDA in the same period. EBITDA increased from €1.4m in 2010 to €4.9m in 2017. The investor presentation also stated that an upturn in first-half 2018 revenues was fuelled by a higher share of system solutions. Moreover, Delignit reported that efficiency gains associated with investments in automating production technology and more ample margins as a result of economies of scale had sent earnings soaring. EBITDA had jumped 16.3% to €2.9m in the first half of the year. □

### ***Garnica Group boosts capacity at Llodio mill***

The Spanish plywood manufacturer Grupo Garnica Plywood S.A., based in Logroño, has raised manufacturing capacity at a radiata pine plywood mill in Llodio that it acquired in April 2018 by roughly 25%. This capacity increase was made possible by investments in new technology and by optimising its existing machinery. In the full year of 2018, Garnica will produce approximately 48,000 (2017:40,500) m<sup>3</sup> of radiata pine plywood at the new location, a year-on-year upturn of around 19%.

The ongoing integration process is focusing mainly on more refined products. For instance, production of radiata pine plywood filmed on both sides had already jumped 30% in the past few months. New product versions had also been developed, including decorative raw plywood and special plywood boards for use in the automotive segment. Plywood made in Llodio is still sold under the Ludio

brand name. The export rate was listed at approximately 80%.

The Garnica group, which specialises in making poplar plywood, first gained access to radiata pine stocks and converting capacity in Spain with its 12 April acquisition of the radiata pine plywood firm Maderas de Llodio S.A., which will continue to operate as a legally independent subsidiary. Garnica presently has six mills with its new site in Llodio, five of them in Spain and one in France. Another mill is to be built in Troyes, France from the start of 2019 onwards. Preliminary information suggests that revenues have reached €250m (200m) in the 2018 financial year, an increase of about a quarter. Maderas de Llodio's contribution to total revenues was not specified. The company had generated revenues of €21.5m in 2017. Last year's output of Garnica group has likely reached around 350,000 m<sup>3</sup> of plywood, including the radiata pine plywood made in Llodio. In 2017, the company made about 293,000 m<sup>3</sup> of plywood. □

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## **NATURAL OR INDUSTRIAL STYLE? OUR TRENDS. YOUR CHOICE.**

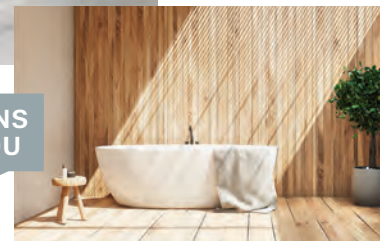
**Natural and light or rough and informal? Inspired by the latest home trends, Pfleiderer has added some exceptional decors and textures to its collection of designs.**

"The novelties were inspired by the current trend towards materials such as concrete, metals and textiles as well as homogeneous woods, stone and marble," explains Christiane Gebert, Pfleiderer's head of design and development. The coolness of old industrial

buildings is currently particularly popular and achieved with "understatement and informality", in home trend terms: surfaces that look like polished concrete and rough plaster, combined with metals such as black steel create a generous, relaxed industrial ambience. The trend "authenticity and handcrafted", on the other hand, is characterised by natural woods and handcrafted-looking finishes. Less rustic, but expressive grains and pale decors create lightness and freshness. Cool shades of grey and black provide clear contrasts; textile decors emphasise the feeling of cosiness. Two exceptional textures



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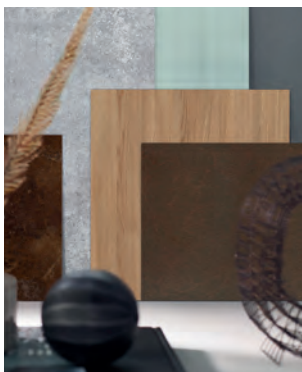


perfectly reflect the latest home trends. The rough, lively Corrosio texture looks like corroded metal and therefore particularly authentic in combination with iron or bronze decors. With its fine-grained texture, Sandpearl recreates the look of sandblasted surfaces. Matt yet still durable, it adds sophistication and modernity to material-inspired and plain-coloured decors.

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*Analysts: Downward trend in benchmark prices probably will continue this year*

## *North American OSB market has been experiencing weakness in the last months*

**A strong first half of 2018 gave way to growing weakness on North American OSB markets.**

Background information compiled in the annual report of Norbord Inc., based in Toronto, Ontario, published on 1 February indicates that this slow demand persisted into January. Yet, the company thinks that markets are currently experiencing a phase of temporary weakness and is ruling out a fundamental change in market trends. Consequently, demand for OSB should rebound with the anticipated spring revival in construction activity.

Norbord said that a slowdown in US housing construction during the autumn was also the main reason for the reversal in course on North American OSB markets. Strong demand and weather-related logistics problems in all relevant regions had paved the way for another upswing in benchmark prices during the first half of the year. Rising house prices and mortgage rates increasingly curtailed home construction starting in the third quarter. The resulting decline in demand for OSB was compounded by inventory corrections

undertaken by buyers from mid-year and by wet weather in the south of the US towards the year's end.

North American OSB production rose by 4% to 23.5bn sqft (3/8" basis) or 20.937m<sup>3</sup> last year, according to statistics from the APA-The Engineered Wood Association, based in Tacoma, Washington. Capacity utilisation thus reached around 87%. Norbord reported that 37 OSB mills are now operating in North America. Seven mills had been commissioned in 2012 and 2013, and five more in 2017 and 2018. Just one OSB mill is awaiting restart: Norbord's plant in Chambord, Québec.

Benchmark prices for 7/16" increased almost consistently during the first half of the year, peaking at US\$445/1,000 sqft in the North Central region. These prices then more than halved to US\$203 by December. In an annual average, prices fell by 1% to US\$351 (353). Average prices were 5% lower at US\$315 (330) in the South East region. Western Canada saw a 6% decline in prices to US\$307 (326). The variations in pricing from one region to another tended to intensify during the

course of the year. Prices also increased compared with 2017. The average annual price in the North Central region was US\$36 (2017: 23) higher than in the South East region in 2018. The gap between the North Central region and Western Canada swelled to US\$44 (27).

The slump in North American OSB prices will likely stick around this year, analysts believe. Banks analysed by Norbord think that the average annual price will be in the region of US\$244-306 in the North Central region. The average of all forecasts stands at US\$283. Prices are projected to stabilise in 2020. Analyst forecasts for the annual average in that year vary between US\$250 and US\$330, averaging US\$295.

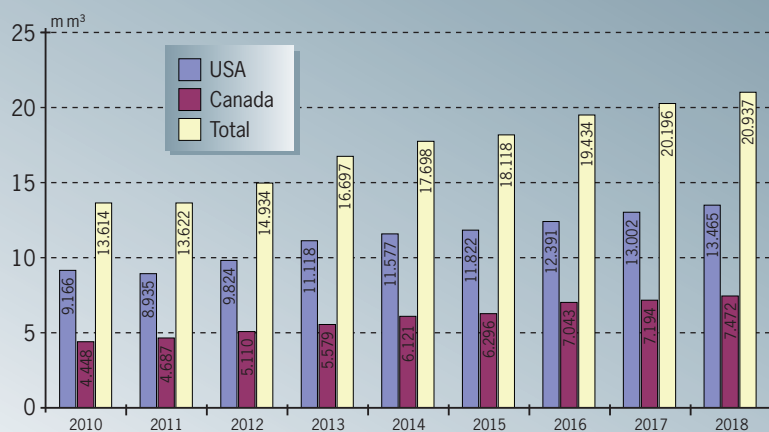
### ***OSB prices stabilised a little in January***

North American OSB prices have levelled off for the first time in a while in January after tumbling in the second half of 2018. Somewhat larger price cuts had been instituted in July and October. Prices had softened a little in August, September, November and December. A period lasting several weeks in September was the only time when prices stayed almost the same.

Conversely, the prices researched weekly by Random Lengths for the benchmark grade OSB North Central 7/16" gradually increased in the first half of the year, reaching the highest level of 2018 in mid-May at US\$445/1,000 sqft. Prices stayed there until the start of July. July then brought a slump of around US\$75 and August produced another US\$25 markdown. A period of stability lasting from the middle of August to the end of September gave way to a US\$10 decrease in the final week of September and a US\$85 plunge in October, leaving prices at US\$250.

Another US\$5 markdown emerged at the start of November. Random Lengths re-

**North America: Structural panel production**



Source: APA



ported that the resulting price of US\$245 applied until the end of November. A price of US\$230 was quoted for the final week in November. The price ended up at almost US\$205 in mid-December after falling to US\$220 at the start of the second week in December. This price continued to apply in subsequent weeks.

The six-month downward spiral reversed course for the first time in the first half of January, according to Random Lengths. A price of US\$210 was quoted by mid January.

### *Little change to the structural panels market*

The North American OSB industry encountered a small increase in output during the fourth quarter of 2018. This increase was much smaller than in quarters past. On the other hand, the downward trend in softwood plywood production that emerged in the third quarter actually intensified in the final three months of 2018. The APA-The

Engineered Wood Association reported that OSB production was 0.7% higher than the prior-year period at 5.175m (Oct-Dec. 2017: 5.141m) m<sup>3</sup>. Production fell by 7.7% to 584,000 (633,000) m<sup>3</sup> in the north of the US, but increased by 1.0% to 2.709m (2.681m) m<sup>3</sup> in the south and south-east of the country. Canadian producers made 3.0% more OSB than the previous year with 1.882m (1.827m) m<sup>3</sup>. The north of the US was the only region to register a growth compared with the third quarter (+10.8%). OSB production dropped by 9.3% in the south and south-east of the US and 2.0% in Canada. Softwood plywood production fell compared with the prior-year period and the last three months across all regions.

The slight increase in OSB production and downturn in softwood plywood translated into a 1.5% reduction in structural panel output compared with the prior-year period to 7.395m (7.504m) m<sup>3</sup>. By contrast, output improved in the first three quarters of the year (Q1: +1.8% to 7.442m m<sup>3</sup>, Q2: +4.2% to 7.879m m<sup>3</sup>, Q3: +2.9% to

7.854m m<sup>3</sup>). OSB production edged 3.7% higher to 20.937m (2017: 20.196m) m<sup>3</sup> in 2018. All four quarters spurred this growth (Q1: +1.9% to 4.982m m<sup>3</sup>, Q2 +5.7% to 5.333m m<sup>3</sup>, Q3 +6.0% to 5.429m m<sup>3</sup>). Softwood plywood output increased in the first half of the year, but this growth was more than erased by a downturn in the second half of the year (Q1: +1.5% to 2.460m m<sup>3</sup>, Q2: +1.2% to 2.546m m<sup>3</sup>, Q3: -3.3% to 2.425m m<sup>3</sup>). The full year produced a 1.7% decline in softwood plywood production to 9.645m (9.808m) m<sup>3</sup>.

These diverging trends mean that OSB's share of total structural panels production increased to 68.5 (67.3) %. OSB had an 81.0 (80.2) % share in Canada and a 63.0 (61.8) % share in the US. During the course of the year, OSB's share steadily rose in North America as a whole and in the two countries. OSB had a 66.9% share of the North American market in the first quarter, rising to 67.7% in the second quarter and 69.1% in the third quarter. Its share rose to 70.0% in the fourth quarter. □



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*USA purchased nearly one third of the overall volume, exports to Europe rose by 7 %*

## *Brazilian exports of elliotis pine plywood increased again at a double-digit rate*

**Despite a somewhat weaker development in the second half of 2018, Brazilian exports of elliotis pine plywood increased once again last year.**

According to the figure of 2.272m m<sup>3</sup> (2017: 2.060m m<sup>3</sup>) announced by the Associação Brasileira da Indústria de Madeira Processada Mecanicamente (Abimci) in Curitiba (Paraná), the export volume was 10.3% above the figure of the preceding year. In previous years higher rates of increase had been achieved. In 2015 exports rose by 13.9%; in 2016 and 2017 similar rates of 19.4% and 19.1% respectively had been achieved. In 2012 (+13.6%) and 2013 (+18.4%) double-digit increase rates had also been recorded. For 2014, however, Abimci had calculated a rise of 9.3%. Up to 2011, by contrast, exports had developed along negative lines for a period of several years. Calculated on the basis of the low point of 865,639 m<sup>3</sup> recorded at the time, exports of elliotis pine almost tripled up to 2018.

In the first half of 2018 the Brazilian plywood industry recorded significantly higher increase rates than in the second half of the

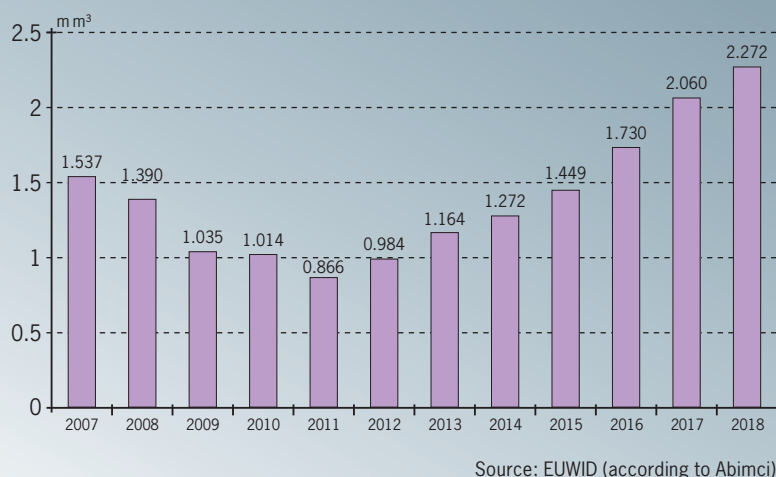
year. The trend observed in 2017 was thus reversed. At the time exports increased more significantly in the second half of the year. According to the Abimci figures, in each individual month of the second half of 2017 Brazil exported more elliotis pine plywood than in the first half of the year. Last year, by contrast, a stronger development had been recorded during the first half year. In five of six months increase rates of more than 20% were recorded (January +27.3% to 182,915 m<sup>3</sup>, February +26.7% to +189,220 m<sup>3</sup>, March +22.2% to 210,157 m<sup>3</sup>, April +35.2% to 214,352 m<sup>3</sup>, June +34.3% to 187,636 m<sup>3</sup>). May was the only month in which the preceding year's figure was not achieved (-14.5% to 142,158 m<sup>3</sup>), and this situation was due to the truck drivers' strike. In the second half of the year significantly lower increase rates were recorded, mainly as a result of the higher comparative figures. Consequently September was the only month in which a double-digit increase rate was recorded (+13.5% to 203,295 m<sup>3</sup>). For August (+2.9% to 197,416 m<sup>3</sup>), November (+4.9% to 203,989 m<sup>3</sup>) and December (+8.2% to 207,692 m<sup>3</sup>) increase rates in the mid single-digit percentage range

were recorded. October, at 186,156 m<sup>3</sup>, was at the level of the preceding year. In July exports declined by 21.2% vis à vis last year to 147,079 m<sup>3</sup>. Brazil exported an average volume of 189,339 m<sup>3</sup> per month last year, compared to 171,681 m<sup>3</sup> the year before.

The significant increase in volume was mainly due to the large sales regions. Exports to North America, at 1.023m m<sup>3</sup> (892,602 m<sup>3</sup>), passed the 1m m<sup>3</sup> mark for the first time. The preceding year's figure was therefore exceeded by 14.6%. Exports to Europe rose by 7.0% to 975,223 m<sup>3</sup> (911,370 m<sup>3</sup>). For Central America an increase of 21.3% to 137,535 m<sup>3</sup> (113,342 m<sup>3</sup>) was recorded. The most significant increase was recorded for South America which, at a volume of 45,115 m<sup>3</sup> (33,576 m<sup>3</sup>), purchased one third more than in the preceding year. Exports to Oceania, at 30,399 m<sup>3</sup> (30,334 m<sup>3</sup>), were at the same level as the year before. Declines were recorded in other regions. A volume of 53,760 m<sup>3</sup> (66,851 m<sup>3</sup>) was delivered to Africa, and a volume of 6,708 m<sup>3</sup> (12,092 m<sup>3</sup>) to Asia. North America's proportion of total exports thus increased to 45.0% (43.3%). Europe, with a proportion of 42.3% (44.2%), slipped to second place for the first time. Of the total export volume, 6.1% (5.5%) was exported to Central America, 2.4% (3.2%) to Africa, 2.0% (1.6%) to South America, 1.3% (1.5%) to Oceania and 0.3% (0.6%) to Asia.

The USA, at an increase rate of 20.1% to 746,128 m<sup>3</sup> (621,424 m<sup>3</sup>), further expanded its position as the largest export market. Germany, with 274,555 m<sup>3</sup> (208,961 m<sup>3</sup>), has overtaken Great Britain again, which only purchased 232,785 m<sup>3</sup> (282,610 m<sup>3</sup>). There was also a change in fourth position. Mexico, at 193,509 m<sup>3</sup> (171,474 m<sup>3</sup>), surpassed Belgium at 184,207 m<sup>3</sup> (173,519 m<sup>3</sup>) for the first time. Deliveries to Italy increased to a volume of 119,282 m<sup>3</sup> (97,390 m<sup>3</sup>). □

**Brazil: Exports of elliotis pine plywood**





***Group-wide investment budget for 2019 cut to US\$150m, coming from US\$204m in 2018***

## ***OSB producer Norbord is planning to invest another £35m in its Scottish Inverness mill***

**The Canadian OSB producer Norbord Inc., based in Toronto, Ontario, intends to invest another £35m or US\$46m in its Scottish OSB mill in Morayhill, Inverness, over the next two years.**

This project comes after it finished replacing two multi-opening lines with a continuous forming and press line in autumn 2017 and installed a new final assembly line at the end of 2018. The Board of Directors approved funding for installation of a second strander and dryer line in January 2019. This expansion project, which was pre-planned when the new line was installed, aims to boost its annual capacity, which is currently listed at about 720m sqft (3/8" basis) or around 635,000 m<sup>3</sup>, by 225m sqft or 200,000 m<sup>3</sup> to some 945m sqft or 835,000 m<sup>3</sup>. Norbord has invested around US\$12m in installing the new final assembly line, which is currently being commissioned, according to its annual report published on 1 February. The original total investment of US\$135m earmarked for the Inverness project has now been raised to US\$146m. Norbord primarily attributed the increase to currency effects.

Norbord invested a total of US\$204m (2017: 253m) during the past financial year. This figure breaks down into US\$50m in the first quarter, US\$54m in the second, US\$41m in the third and US\$59m in the fourth quarter. Total investments included US\$144m (103m) on projects to raise capacity and productivity and to cut costs. With the installation of the new final assembly line, another US\$12m (101m) had been spent on the Inverness site last year. Maintenance and servicing investments swelled to US\$39m (34m). Environmental protection and safety measures were roughly the same as the previous year at US\$9m (8m). Other investments stood at US\$0m (7m). Besides the final assembly tech-



*New production line in Inverness*

*(Photo credit: Norbord)*

nology in Inverness, the single-largest projects were debottlenecking work in Grand Prairie, Alberta, and preparations to restart a mill in Chambord, Québec. Norbord took steps to enhance productivity and cut costs at several other North American OSB mills.

The company invested a total of US\$44m in the expansion of its mill in Grand Prairie, which was completed in the fourth quarter, boosting total project costs to US\$68m. The installation of lumber yard technology, the power plant and dryer from a second production line, which was installed at the same location in the second half of the 2000s but never commissioned, boosted annual capacity by 100m sqft from around 730m sqft to around 830m sqft or 735,000 m<sup>3</sup>.

About US\$27m of the US\$71m budget for the Chambord mill approved by the Board of Directors in August 2018 was used last year. Besides expanding lumber yard technology and replacing the dryer, the firm primarily has to update plant con-

trol and emission protection systems. The planned work will raise the mill's nominal capacity by 80m sqft from 470m sqft to around 550m sqft. However, Norbord has made it clear again that the final decision about restarting this mill will not be made until the market conditions are right.

The modernisation and expansion of the lumber yard in Huguley, Alabama, has only just begun. This project will eliminate a capacity bottleneck before the forming and press line, as in Grande Prairie. The goal is to increase capacity by around 150m sqft.

Norbord set its investment budget for 2019 at US\$150m. The planned work primarily aims to reduce manufacturing costs and increase production of speciality products. Norbord said that the largest projects were the next expansion phase in Inverness and additional investments in Chambord. Norbord also intends to continue increasing the proportion of speciality products in its total OSB output by carrying out additional work at other sites. □

*Homann ceased production in Berga, Pavatex intends to close the Cham plant*

## *Competitive pressure will lead to further consolidation in the fibreboard industry*

**The ongoing competitive pressure in the markets for wood-fibre insulating board will lead to further consolidation in the European fibreboard industry.**

Pavatex S.A., based in Fribourg, Switzerland, intends to close its insulating board plant in Cham, Switzerland, during the first quarter of 2019. The firm has been owned by Soprema S.A.S., based in Strasbourg, France, since May 2016. A final decision to divest the site will be made if no way of keeping the plant open is found, for instance by selling it to a new operator. A redundancy package and supporting measures to help the 50 or so workers who would be affected by the closure to find a job are envisaged. Altogether, Pavatex employs about 80 people at its headquarters in Fribourg and in Cham. The company will retain 30 or so administrative, sales and logistics workers not hit by the closure.

Pavatex said that it had decided to close the plant because of ongoing losses at the Swiss location despite taking a vari-

ety of counter-measures. These losses were fuelled by rising raw material and energy prices, falling export sales and dwindling prices caused by competitive pressure. Pavatex had battled unfavourable currency effects on its domestic market and for exports in the past few years. Deliveries from Pavatex's plant in Golbey, France, which started to operate in April 2013, will partly make up for the shortfall caused by the closure of the Cham site. With a workforce of around 55 people, the Golbey plant has an annual capacity of around 46,000 tonnes of wood-fibre insulating board, but is mainly geared towards making single-layer standard products. Manufacturing of speciality products such as composite panels and refined products, which was concentrated in Cham after the Fribourg plant closed in December 2014, will no longer continue to the full extent in the future. In the event that the Cham site closes, buyers will likely be able to receive deliveries from inventories built up in recent months until the second half of 2019. Any further follow-up deliveries

might be ensured through contract manufacturing agreements, although no firm decisions have been made yet.

With a designed annual capacity of around 40,000 tonnes, the Cham site made 37,000 tonnes last year. Around 45% of this amount was exported. All told, Pavatex sold just over 80,000 tonnes last year. Optimisation work involving a modest investment will allow the Golbey site to boost its capacity by about 10-15%.

Homann Holzwerkstoffe GmbH, based in Herzberg, Germany, shut down activities run by Homanit Building Materials GmbH & Co. KG, headquartered in Berga, Germany, at the end of 2018 amidst ongoing losses. Production at its Berga insulating panel plant, which makes flexible insulating mats, pressure-resistant insulating panels, insulation flakes and resulting products, ceased at the same time. Its 84 employees had already been made redundant during the fourth quarter. By withdrawing from its insulating materials operations, Homann Holzwerkstoffe focuses on its business in thin MDF/HDF and refined products for use in the furniture and door industry at its plants in Losheim, Germany, Karlino, Poland and Krosno, Poland.

Homann Holzwerkstoffe had acquired the assets of the insolvent insulating material manufacturer Homatherm GmbH, which was based in Berga and had been insolvent since mid-October 2016, in a transferred reorganisation on 1 March 2017 and integrated them into Homanit Building Materials GmbH & Co. KG. According to Homann Holzwerkstoffe's annual reports, Homanit Building Materials was unable to return to profitability. The insulating material manufacturer had incurred a loss of €2.4m in the 2017 financial year. It booked a loss of €2.6m and revenues of €5m in the first half of 2018. As a result, Homanit Building Materials had negative equity of €3.5m by the end of the first half year. □



*Cham fibreboard plant*

*(Photo credit: Pavatex)*



*After rebuilding, the new flex line in Czarnków will make thicker mats in future as well*

## *Steico poised to commission two more lines in Czarnków and Czarna Woda*

**The insulating panel producer Steico SE, based in Feldkirchen, Germany, is currently installing two more lines at its Polish production facilities in Czarnków and Czarna Woda. These lines are set to get up and running by May 2019.**

In Czarnków, the company will start making wood construction elements for the first time with the addition of a production line for wall, ceiling and roofing elements, thus creating added value. For this project Steico used a second-hand line, that was purchased out of the insolvency mass of the Polish pre-fabricated building producer Nordhus S.A., headquartered in Bielsk Podlaski, in the third quarter of 2018. The line had been delivered to Nordhus just a few years ago by the Homag subsidiary Weinmann Holzbausystemtechnik GmbH, based in St. Johann-Lonsingen, Germany, and Hundegger Maschinenbau GmbH, headquartered in Hawangen, Germany. With a staff of 140 workers, Nordhus had last made up to 1,000 pre-fabricated modules each year at a site with a manufacturing area of about 10,000 m<sup>2</sup>. Its modules were mainly sold in Poland and Scandinavia. The company had ceased all operations by March of last year after filing for bankruptcy in January 2018.

Steico had spent about €1.4m to buy the main production machinery during the liquidation process. This technology was supplemented by a few pieces of new machinery from Weinmann when it was reinstalled in a new 8,000 m<sup>2</sup> hall in Czarnków. An additional multi-functional bridge was installed, among other items.

Part of Steico's aim behind this investment is to enter timber-construction element production and thereby further increase its added value. The insulation panels, LVL, and joists made by Steico will be the main preliminary products used.



*Czarnków site*

*(Photo credit: Steico)*

The industrially prefabricated wall, roof, and ceiling elements are to be supplied to timber-construction businesses in Poland and the eastern European region. There are no plans to work the western European markets for the time being.

In Czarna Woda, Steico is currently installing a wood-fibre panel line using the wet method. This line was dismantled at a plant in Casteljalous, France, in recent months and transferred to Poland. As it used to be the case in Casteljalous, this line will make bituminised wallboard that will mainly be sold on the export market under the "Steico universal black" name. Steico said that Czarna Woda's proximity to the port of Gdansk makes it more suitable to handle these export activities than its plant in Casteljalous in south-western France.

Steico commissioned two more production lines in Czarnków as recently as spring 2018. Once optimisation work was completed, these lines using the dry method switched to regular operations

during the third quarter. One line makes stable wood-fibre insulating panels for use in building shells.

The second line boosted its capacity to make flexible wood-fibre mats. When installing this insulating mat line, Steico had used a variety of components that were purchased at the end of April 2017 from the insolvency assets of Homatherm France S.A.S., headquartered in Chamouille, St. Dizier. The line, which has mainly been used to make thin insulating mats to date, is to be set up to make bigger thicknesses too during a rebuilding stoppage lasting around two months that started in December.

According to preliminary figures Steico's group revenues increased 9.4% to €252.0m last year. By contrast, growth had been barely in the double-digit percentage range in 2016 (+10.6% to €208.9m) and 2017 (+10.2% to €230.3m). EBITDA once again displayed a disproportionately strong growth of 15.8% to €43.9m (2017: 37.9m). □

## PG Bison planning to enlarge capacity

The wood-based panel manufacturer PG Bison Ltd. of Johannesburg, part of the South African conglomerate KAP Industrial Holdings Ltd. of Stellenbosch, is currently preparing expansion investment measures for its particleboard mills in Ugie, Eastern Cape, and Piet Retief, Mpumalanga. The project in Ugie is scheduled for conclusion in February 2020. Completion of the Piet Retief project is planned for March 2020. The laminating capacity is to be enlarged this year with the planned start-up of a new short-cycle press in August. KAP Industrial Holdings is planning to invest a total of roughly ZAR200m (roughly equivalent to €13m) for the three individual projects.

The particleboard plant in Ugie was built in 2006 to 2008. After the start-up, the particleboard works were shut down in Stellenbosch and Pietermaritzburg. Ac-

cording to the information last published, the works can meanwhile produce roughly 1,000 m<sup>3</sup> per day or 340,000 m<sup>3</sup> per year with a forming and press line supplied by Siempelkamp. Over the last two years, PG Bison has replaced the multi-opening system put into operation in Piet Retief in 1984 with a continuous production line also supplied by Siempelkamp, followed by the modernisation of the particlepreparation and drying systems in a second step. When the new forming and press line was put into operation in May 2017, production capacity was raised from what had formerly been roughly 180,000 m<sup>3</sup> to around 1,000 m<sup>3</sup> per day or 340,000 m<sup>3</sup> per year as well. PG Bison's laminating capacity had been enlarged shortly beforehand with the start-up of a fifth short-cycle press.

Within KAP Industrial's "Diversified Industrial" division, PG Bison forms the

"Integrated Timber" subdivision, which achieved growth of 15.4% in sales revenue to ZAR1.960bn (July-Dec. 2017: ZAR1.699bn) in the first half of the business year 2018/2019 running until the end of December. EBITDA, however, only rose by 2.4% in the same period to ZAR423m (ZAR413m), and the operating result by 1.2% to ZAR346m (ZAR342m). The reasons for this are the impaired result in plantation management, sawmills, and mast production arising from the forest fires in June 2017 and November 2018 and from the drought in the Western Cape region. The activities in resin production and impregnation, formerly consolidated in the "Diversified Chemicals" division and trading under the name of Woodchem S.A., have been assigned to the Integrated Timber division since the beginning of the new business year; the previous year's figures have been adjusted accordingly. □

## Arauco mill in Grayling up and running

Arauco North America has started commissioning individual parts of a new particleboard mill built in Grayling, Michigan, in January and February 2019 after delays occurred during the course of 2018. The first board was supposed to be made by mid-February, according to the latest

plans disclosed in January. Unconfirmed reports indicate that the first panel went through the forming and press line at the end of the first week in February.

According to a project report published by Arauco North America at the end of

December, mechanical installation work was largely finalised during the fourth quarter. The last major steps involved insulating the dryer and the wet electrostatic precipitator and completing the conveyor belt. The first test runs in the debarking and particle preparation systems, dryer and gluing stations were carried out before the year's end. Assembly of the forming and press line was finished quite some time ago. Work to install electrical systems in the final assembly area and downstream sander was largely completed in January. Altogether, electrical installation took longer than planned as power supply to the site was not completed until autumn 2018. Delays also surfaced in hiring manufacturing staff. Arauco North America had hired about 220 workers for the Grayling mill by the end of 2018.

When the project was unveiled in September 2015, Arauco North America had initially thought that start-up would happen in the second half of 2018. In autumn 2018, the company had set the goal of commissioning the mill by year's end. □

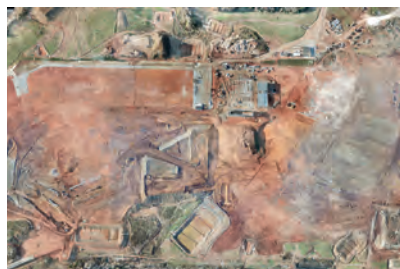


Grayling particleboard plant right before start-up

(Photo credit: Arauco North America)



## Egger receives permit for particleboard mill



Lexington site

(Photo credit: Egger)

The Egger group, headquartered in St. Johann, Austria, has started foundation and building construction work on a particleboard mill planned in Lexington, North Carolina, after receiving an air quality permit. The company had so far only carried out preparatory earthmoving work at the site. Egger Wood Products LLC had filed an application for the air quality permit with the North Carolina Department of Environmental Quality, Division of Air Quality (DAQ) in December 2017. According to a statement published on 12 September, the DAQ had concluded after an initial review that the project could be approved in principle. The deadline for objections was 12 October. The final air quality permit was granted once the conditions set in the preliminary decision were met.

The application was based on an annual manufacturing capacity of 424m sqft (3/4" basis) or approximately 750,000 m<sup>3</sup>, which is supposed to be reached in the final expansion phase. The new particleboard mill will process both fresh timber and waste wood. More than 1,500 pages long including annexes, the application includes a description of the different

sections of the mill (particle preparation, waste wood processing, dryer for the outer faces and core, biomass power plant, exhaust air treatment with a wet electro static precipitator (WESP) and regenerative thermal oxidizer (RTO), screen/sieve, gluing, the forming and press line and final assembly). Three treating lines with a combined annual capacity of 165m<sup>2</sup> and four short-cycle presses with a laminating capacity of 40m<sup>2</sup> are to be installed to process raw particleboard manufactured at the mill by the final development stage, according to the application. The DAQ assessed the environmental impact of the different sections of the mill in a 157-page opinion accompanying the application that was published on 12 September.

The information available to date indicates that Egger will install a raw particleboard line and two short-cycle presses in Lexington in the first phase of the project. Project planning work was largely completed during 2017. The forming and press line, which is to make around 400,000 m<sup>3</sup> per year in the first phase using a 10 ft x 43 m continuous press, was ordered from Siempelkamp Maschinen- und Anlagenbau GmbH in December 2017. An order for two short-cycle presses was placed with Wemhöner Surface Technologies GmbH & Co. KG a short time later. Manufacturing is to commence during 2020. Egger put the total investment in the first phase of the project, which will run until 2024, at about €260m. Some 400 direct jobs are to be created during this period. □

## Egger's new short-cycle press up and running

The Egger group commissioned what is now its fifth short-cycle press at its headquarters in St. Johann, Austria, in December 2018. The press was delivered by Siempelkamp Maschinen- und Anlagenbau GmbH and will make board with one-sided or two-sided synchronised pores ("Feelwood") and compact board, like a Siempelkamp short-cycle press that

has been in operation in St. Johann since December 2013.

One of five short-cycle presses running at its Brilon particleboard mill is currently being replaced by a new unit delivered by Wemhöner Surface Technologies GmbH & Co. KG. Commissioning is slated for March. A Siempelkamp short-cycle press replacing existing technology should then be commissioned at its particleboard mill in Rambervillers in the second quarter. □

## Egger modernising third dryer in Rambervillers

The Egger group, based in St. Johann, Austria, is set to modernise a third drum dryer at its particleboard mill in Rambervillers, France. Siempelkamp's subsidiary Büttner Energie- und Trocknungstechnik GmbH landed the contract to carry out this work. The company will deliver a tube-bundle heat exchanger for the indirectly heated chip dryer and a condensate system. The dryer was delivered in 1993 by the firm then known as Babcock-BSH GmbH, based in Bad Hersfeld, Germany, as part of a project to expand the plant.

Büttner had previously modernised the first two of three 4.8 x 24 RT-diameter drum dryers operating at the site. During the last modernisation project in 2016, a dryer was retrofitted into a directly heated single-path drum dryer with a chip throughput of 30 t/h while retaining the drum shell, bearings and drive. Büttner had delivered completely new components, a flash tube pre-dryer, a discharge box and all of the ventilation technology. The heating system was completed with a vertical, lined combustion chamber. This chamber is fired with a 30MW combination burner which can run on wood dust and gas in solo and combined operations. The dryer's exhaust air has since been treated using a wet electrostatic precipitator (WESP).

Another investment project was completed in Rambervillers in the first half of the ongoing 2018/2019 financial year when a new power plant was commissioned. A variety of French newspapers reported that Egger had invested €34m in its construction.

The biomass boiler delivered by Standardkessel Baumgarte GmbH, headquartered in Duisburg, Germany, has a rated thermal input of 55 MW and an electrical capacity of 9.6 MW. This subsidiary of the Japanese company JFE Engineering (JFEE), based in Tokyo, had previously delivered biomass boilers to a number of Egger sites. For instance, a larger boiler with a maximum rated thermal input of 83 MW and an electrical capacity of 15 MW was commissioned in Radauti, Romania in 2013. □

## Homanit opting for investment in Lithuania



Krosno site

(Photo credit: Homanit)

The Homanit subsidiary Homanit Holding GmbH, headquartered in Herzberg, Germany, is poised to build a new thin MDF/HDF mill via its new Lithuanian subsidiary Homanit Lietuva UAB near Lithuania's capital Vilnius. According to a report published by Invest Lithuania at the end of January 2019, the project is to involve an investment of around €115m. A timetable for the project was not disclosed.

Homanit intends to move closer to customers in the Baltic region by making this investment. Until now, these customers have mainly received thin and semi-finished MDF/HDF from Homanit's two Polish mills in Karlino and Krosno. The Baltic furniture industry and its suppliers shall receive around half of the products made at the new mill. The other half will be exported to markets outside Europe, principally to North America and Asia.

Homanit has long been exploring investment opportunities in the Baltic region. In September 2017, the company signed a letter of intent with the Lithuanian company AB Grigeo, headquartered in Grigiškes near Vilnius, to acquire the rigid fibreboard producer UAB Grigeo Baltwood. However, this letter of intent was revoked at the start of February 2018 as the premises and infrastructure conditions at the Grigeo Baltwood mill were deemed inadequate for the investments that Homanit had planned in a thin board mill. In its 2017 annual report, which was published on 30 April 2018, Homanit Holzwerkstoffe stressed that it intended to stick to its plans to increase its capacity.

The company, which currently operates three mills in Losheim (Germany) and Karlino and Krosno (Poland), had also explored opportunities for expanding to the Baltic region at that time. Its interim report for the first half, which was published in late September, again raised the possibility of expanding capacity by either acquiring an existing mill or investing in a new plant. However, the firm no longer mentioned the region that it was focusing on in these endeavours. □

## Sharp decline in Sonae Industria's EBITDA

The termination of production announced by the joint venture Laminate Park GmbH & Co. KG of Heusweiler-Eiweiler on 19 February 2019 and a fire at the Canadian particleboard works in Lac-Mégantic, Quebec, led to major impairments in the results of Sonae Industria SGPS S.A. of Maia, Portugal, in the fourth quarter of 2018. With the provisionally reported 4.0m €, EBITDA for the fourth quarter will probably only reach roughly half the reference figure for the preceding year.

Sonae Industria performed an impairment test for the assets of the Eiweiler

joint-venture works at the end of 2018. The impairment requirement will probably reduce Sonae Industria's EBITDA by around 8m € in its business year 2018. The development in the result for the fourth quarter was also impaired by downtime due to fire in one of the two particleboard lines at the Lac-Mégantic particleboard works in Quebec, Canada. The plant was damaged by fire in the second half of November, only a few days after the annual downtime. The subsequent loss in output of approximately two weeks combined with the preceding downtime for maintenance led to substantial losses in sales revenue and results. The result was further impaired by costs for maintenance and repair. □

## Sonae Arauco: Mangualde MDF line up and running

The joint venture Sonae Arauco S.A., based in Madrid, Spain, made the first board using a new continuous production line installed at its MDF mill in Mangualde, Portugal towards the middle of September 2018. The relatively quick commissioning process allowed the company to stick to its original timetable, which provided for manufacturing to commence during the third quarter of 2018.

Sonae Arauco had replaced a multi-opening press with a continuous forming and press line during the replacement project announced in spring 2017. The contract awarded to Siempelkamp Maschinen- und Anlagenbau GmbH in June 2017 included an 8ft x 28.8m ContiRoll press, the associated automation technology, a handling system set up for different lengths and widths of board and connection to the existing board warehouse and downstream sanding and packaging lines. Following start-up of the new line, Sonae Arauco operates two continuous MDF lines in Mangualde. The company had previously said that the plant's current listed capacity of 360,000 m<sup>3</sup> would not change much at first with the replacement project.

In May 2017, Sonae Arauco announced plans to replace its remaining single-opening and multi-opening lines with continuous production lines. Following completion of the project in Mangualde, the next project entails replacing two single-opening particleboard lines at its Beeskow facility. The Sonae Arauco Board of Directors had approved the Beeskow 50+ project in spring. The company then ordered a forming and press line with a 42-metre-long continuous CPS+ press from Dieffenbacher.

The chip preparation area was modernised and expanded a few years ago as a preparatory step. Following commissioning of the forming and press line slated for October 2019, the chip preparation area is to be expanded in a next stage, which will boost the annual capacity of the Beeskow plant from 312,000 m<sup>3</sup> to 600,000 m<sup>3</sup> in two investment phases. □



## ***Restructuring projects realised by Duratex***

The Brazilian wood-based panel manufacturer Duratex S.A. of São Paulo implemented major restructuring measures in both of its divisions in its business year 2018. In the "Wood" division, the Itapetinga particleboard and MDF/HDF plant, shut down indefinitely in December 2015, resumed operation at the beginning of April and was initially run in alternation. In its place, Duratex mothballed the Botucatu MDF/HDF in São Paulo works at the end of November. The works is to be updated during the downtime lasting at least one year. The asset swap agreed between Duratex and Eucatex at the end of January was completed in August. By selling the three hardboard plants in Botucatu to Eucatex, Duratex has permanently withdrawn from this product segment. In return, Eucatex transferred forest plantations in Capão Bonito, São Paulo, to Duratex. Part of Duratex' intention behind acquiring these forest plantations is to improve the supply of wood to the Itapetinga works. In two transactions in February and July, Duratex transferred a total of almost 30,000 ha of forest to the pulp and paper manufacturer Suzano Papel e Celulose S.A. of Salvador de Bahia, Bahia. Duratex also wants to bring in roughly 43,000 ha of eucalyptus plantations in the Triângulo Mineiro region in the state of Minas Gerais into the joint venture agreed with Lenzing AG in mid-June for building and operating a dissolving wood-pulp (DWP) mill.

In the "Deca" division, geared to bathroom fittings, Duratex shut down the Hydra works in Tubarão, Santa Catarina, and moved its plant and machinery to Aracaju, Sergipe. Besides this, structural modifications and cost-reduction measures are planned for the whole division. □



Botucatu site

(Photo credit: Duratex)

## ***Duratex discontinues MDF production at Botucatu***

At the end of November 2018, the Brazilian wood-based panel manufacturer Duratex S.A. of São Paulo temporarily shut down the Botucatu MDF/HDF works in São Paulo, geared to an annual production capacity of 400,000 m<sup>3</sup>. According to Duratex, the stoppage has no effect on buyers because the MDF/HDF plant in Itapetinga, São Paulo, has been operating at its full annual capacity of 500,000 m<sup>3</sup> again since the fourth quarter. The production line in Itapetinga shut down indefinitely in December 2015 resumed operation in April 2018.

The plant in Botucatu, which went into operation in 2002 with an 8 ft x 50.1 m continuous press supplied by Siempelkamp Maschinen- und Anlagenbau GmbH is to be updated during the downtime. Duratex estimates a period of at least one year for this modernisation, the purpose of which is to increase productivity and reduce production costs. According to Duratex, when the plant can resume operation depends on how the market develops in the future and on the underlying logistical conditions.

Duratex is meanwhile only operating the MDF/HDF plant in Botucatu. The three hardboard plants geared to a total annual capacity of 200,000 m<sup>3</sup> were sold to Eucatex S/A Indústria e Comércio de São Paulo with effect from 31 August 2018. □

## ***Berneck orders technology for MDF/HDF line in Lages***

The Brazilian wood-based panel manufacturer Berneck S.A. Painéis e Serrados, headquartered in Araucária, Paraná, has ordered the forming and press line and a variety of upstream and downstream components for a new MDF mill planned in Lages, Santa Catarina, from Siempelkamp Maschinen- und Anlagenbau GmbH. The order includes the resin kitchen, an Ecoresinator, the fibre mat-spreader, a ninth generation ContiRoll continuous press in dimensions of 9 ft x 48.8 m as well as a finishing line with cooling turners and intermediate storage. According to Siempelkamp, Berneck will be the first



(Photo credit: Berneck)

client to receive a ContiRoll with an extended press infeed, known as the new entry option (NEO). Siempelkamp's subsidiary Büttner Energie- und Trocknungstechnik GmbH will deliver a steam-heated flash tube dryer. Siempelkamp's Belgian subsidiary, Sicoplan N.V., based in Lauwe, will provide engineering of the entire plant. Siempelkamp will also be responsible for the steel structure and wiring. Assembly work is scheduled to get under way in the second quarter of 2020, with the first board to be made in December 2020. The planned daily capacity of 1,665 m<sup>3</sup> is to be reached starting in spring 2021. Alongside awarding the contract for the new line in Lages, Berneck ordered equipment for four existing lines in Araucária (Paraná) and Curitiba (Santa Catarina) and the new line with the "Prod-IQ" process control system.

Berneck presently operates one particleboard line and one MDF/HDF line each in Araucária and Curitiba; all of these lines use continuous presses. The company also runs a sawmill at each site. A similar manufacturing strategy is to be implemented at the long-planned new site in Lages. In a first phase, Berneck intends to invest in a sawmill as well as the MDF/HDF line. Berneck started the first preparatory work for construction of the new mill during the fourth quarter of 2017.

Berneck reports that it presently has a total annual capacity of around 2.4m m<sup>3</sup> at its existing locations. Forest plantations covering 132,000 ha, mainly stocked with elliotis pine, supply timber for its production sites. The company has also planted smaller teak plantations. Berneck also runs a converting plant for teak wood in Brasnorte, Mato Grosso. Altogether, the company employs about 2,500 workers. □

## ***Floraplac commissions second MDF line***



(Photo credit: Floraplac)

The Brazilian MDF manufacturer Floraplac Industrial MDF Ltda., based in Paragominas, Pará, made the first piece of MDF using a production line delivered by Dieffenbacher GmbH Maschinen- und Anlagenbau on 23 October 2018. Commercial production began before the end of November after optimisation work had been completed. Floraplac said that it had invested more than BRL600m or approximately US\$162m in installing the line, which has a daily capacity of 1,800 m<sup>3</sup>. According to a company presentation published at the end of November 2017, the firm will be able to make a total of 720,000 m<sup>3</sup> of MDF each year in future using the two production lines, which will quadruple its former capacity.

The company started making MDF in October 2010 when it commissioned a multi-opening press delivered by Shanghai Wood Based Panels Machinery Co. Ltd. (SWPM), based in Shanghai. With an original installed daily capacity of 250 m<sup>3</sup>, its daily output was raised to around 500 m<sup>3</sup> by the time that the second production line was ordered. Recent information from Floraplac indicates that the line can now make 180,000 m<sup>3</sup> per year. Until now, most of its production has been sold by sales partners, with around 10% delivered directly to furniture businesses located in the plant's vicinity in north-eastern Brazil. Floraplac intends to start exporting its products too with the new line.

Completion of the MDF project had been delayed several times since it was announced. Originally placed in March 2013, the contract for the complete line was initially put on ice and not reactivated until financing was finalised in May 2015.

At the same time, the order was changed compared with the original plans. The continuous press, which was originally supposed to be 9ft x 42m long with a daily capacity of 1,300 m<sup>3</sup>, is to be delivered in a length of 49.5 m. In return, the planned superheated steam mat pre-heating system was cancelled. At the time when installation work began, the company had envisaged a start-up date in July 2017. Assembly work then took much longer than originally expected. Towards the end of 2017, Floraplac had intended to start up production in May 2018. The new MDF line then reached 95% completion by the start of August. The parent firm Grupo Concrem manages forest plantations with a total area of more than 30,000 ha near the plant to supply roundwood to the two production lines. □

## ***Alliance between Timber Products and Panolam***

Through a sales alliance agreed with the wood-based panel and laminates manufacturer Panolam Industries International Inc. of Shelton, Connecticut, in September 2018, the US plywood and particleboard manufacturer Timber Products Company of Springfield, Oregon, will be supplying Panolam distributors in the US states of California, Utah, New Mexico, Nevada, and Colorado with thermally-fused laminate (TFL) wood-based panels in future. Timber Products will produce the TFL panels using Panolam decors at the laminating plant in White City, Oregon.

Panolam had previously supplied the markets on the North American West Coast through its own laminating works in Albany, Oregon, which was sold to Arauco North America of Atlanta, Georgia, in July 2018, however. In connection with the takeover, the two companies had come to an agreement on an alliance through which Arauco North America continues to produce melamine-laminated wood-based panels at the Albany works under the Panolam brand and with matching Panolam laminates. The panels are also to be supplied to Panolam buyers in southern and western USA. □

## ***CFP to take over exclusive distribution for CalPlant***

The US plywood manufacturer Columbia Forest Products (CFP) Inc., headquartered in Greensboro, North Carolina, is poised to take over exclusive distribution of board made out of rice straw using formaldehyde-free binding agents. This comes after start-up of an MDF mill currently being built by CalPlant I LLC. CFP reported that production at the line, which will have an annual capacity of 140 million sqft (3/4" basis) or about 250,000 m<sup>3</sup>, in mid-2019. The original timetable has thus been pushed back a little. When the project was approved in June 2017, the firm had anticipated that commissioning might happen by the end of 2018. At the same point in time, CalPlant had ordered a complete MDF production line with a ninth-generation ContiRoll press in dimensions of 10 ft x 35.4 m from Siempelkamp. This line can make board 2-30 mm thick with a variable width of 8-10 ft.

CFP runs eight hardwood plywood mills and five veneer mills in the US and Canada. It also has a stake in CalPlant I through its parent firm CalPlant I Holdco LLC, which owns shares in CFP. Existing hardwood plywood channels are to be used to distribute MDF made by CalPlant. Products have so far been sold by wholesalers, the DIY store chain The Home Depot and directly to industrial customers. □

## ***CHH exiting the particleboard business***

Carter Holt Harvey Pinepanels Pty. Ltd., based in St. Leonards, New South Wales, ceased production at its particleboard mill in Tumut, New South Wales on 25 February 2019. The mill closed its doors altogether at the end of the month. With a recent staff of 88 workers, the mill had made raw and laminated particleboard for use in the furniture industry. In a notice to suppliers, its parent company Carter Holt Harvey Ltd (CHH), based in Auckland, New Zealand, said that it had shut down operations in Tumut because of a scarcity of timber in the region. The Tumut and Adelong Times reported that high costs involved in main-



taining machinery, some of which was over 30 years old, had made it increasingly difficult to run the site in a cost-efficient manner. This was also the reason why the company had been unable to find a buyer for the mill. Its particleboard mill in Gympie, Queensland is to close by April. Around 60 people working at the location have been informed of the closure plans. CHH said that it was divesting this mill because of a sharp slump in demand for particleboard flooring, which made up about 80 per cent of the site's output. Earlier reports indicated that the Gympie and Tumut mills each had an annual capacity of about 100,000 m<sup>3</sup>.

At the start of 2018, CHH sold two particleboard mills in Mount Gambier (South Australia) and Oberon (New South Wales) to Borg Group Holdings Pty Ltd. (Somersby, New South Wales). In October 2017, the Australian Competition & Consumer Commission (ACCC), based in Canberra, approved this deal brokered in mid-2017. Borg had also acquired rights to the STRUCTAflor particleboard flooring brand together with the two sites making raw particleboard and

particleboard flooring. Borg Group had entered the wood-based panel manufacturing business by acquiring an MDF mill in Oberon, New South Wales from CHH in March 2010. This Borg Panels Pty. Ltd. Mill gained a new particleboard line in the past two years. The two MDF lines acquired from CHH were modernised at the same time. Borg also operates an adhesive resin plant in Oberon. □

### ***Kim Tin puts second MDF plant into operation***

The MDF manufacturer FSC Vietnam, belonging to the Vietnamese Kim Tin Group, officially opened its new MDF works in Tân Lập, Bình Phước, on 16 August 2018. Siempelkamp Maschinen- und Anlagenbau GmbH supplied components such as the forming and press line. With a thickness range of 2.5-40 mm, the eighth-generation 8 ft x 47.0 m ContiRoll it uses apparently achieves an annual capacity of 400,000 m<sup>3</sup>. The scope of the supply

contract signed in July 2016 also covered the cooling and stacking stations as well as an automatic warehouse system.

The power station, which achieves a firing capacity of 63 MW with a stoker-fired furnace including dust combustion, was supplied by Büttner Energie- und Trocknungstechnik GmbH. This supplies the flash-tube fibre-dryer geared to a throughput of 42 tph bone dry with flue gases. The order for the power station also covered the thermal oil heater and the process-steam generator. The planning for the whole system was handled by Sicoplan N.V. of Lauwe, Belgium.

Kim Tin Corp., based in Ho Chi Minh City, made its debut in MDF production in 2011 through the works trading under the name of Kim Tin MDF at the nearby location of Tân Phú, Bình Phước. According to earlier information from the company, this plant was designed for an annual capacity of 160,000 m<sup>3</sup> of MDF. The 4 x 8 ft and 9-25 mm thick panels it produces are sold under the "Timbee MDF" brand. □

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## *Sales of thermally fused laminate (TFL) did not continue to recover in fourth quarter*

# *North American particleboard sales stable, MDF/HDF sales rebounded slightly stronger*

**North American composite panel markets lived up to expectations in the fourth quarter of 2018. Particleboard shipments fell just as much compared with the previous three months as they had in previous years.**

Quarterly statistics from the Composite Panel Association (CPA), based in Leesburg, Virginia, reveal that particleboard sales had receded by 9.3% - similar to the rates of decline recorded in the fourth quarters of 2015 (-9.4%) and 2016 (-9.4%). Sales had decreased 6.7% in the fourth quarter of 2017 compared to the preceding quarter. MDF/HDF shipments had weakened a little more compared with the third quarter than had been the case in previous years. Sales had slipped 4.7% between the third and fourth quarters of 2015, but almost stayed the same in 2016 (-0.7%). The fourth quarter of 2017 did not repeat this performance with a 7.0% decrease. A double-digit fall of 10.8% compared with the previous three-month stretch had even been recorded in the fourth quarter of 2018. Sources in the North American composite panel industry believe that the somewhat bigger downturns for particleboard and MDF/

HDF reflect mounting uncertainty about the economic outlook and a slowdown in US home construction towards the year's end.

Sales figures only dipped slightly when compared with the same periods in 2017. Particleboard sales were 1.4% lower at 1.356m (Oct.-Dec. 2017: 1.375m) m<sup>3</sup>, while MDF/HDF sales dipped 0.9% to 946,800 (953,900) m<sup>3</sup>. During the first three quarters, particleboard sales had not fared as well as MDF/HDF sales when compared with the prior-year periods. Particleboard sales had decreased 0.5% to 1.466m m<sup>3</sup> in the first quarter and 0.7% to 1.522m m<sup>3</sup> in the second quarter compared to the corresponding period in the preceding year. The third quarter then brought a small 1.4% improvement to 1.494m m<sup>3</sup>.

By contrast, MDF/HDF sales had jumped 5.5% to 1.042m m<sup>3</sup> in the first quarter when compared with the prior-year period. Second-quarter sales had shot up as much as 7.9% to 1.092m m<sup>3</sup>. CPA statistics show that the third quarter also ended with a 3.5% improvement in sales to 1.062m m<sup>3</sup>.

Looking at 2018 as a whole, particleboard sales were roughly the same as in 2017 at 5.837m (2017: 5.856m) m<sup>3</sup>. Hardly any changes had surfaced in 2017. By comparison, sales were down 1.4% at 5.849m m<sup>3</sup> in 2016 compared to the preceding year. The CPA had registered slight growth in 2014 (+2.1% to 5.844m m<sup>3</sup>) and 2015 (+1.3% to 5.931m m<sup>3</sup>). MDF/HDF sales had already altered a little more in previous years. Sales had declined 1.7% to 3.711m m<sup>3</sup> in 2014. A 4.6% growth to 3.906m m<sup>3</sup> in 2015 had given way to stagnant MDF/HDF sales of 3.902m m<sup>3</sup> in 2016. Sales had improved 2.0% to 3.980m m<sup>3</sup> in 2017. The 4m m<sup>3</sup> mark was surpassed for the first time in a long while last year with a 4.1% improvement to 4.143m m<sup>3</sup> compared to the preceding year.

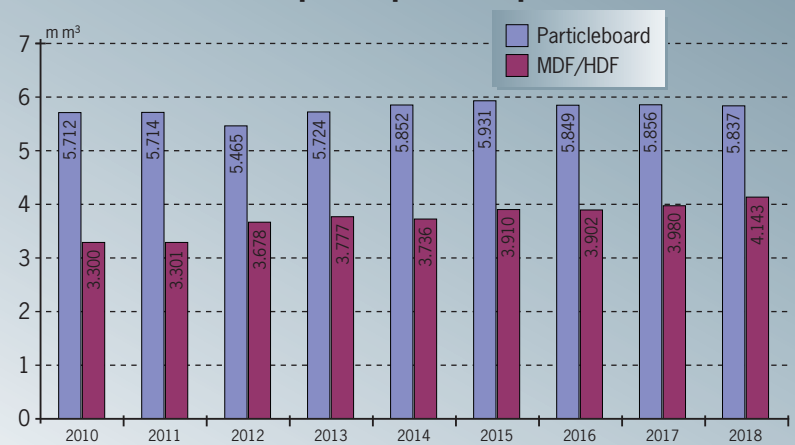
### *TFL shipments stagnated in the fourth quarter*

A growth in North American thermally fused laminate (TFL) sales that surfaced in the third quarter of 2018 after a period of stagnation did not endure in the fourth quarter of last year. Statistics from CPA show that sales stagnated compared with the prior-year period at 28.22m (Oct.-Dec. 2017: 28.15m) m<sup>2</sup>.

Canadian TFL sales had increased 2.5% to 61.90m (2017: 60.33m) m<sup>2</sup> in all twelve months combined, while the US stagnated at 57.53m (57.42m) m<sup>2</sup>. All told, North American TFL sales rose 1.4% to 119.43m (117.75m) m<sup>2</sup> compared to the preceding year. Total sales had decreased 0.5% in 2017 from the revised figure of 118.40m m<sup>2</sup> reported for 2016.

Figures compiled by the CPA for the TFL market reveal little momentum despite the investments made in new and replacement technology made by North American wood-based panel manufacturers and laminating firms, especially in the past two years. □

**North America: Composite panel shipments**



Source: CPA



*Domestic sales and apparent consumption again increased slightly in 2018*

## *Brazilian wood-based panels producers are in the process of restarting lines*

**In connection with the stabilisation of domestic demand over the course of last year, capacity utilisation of the Brazilian wood-based panels industry also improved slightly.**

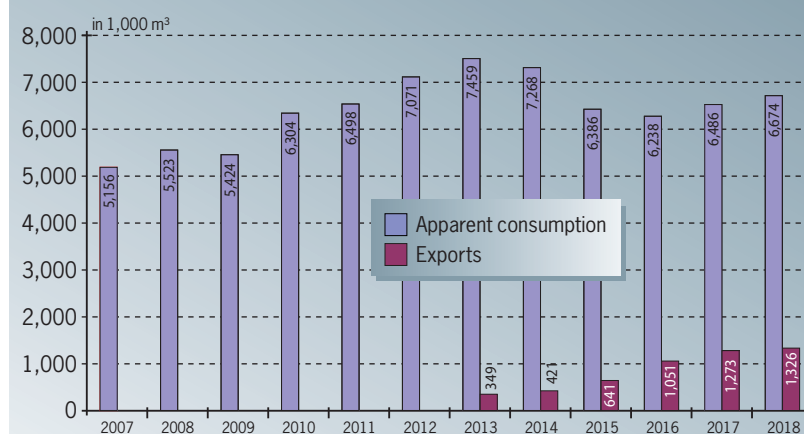
According to the figures of sector association Indústria brasileira de árvores (IBÁ), Brasília and São Paulo, conveyed in the 2018 financial year presentation of particleboard and MDF/HDF manufacturer Duratex S.A. (São Paulo), over the entire period of 2018 domestic sales of MDF/HDF increased by 5% to 3.9m m<sup>3</sup> (2017: 3.7m m<sup>3</sup>). MDF/HDF exports, at 0.7m m<sup>3</sup> (0.7m m<sup>3</sup>), remained at virtually the same level as the preceding year. With regard to particleboard, domestic sales increased by 8% to 2.8m m<sup>3</sup> (2.6m m<sup>3</sup>) and exports by 20% to 0.5m m<sup>3</sup> (0.4m m<sup>3</sup>).

Against this background, some manufacturers resumed normal production after operating at a reduced level for some time. Individual companies also relaunched production on equipment which had in fact been shut down for an indefinite period.

In April 2018 Duratex, for example, started up operations again at the Itapetininga particleboard and MDF/HDF plant, which had been closed in December 2015. Instead, Duratex mothballed the Botucatu MDF/HDF plant at the end of November. This plant, which is geared to an annual production capacity of 400,000 m<sup>3</sup>, is to be updated during a downtime lasting at least one year. According to Duratex, the stoppage has no effect on buyers because the MDF/HDF line in Itapetininga has been operating at its full annual capacity of 500,000 m<sup>3</sup> again since the fourth quarter.

By normalising production again and re-commissioning individual production lines, the proportion of dormant capacities was reduced further. In 2015,

**Brazil: Consumption and export of wood-based panels**



Source: EUWID, according to information from IBÁ

according to IBÁ, some 19% of total MDF/HDF capacities were not in operation. In 2016, this proportion increased to 22% before declining to 18% in 2017 and 14% in 2018. In the case of particleboard, some 30% of capacity had been idle in 2015. For 2016 and 2017, IBÁ had indicated the proportion of shutdown capacities at 27%, last year it decreased to 22%.

In the statistics published by IBÁ, wood-based panels sales are not differentiated between particleboard, MDF/HDF and hardboard. According to the figures for the entire period of 2018, which were published at the end of February, domestic sales increased by 2.9% vis à vis the preceding year to 6.674m m<sup>3</sup> (6.486m m<sup>3</sup>). Exports, at 1.326m m<sup>3</sup> (1.273m m<sup>3</sup>), surpassed the preceding year's figure by 4.2%. Imports of wood-based panels, at 5,000 m<sup>3</sup> (4,000 m<sup>3</sup>), did not play a significant role.

According to the IBÁ figures, for the entire period of 2018 apparent consumption also increased by 2.9% to 6.679m m<sup>3</sup> (6.490m m<sup>3</sup>).

In the second half of the year, apparent consumption surpassed the preceding year's figures in all months. In the first half year, it had increased in three months and decreased in the other three. The decline recorded in May was mainly due to interruptions in production and transport caused by a strike of Brazilian truck drivers which lasted several days. The ensuing backlogs were compensated by additional deliveries in the following months.

According to IBÁ figures, accumulated over 2017 and 2018 apparent consumption increased by 436,000m<sup>3</sup>. The decline of 1.221m m<sup>3</sup> recorded in 2014, 2015 and 2016 was thus so far only compensated by just under one third. In order to compensate for the somewhat restrained domestic market, since 2013 the Brazilian wood-based panels industry increasingly expanded its export business, which previously had been of virtually no significance. Over the last two years, however, the increase in exports levelled off again somewhat. □

*Companies are accused of colluding on particleboard and MDF prices during 2017*

## *Turkish anti-trust authority investigating 12 producers of particleboard and MDF*

**The Turkish anti-trust authority Rekabet Kurumu launched official investigation proceedings into 12 wood-based panel manufacturers from Turkey and the Turkish wood-based panel association MDF ve Yonga Levha Sanayicileri Dernegi towards the end of November.**

The companies in question are accused of colluding on particleboard and MDF prices, primarily during the course of last year. Turkish wood-based panel buyers claimed that prices had not altered much for a long time up until the end of 2017. Companies involved in the alleged cartel had then announced and implemented several price hikes in rapid succession. Price hikes for MDF had been especially steep.

The Turkish anti-trust authority had launched preliminary investigations after complaints were made by the Turkish furniture industry. The tips that were gathered were evaluated at a final review carried out on 1 November. The anti-trust authority concluded that there

was enough evidence to launch investigation proceedings. The wood-based panel association and listed companies are accused of infringing Article 4 of the 1994 Act 4054 (Law on protecting competition 'Rekabetin Korunmasi Hakkinda Kanun'). Article 4 bans collusion on prices and quantities in product markets, limiting supply and dividing up sales markets. These investigation proceedings are now listed under reference number 18-41/654-M. Under Act 4054, a decision has to be made within six months of the official investigation proceedings being launched. If needed, though, a six-month extension is possible. The proceedings can thus last up to a year. In recent years, Turkish wood-based panel buyers had complained several times about potential price collusion by manufacturers. Anti-trust authorities had reviewed these tips, but had not launched investigations until now.

The current investigations are focusing on Turkey's major wood-based panel groups Kastamonu Entegre Ağaç San.

ve Tic. A.S. (Istanbul), Yıldız Entegre Ağaç San. ve Tic. A.S. (Kocaeli), Yıldız Sunta Orman Ürünleri Sanayi Tesisleri İth. İhr. ve Tic. A.S. (İzmit) and Starwood Orman Ürünleri A.S. (İnegöl), which operate several wood-based panel locations in Turkey and some in other countries. There are also some family ties between these groups. Several medium-sized companies are also involved: Çamsan Ordu Ağaç Sanayi ve Ticaret A.S. (Ordu), Çamsan Entegre Ağaç San. ve Tic. A.S. (İstanbul-Levent), Teverpan MDF Levha Sanayii ve Ticaret A.S. (İstanbul), Divapan Entegre Ağaç Panel San. Tic. A.S. (Düzce) and Orma Orman Mahsulleri Entegre San. ve Tic. A.S. (İstanbul). The statement published by Rekabet Kurumu on 29 November also lists the new MDF company AGT Ağaç Sanayi ve Ticaret A.S. (Antalya), Çamsar Orman Ürünleri Tic. ve San. A.S. (İstanbul) and the laminate manufacturer Gentas Genel Metal San. ve Tic. A.S. (Ankara). Gentas runs a relatively small particleboard mill in Bursa.

These companies cover the majority of Turkey's particleboard and MDF industry. The companies not affected by the anti-trust proceedings include Kronospan's subsidiary SFC Entegre Orman Ürünleri Sanayi ve Ticaret A.S. (Kastamonu), Turanlar Group's subsidiary Vezirköprü Orman Ürünleri Ve Kağıt San. A.S. (Sefaköy-Küçükçekmece) and Beypan Entegre Orman Ürünleri San. ve Tic. A.S. (Kayseri). □



*The Turkish anti-trust authority Rekabet Kurumu launched official investigation proceedings into 12 wood-based panel manufacturers from Turkey.  
(Photo credit: Yıldız Entegre)*



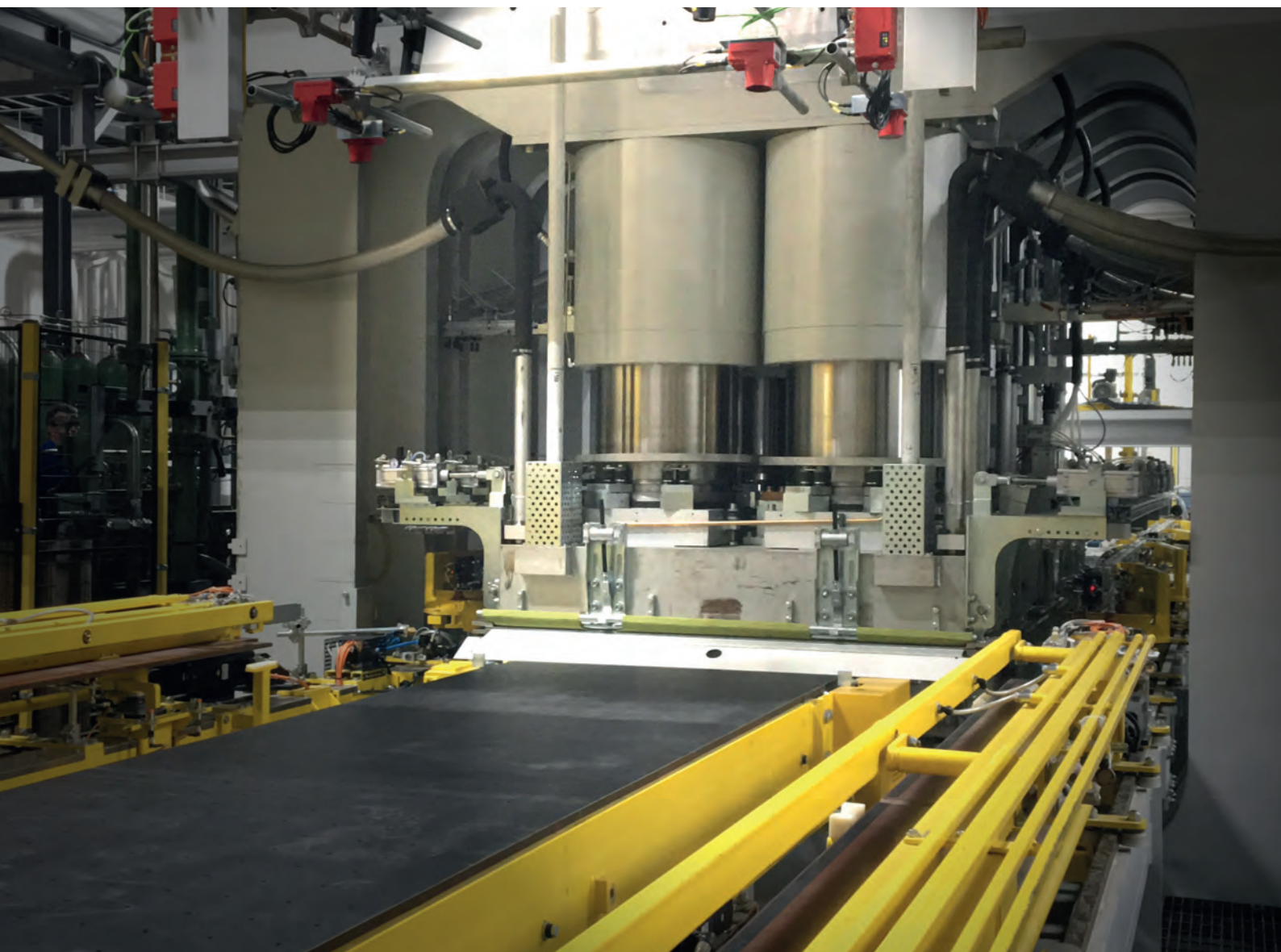
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*Laminate flooring plant in Eiweiler facing consistent deterioration in capacity utilisation*

## *Laminate Park to stop manufacturing MDF/HDF and laminate flooring*

**The MDF/HDF joint venture Laminate Park GmbH & Co. KG is set to cease operations at its site in Heusweiler-Eiweiler by the end of 2019.**

Founded in 2006, Laminate Park is owned by Tarkett S.A., based in Paris-La Défense, and Sonae Arauco S.A., headquartered in Madrid, which each own a 50% stake. According to a statement published by the company on 19 February, the economic committee and works council had already been informed of the closure plans. Negotiations about a settlement of interests and redundancy package are to commence soon. A staff meeting for the 230-strong workforce was held on the same afternoon. The timetable for the closure is to be determined depending on how consultations go.

Laminate Park said that it had decided to go ahead with the closure because of intense competition on European MDF/HDF and laminate flooring markets. A sharp decline in volumes on Western European laminate flooring markets compounded a long-standing downturn in sales at Laminate Park in the past year. As a result, capacity utilisation continued to worsen at the laminate flooring plant, which is equipped with two short-cycle presses and profiling lines with an annual capacity of about 20m m<sup>2</sup>. The company made and sold just 4.9m m<sup>2</sup> of laminate flooring in 2018. Its MDF/HDF capacity of 218,000m<sup>3</sup> was largely utilised, though. Just about 20% of the MDF/HDF made in Eiweiler had been used in downstream laminate flooring production. The other 80% was sold to external buyers either by Laminate Park or Sonae Arauco. Besides offering HDF for other laminate flooring manufacturers, the Eiweiler facility mainly delivered standard MDF for southern German merchants and a variety of types of MDF for the Central European furniture industry and its suppliers. Laminate flooring made in Eiweiler is sold by both joint venture partners. The Tarkett group primarily sourced laminate



*Short-cycle presses in Eiweiler*

*(Photo credit: EUWID)*

flooring for Western European markets and the EMEA region from Eiweiler. Shipments to Eastern Europe had been scaled back more and more after Tarkett commissioned a laminate flooring mill in Mytichtchi, Russia doing business as Tarkett Sommer OOO in November 2009, compounding existing capacity utilisation problems in Eiweiler. In addition to making Tarkett's laminate flooring collection, the Eiweiler plant also manufactures OEM products. It also set up the Hornitex brand as a customer brand.

Tarkett S.A. and Sonae Arauco Deutschland GmbH, headquartered in Meppen, Germany are the limited partners of Laminate Park GmbH & Co. KG. After its establishment, Laminate Park had battled relatively hefty losses for a long time, which were primarily driven by start-up difficulties and capacity utilisation problems at the laminate flooring mill, which was commissioned at the start of October 2006. These problems were prompted by changes in strategy undertaken by Tarkett a short time after commissioning, for instance the decision to focus on products with higher

margins, changes in product structure and shifts in volumes within the global laminate flooring business. The laminate flooring mill never reached maximum capacity as a result. It made more than 10m m<sup>2</sup> in just a few years. Major volatility in output also occurred at the upstream MDF/HDF mill in early years as a result. The production line was able to raise its capacity utilisation more and more starting in 2014 with the expansion of external MDF/HDF sales, meaning that MDF/HDF revenues had gradually edged higher in recent years. On the other hand, laminate flooring revenues tended to decline. According to its last published annual report, Laminate Park generated revenues of €41.0m (2016: 38.8m) from laminate flooring and €38.7m (35.7m) from MDF/HDF in 2017. Total revenues increased to €83.8m (79.8m). Starting in 2016, the joint venture first turned a profit. However, it booked losses well in excess of €10m between 2007 and 2012, which resulted in a growing increase in losses carried forward and the resulting special loss accounts. These sums had to be covered equally by its partners. □



***P3G Industries submitted a bid for French mill to Ikea Industry mid-September***

## ***Transfer of the Lure particleboard mill took place beginning of January***

**In mid-December Ikea Industry AB, which belongs to Inter Ikea Group, accepted the takeover offer for the Lure particleboard plant by P3G Industries S.A.S., based in Saint-Loup-sur-Semouse, France.**

Prior to this initial discussions with employee representatives, which had been conducted at the Lure location following receipt of the offer, were concluded successfully. According to Ikea Industry and P3G, the closing procedure took place on 2 January 2019.

P3G Industries, owner of furniture producer Parisot S.A.S. and particleboard manufacturer Compagnie Française du Panneau (CFP), had handed in the bid for the Lure mill, that did business as Ikea Industry France S.A.S., on 20 September. In combination with the offer, the company had also raised the prospect of investing €12m, which is to expand limited capacities for further processing at the site. With the ensuing portfolio expansion P3G wants to reach new customers and thus

compensate for declines in deliveries to the Ikea supply chain which are forecast for the coming years.

P3G Industries plans to operate the former Ikea Industry plant in Lure together with the CFP particleboard plant in Saint-Loup-sur-Semouse, which is only 30 km away, and thus has become the second largest manufacturer of wood-based panels in France. With an annual capacity of 430,000 m<sup>3</sup>, the CFP mill is equipped with an eight-opening press commissioned in 1991 and has a 12,700 x 2,400 mm press that can make products 10-38 mm thick. Around three-quarters of the raw particleboard it makes can be laminated using a short-cycle press and a 2,070 mm-wide laminating unit.

In future, both plants are to supply particleboards to the Parisot furniture plants, furniture manufacturers in the Ikea supply chain as well as external purchasers. The goal is to cover all segments of the French particleboard market. What is more, the group intends to expand its export operations.

In a statement issued on 3 October after receipt of the offer, Ikea Industry noted that its own need for the particleboard made in Lure will tend to decline in the years ahead since Ikea is switching its product strategy to focus more on lighter-weight furniture designs. Against this backdrop, a rising share of the products made must be sold to buyers outside Ikea's network. Ikea Industry felt that an independent company will be better positioned to expand the customer base for its Lure mill, which is to be achieved in part by making a broader range of products.

Ikea Industry had bought the Lure particleboard mill from Sonae Industria SGPS S.A., based in Maia, Portugal, in April 2010 and had invested a total of about €22m in modernising the mill in the 18 months after the acquisition. The Lure particleboard mill, which Sonae Industria thoroughly updated in 2000 and 2001, can make particleboard 6-45 mm thick with a 43.050 m x 2,200 mm continuous press. Its original listed annual capacity of 450,000 m<sup>3</sup> was boosted to about 500,000 m<sup>3</sup> in recent years. However, the 550,000 m<sup>3</sup> target set by Ikea Industry when it bought the mill has not been achieved yet. Ikea Industry had achieved average output of around 440,000 m<sup>3</sup> at the Lure particleboard mill in 2016 and again in 2017; similar output was reached in 2018. In previous years, Ikea Industry had made up to 475,000 m<sup>3</sup> in Lure. This somewhat lower output of late was due to making a higher proportion of 12 mm particleboard. A good 80% of the output had been delivered into the Ikea supply chain in the year after the take-over. This proportion has declined to around 70% and will fall further over the next three years, likely to about 50%, because of the change in Ikea's product strategy. A short-cycle press commissioned in 2001 with a maximum size of 5,750 x 2,250 mm is used to refine particleboard in Lure and can laminate up to 10m m<sup>2</sup> per year, depending on the product mix. □



*Lure particleboard plant*

*(Photo credit: Ikea Industry)*

*Third acquisition in the North American MDF business since mid-2015*

# *Roseburg wraps up acquisition of MDF mill in El Dorado from PotlatchDeltic*

**The US wood-based panel manufacturer Roseburg Forest Products Inc., headquartered in Roseburg, Oregon, completed its acquisition of an MDF mill in El Dorado, Arkansas from PotlatchDeltic Corp., based in Spokane, Washington on 13 February 2019. This deal had originally been brokered in mid-December.**

With this third acquisition since mid-2015 Roseburg expanded its foothold in the North American MDF business. The company re-entered MDF manufacturing in September 2015 when it purchased a mill in Medford, Oregon from Sierra Pine Ltd., based in Roseville, California. Its March 2018 acquisition of the Canadian MDF/HDF producer Pembroke MDF Inc., based in Pembroke, Ontario, closed in April. Towards the middle of December, Roseburg signed an agreement in principle to buy the MDF mill in El Dorado, that did business as Del-Tin Fiber LLC. This mill used to be owned by PotlatchDeltic, which was created when Deltic Timber Corp., based in El Dorado, Arkansas, merged with Potlatch Corp, headquartered in Spokane, Washington, in February 2018. PotlatchDeltic put the purchase price at approximately US\$92m, comprising a cash payment of US\$63m and the acquisition of shares to the tune of US\$29m.

The Del-Tin MDF mill had been built in a joint venture between Deltic Timber and Temple-Inland Forest Products Corp., based in Diboll, Texas, and started operating in summer 1998. Following start-up, the company battled major technical troubles in the early years, which resulted in significant losses and took several years to resolve in partnership with the technology provider Metso Panelboard, based in Helsinki, Finland. Deltic Timber had actually planned to exit the joint venture for this reason, but dropped these deliberations in December 2003. Inter-



*Del-Tin MDF plant in El Dorado*

*(Photo credit: Roseburg)*

national Paper Co., based in Memphis, Tennessee, had sold its Temple-Inland Building Products division to Georgia-Pacific LLC, headquartered in Atlanta, Georgia, after completing its acquisition of Temple Inland in February 2012. The agreement reached in mid-December 2012 provided for the 50% stake in Del-Tin to be transferred to Georgia-Pacific. International Paper had then sold this stake on to the joint venture partner Deltic Timber in mid-February 2013. The purchase price was fixed at US\$20m. The Del-Tin MDF line comes with a 2.9 x 38.2m continuous press delivered by the firm then known as Eduard Küsters Maschinenfabrik GmbH & Co. KG, headquartered in Krefeld, Germany, which has an annual capacity of 150m sqft (3/4" basis) or around 265,000 m<sup>3</sup>.

By acquiring Del-Tin, Roseburg expanded its portfolio of products and market coverage. The company is represented in the south-east of the US by particleboard mills in Simsboro (Louisiana) and Taylorsville (Mississippi). Taylorsville is a

raw particleboard mill. Roseburg also has laminating capacity in Simsboro. The El Dorado mill will allow Roseburg to expand its MDF business with the Arreis, Medite, Medite FR and Medex product lines in this region.

Roseburg's composite panels operations also include particleboard mills in Dillard (Oregon) and Missoula (Montana), which both have their own laminating capacity, together with two MDF mills in Medford and Pembroke. Its portfolio of raw particleboard includes the Ultrablend, Skyblend and Redishelf products; its range of thermally fused laminate (TFL) is sold under the Duramine name. Roseburg last put its four particleboard mills' capacity at around 1.3bn sqft (3/4" basis) or approximately 2.3m m<sup>3</sup>. Its three laminating mills can handle around 500m sqft or roughly 46m m<sup>2</sup> each year. The Medford MDF mill has an annual capacity of 250,000 m<sup>3</sup>, while Pembroke can make 280,000 m<sup>3</sup>. The addition of the El Dorado mill would boost Roseburg's total MDF capacity at close to 800,000 m<sup>3</sup>. □



*Sale of activities in Argentina, Brazil and Mexico reduced Masisa's capacities significantly*

## *Arauco completes purchase of all shares in five Mexican subsidiaries of Masisa*

**Celulosa Arauco y Constitución S.A. has completed its recently announced acquisition of all shares in five Mexican subsidiaries of Maderas y Sintéticos S.A. (Masisa) on 31 January 2019.**

The Mexican competition authority Comisión Federal de Competencia Económica (COFECE) gave the green light for the transaction towards the middle of December 2018, subject to conditions. In contrast with plans originally unveiled on 19 December 2017, the Chihuahua particleboard plant was not part of the transaction. By removing this mill from the scope, the companies responded to a COFECE statement on 13 September, indicating the potential risks associated with the planned transaction. The purchase price, which had so far been listed at US\$245m for all shares in five Mexican Masisa subsidiaries, was trimmed to US\$160m. Masisa said that this translates into an EBITDA multiple of 8.5.

Arauco has thus acquired three particleboard lines with a combined annual capacity of 339,000 m<sup>3</sup> (Durango: 155,000 m<sup>3</sup>,

Zitacuaro: 184,000 m<sup>3</sup>) and an MDF line in Durango (annual capacity: 220,000 m<sup>3</sup>). Both mills have laminating lines with an installed capacity of 309,000 m<sup>3</sup> per year. The Durango mill and its leased site in Lerma are also home to two adhesive plants whose installed annual capacity Arauco put at 103,200 tonnes of adhesive resin (Durango: 60,000 tonnes; Lerma: 43,200 tonnes) and 82,000 tonnes of formaldehyde (Durango: 60,600 tonnes; Lerma: 21,600 tonnes). Arauco has also acquired impregnating capacity to the tune of 29m m<sup>2</sup> per year. The transaction also includes the Placacento Masisa Mexico distribution network with 77 Placacento branches.

With the closing of the transaction Masisa has retained the Chihuahua particleboard plant in Mexico. This plant has an annual capacity of 220,000 m<sup>3</sup>. Three short-cycle presses provide a laminating capacity of 79,000 m<sup>3</sup>. Furthermore, the site produces worktops and veneered panels. By selling most of its assets in Mexico, Masisa has brought a long-standing divestment pro-

cess to a close. In a first step, Masisa had sold its Brazilian forest assets to Taeda Empreendimentos Florestais S.A. and Klabin S.A. in two separate transactions in the first half of 2016. In a transaction closed on 6 December 2017 the wood-based panel activities in Brazil had been sold to Arauco: an MDF mill in Ponta Grossa, Paraná (300,000 m<sup>3</sup> per year) and a particleboard mill in Montenegro, Rio Grande do Sul (650,000 m<sup>3</sup> per year). Four short-cycle presses at both locations can laminate 660,000 m<sup>3</sup> per year.

In Argentina, Masisa sold the wood-based panel site in Concordia and its local distribution structure to Egger Group, headquartered in St. Johann, Austria, at the end of September 2017. The mill has a combined annual capacity of 165,000 m<sup>3</sup> of particleboard and 280,000 m<sup>3</sup> of MDF with four production lines. Its downstream refining assets include a treating line, three short-cycle presses with an annual capacity of 274,000 m<sup>3</sup>, a film laminating unit (40,000 m<sup>3</sup>) and three profiling lines (74,000 m<sup>3</sup>). Forestry activities were not included in the deal, but the two companies had agreed on a longterm partnership to supply wood to the mill.

Masisa sold the bulk of its wood-based panel manufacturing capacity through divestments carried out in the past 18 months to reduce its net liabilities. After the transaction in Mexico closed, the company is continuing to operate two Chilean sites in Cabrero and Mapal and one mill each in Chihuahua, Mexico, and Macaipaima, Venezuela. Total MDF capacity halved from 1.6m m<sup>3</sup> per year to 800,000 m<sup>3</sup> per year based on the latest published figures. The reductions in particleboard (-57% to 368,000 m<sup>3</sup>) and MDP (-62% to 400,000 m<sup>3</sup>) capacity have been even larger. While laminating capacity plummeted 65% to 665,000 m<sup>3</sup>, MDF moulding production capacity dropped by 36% to 130,000 m<sup>3</sup>. □



MDF line in Masisa's Durango site

(Photo credit: Masisa)

## ***FunderMax buys kraft-paper manufacturer***

The aim of the wood-based panel and laminates manufacturer FunderMax GmbH of St. Veit, Austria, behind its acquisition of the Norwegian kraft-paper manufacturer Ranheim Paper & Board AS of Trondheim-Ranheim concluded in January 2019 is partly to secure its supply of core paper. This saturating base paper obtained from Ranheim since 2016 is impregnated with phenolic resin and used as the core in the production of laminates and compact panels. Ranheim's seller is the Norwegian investment company Pemco Holding AS of Oslo.

Ranheim generated sales revenue of approximately 62m € with 176 employees last year. At its Ranheim facility, the company operates two Fourdrinier paper machines with an annual capacity of roughly 120,000 t. The PM 5, put into operation in 1959, has an annual capacity of 45,000 t with a working width of 3.53m. The PM 6, in operation since 1966, can produce approximately 75,000 t per year with a working width of 4.04 m. In the last few years, the company has achieved an annual output of around 109,000 t. Roughly 125,000 t of old corrugated containers (OCC) obtained from Norway and Sweden are used as the raw material. Most recently, the PM 6 produced roughly 43,000 t of testliner for producing corrugated board

and around 20,000 t of speciality paper including the saturating base paper sold under the name of "Petasat" as well as paper called "Petaplaster" for manufacturing plasterboard. The PM 5 is geared to an annual output of approximately 24,000 t, comprising mostly paper for coreboard.

In the last few years, Ranheim has increasingly shifted its sales towards specialities. Until 2016, roughly 85 % of the company's output was accounted for by commodities. Last year, the share of the total accounted for by specialities had already risen to around 30 %, and sights have been set on bringing this figure up to 36 % this year. One of the focal points here is the Petasat paper. According to Ranheim, Petasat is the first saturating base paper manufactured entirely from recycled fibres. Ranheim is represented with other grades of paper in the construction and furniture sectors. In the building sector, the company's products include board for wall and ceiling structures, which, in combination with a PE vapour barrier, are also used in the "Ranit" sarking board made by the particleboard manufacturer Forestia AS of Braskereidfoss, which is part of the Byggma Group ASA of Vennesla. Ranheim also produces special packaging paper for the furniture industry. □



*Ranheim paper mill near Trondheim*

*(Photo credit: FunderMax)*

## ***Minor growth in Glatfelter's overlay-paper revenue***

After the upward trend registered in 2016 and 2017, revenue generated from sales of overlay paper by the "Composite Fibers (CFBU)" division of P.H. Glatfelter Co. of York, Pennsylvania, last year remained slightly below the previous year's figure again at US\$38.2m (2017: US\$38.7m). From the US\$53.3m recorded for 2011, sales revenue from the overlay-paper business that Glatfelter calls "composite laminates" gradually fell in the years that followed, reaching a temporary low in 2015 at US\$34.9m. Sales revenue had risen slightly to US\$35.1m in 2016, and then gained a little more impetus for the first time again in 2017.

In the wallpaper base paper business, sales revenue remained more or less on par with the year before at US\$103.7m (US\$103.0m); on the basis of the US\$90.8m generated in 2016, substantial growth had occurred a year earlier. In the "food & beverage" and "technical specialties" segments, the upward trend observed a year before continued at US\$279.5m (US\$268.5m) and US\$81.3m (US\$77.0m), respectively. Revenue generated from sales of metallised paper, on the other hand, fell further to US\$52.2m (US\$57.1m).

The CFBU's total sales revenue thus increased 1.9% to US\$554.9m (US\$544.3m). This growth, however, was achieved primarily as a result of the positive currency effects given as US\$18.9m; higher average selling prices were reflected in the growth in sales revenue at US\$5.5m. A negative impact on sales revenue arose above all from the 4.4% reduction in deliveries to 143,777 t (150,338 t); as such, the sales volume was still well above the 137,680 t recorded for 2016, however. Last year, US\$355.0m (US\$349.3m) or 64.0% (64.2%) of the division's total sales revenue was accounted for by the EMEA region, US\$113.5m (US\$107.1m) by North/South America, and US\$86.3m (US\$87.9m) by the Asia-Pacific region. □



### ***Impress commissioned new treating line in St Veit***

The Impress group commissioned what is now its fifth treating line in St. Veit, Austria, in August 2018. Delivered by Vits Technology GmbH, based in Langenfeld, Germany, the line has a working width of 2,200 mm and is set up mainly to make reels and melamine film for use in laminate flooring manufacturing. The new treater was also equipped with a corundum spreading system to make overlay film. Impress is thus now able to deliver a complete range of overlay film, decor film and impregnated backer paper to the laminate industry.

Up until now, Impress has operated two 2,200 mm-wide lines, one 2,600 mm-wide line and one 2,900 mm-wide line in St. Veit. The site's annual treating capacity will increase from around 150m m<sup>2</sup> to 180-190m m<sup>2</sup> with the new line, according to previous information. OOO Funder Uwa, a Russian joint venture in which it owns a 51% stake that is based in Uwa in the Republic of Udmurtia, also runs five treaters with a combined capacity of 130m m<sup>2</sup>. The treater commissioned in summer 2016 is 2,600 mm wide. It also has three lines that have working widths of 2,200 mm and one line that is 1,900 mm wide. Impress can handle approximately 60m m<sup>2</sup> at two treating lines that are 2,200 mm wide at its site in Araucária, Brazil. The first line has been up and running since December 2012. The second line was commissioned in December 2014. Altogether, the company now has 12 treating lines at three locations that have a combined capacity of around 375m m<sup>2</sup> per year. □

### ***Neodecortech added new products to its range***

In the first half-year 2018, the Italian surfaces manufacturer Neodecortech S.p.A. of Filago added a polypropylene version to its plastic printed film (PPF) operations for use in LVT production previously geared to PVC. According to the company, demand for these PP films

### ***WestRock concludes takeover of KapStone***

At the end of November 2018, the US paper and packaging group WestRock Co. of Atlanta, Georgia, that had emerged in July 2015 from the merger between MeadWestvaco Corp. of Richmond, Virginia, and RockTenn Co. of Norcross, Georgia, completed the takeover of KapStone Paper and Packaging Corp. of Northbrook, Illinois, active in the same areas, that had been agreed at the end of January 2018. As such, closing the deal took several months longer than had originally been planned. At the time the contract was signed, both companies had actually set their sights on the third quarter. The purchase price was established from the corporate value of US\$4.8bn. In doing so, WestRock took over a share of roughly US\$1.36bn in net liabilities. According to WestRock, the resultant net purchase price equates to an EBITDA multiplier of 6.4 including anticipated synergies.

According to the documents published in connection with the takeover, WestRock had previously had a total capacity of 13.4m t in a total of 27 paper mills. In its business year 2017/2018 (30 Sept.), the company generated total sales revenue of approximately US\$16.285bn (2016/2017: US\$14.860bn). US\$9.103bn (US\$8.408bn) of this was accounted for by the "Corrugated Packaging" division, and US\$7.291bn (US\$6.453bn) by the "Consumer Packaging" segment. Adjusted EBITDA of US\$2.891bn (US\$2.289bn) was achieved at the group level; the margin calculated from this was improved to 17.8% (15.4%). With the four paper mills in Charleston in South Carolina, Roanoke

Rapids in North Carolina, Cowpens in South Carolina, and Longview in Washington, KapStone has a total production capacity of 3.0m t. In the last twelve months up to 30 September 2018, the company generated sales revenue of US\$3.2bn. Adjusted EBITDA was given as US\$551.1m, resulting in a margin of 17.2%. Following the KapStone acquisition, WestRock has a total of 31 paper mills with a total annual capacity of around 16.5m t. Assigned to the Corrugated Packaging division are 19 mills with a combined capacity of 12.3m t and a total of 145 converting facilities. The bulk of the KapStone activities have also been allocated to this division. Consumer Packaging accounts for 13 mills with a capacity of 4.2m t and 118 converting facilities. WestRock is aiming to raise its total sales revenue to over US\$19bn in its current business year 2018/2019; here, KapStone's figures will be consolidated for a period of eleven months.

KapStone believes it is one of the biggest manufacturers of core paper for laminate and compact-panel production and for laminating plywood (saturating kraft paper). This paper is distributed by KapStone under the brand names of "Durasorb" and "DuRecycle". 25% of this paper is used in the USA and 75% is exported worldwide. The core paper along with other grades is produced at the Charleston mill, which was taken over from MeadWestvaco in July 2008 and, according to earlier information, is geared to a total capacity of around 880,000 t with three paper machines. Roughly 260,000 t of this is accounted for by saturating kraft paper. □

is constantly growing in certain markets due to the problems with PVC, particularly in Germany and Scandinavia. With effect from 1 September, Neodecortech completed the takeover of the business in PVC films for use in LVT production from Corbetta Fia s.r.l. of Carugo, which had been agreed at the end of July. The acquired subdivision of Corbetta Fia can laminate as well as subsequently lacquer

and emboss PPF with a transparent film on a machine at the Casoli di Atri works. The resultant plastic printed laminate film (PPLF) goes to the LVT industry; the market launch is planned for November. In the first half of 2018, Neodecortech's decor paper manufacturer Cartiere de Guarcino S.p.A. (CDG) of Guarcino began producing a kraft-paper version for use in the HPL/CPL paper industry. □

## Purainer is now a Lamigraf shareholder



(Photo credit: Lamigraf)

Josep Colomer formally handed over the reins as CEO of the Spanish decor printer Lamigraf S.A., based in L'Ametlla del Vallès, to his son Pep Colomer in November 2018. This generational change has been in preparation for quite some time. Pep Colomer had joined Lamigraf as managing director of its Brazilian subsidiary at the end of 2014. He had taken over managing its sales and marketing operations when management duties at Lamigraf were restructured following the departure of then CEO Albert Llovet at the start of May 2015. Pep Colomer had gradually taken over operational responsibility from his father starting in 2017. Josep Colomer also transferred his majority shareholding to his son as part of the reorganisation of shareholder relationships. At the same time, Harald Purainer has become a new Lamigraf shareholder with an undisclosed minority stake. He will also join the company's advisory board.

Purainer had become a member of the board in charge of finances at Schattdecor AG, based in Thansau, Germany, in January 2009. Prior to his appointment to Schattdecor's board of directors, he had served as director general of OOO Schattdecor, headquartered in Chechov, Russia. He parted ways with Schattdecor in September 2016 due to a difference of opinion about what should happen after the departure of CEO Rainer Schulz. Purainer has since been managing partner at the investment firm Roctiv GmbH, which is based in Rosenheim, Germany, and which was founded in January 2015. Purainer hopes to establish two new holdings each year through Roctiv Holding, which was created this year with headquarters in Moscow, boosting the

holding group's revenues to more than €100m by 2023.

Up until the end of 2014, Lamigraf had two 50% shareholders with Josep Colomer and the Ibanez family. At the start of 2015, Joseph Colomer had purchased a 2% stake, thereby taking over management of Lamigraf. He became the sole owner at the end of 2016 by acquiring the other 48% from the Ibanez family.

The Lamigraf group currently has three printing sites: its headquarters in L'Ametlla del Vallès, its plant in Bönen and its production and distribution entity in São José dos Pinhais in the Brazilian state of Paraná. The company has also fleshed out longstanding plans to enter the Chinese market directly over the past few months. A new wholly owned subsidiary created for this purpose, Lamigraf Changzhou Co. Ltd., signed an investment agreement to this effect in mid-October. The firm wants to build a printing plant in Changzhou, Jiangsu Province, through a greenfield investment project. Construction work is to begin in spring 2019, with commissioning scheduled to happen one year later. Lamigraf wants to start up the new site with two 4ft-wide printing machines. The new facility will initially solely serve customers in China. Business might be expanded to include exports to South-East Asian countries by investing in a 7ft-wide printing machine at a later point in time. Lamigraf presently serves the Chinese market through Lamigraf Shanghai Trading Ltd. (Shanghai), a sales entity founded in February 2003, and through a partnership with Chinese printers.

The Lamigraf group currently operates 11 printing machines, seven of them in L'Ametlla del Vallès. Two machines each are located in Bönen and São José dos Pinhais. The firm reached a total printing volume of 14,900 tonnes in the 2017 financial year. Another 1,500 tonnes were sold through its partnership with Chinese companies. Group revenues totalled €59.7m last year. Including revenues generated by its branches in Turkey and China, the company posted total revenues of €64m for 2017. □

## Senoplast invested €6.1m in its Piesendorf location

The plastic converter Senoplast Klepsch & Co. GmbH, based in Piesendorf, Austria, wrapped up the first phase of a project to expand its headquarters by officially opening a new production hall and warehouse on 15 September 2018. The company said that it had spent a total of €6.1m on building the hall, which has a gross floor area of 3,600 m<sup>2</sup> across two separate areas. Construction work had started mid September 2017. At that point in time, Senoplast Klepsch had thought that work would be completed by April 2018. The new hall offers additional storage capabilities and has already been prepared for installation of two more extrusion lines. According to the company, plastic sheets and foils for thermoforming are to be made there in future.

In addition to the plant in Piesendorf, Senoplast Klepsch also has a production site in Querétaro, Mexico, which is operated by its subsidiary Senoplast S.A. de C.V. It focusses on co-extruded plastic sheets and foils for thermoforming. Products in its senosan range are sold to furniture and door producers. Other areas of application are in the plumbing and refrigeration appliance industry.

Established in 2011 and also owned by the Senoplast Group, Senosan GmbH, headquartered in Piesendorf, Germany, distributes special plastic foils made for the furniture industry. At first, the firm initially solely made high-gloss lacquer-acrylic foils, but its portfolio has now been widened to include super-matte surfaces too. Senco (Europe) GmbH was founded as a 100% subsidiary of Senoplast Klepsch in 2006. This entity specialises in making multi-layer, co-extruded plastic foils sold in the automotive industry under the brand name senotop. □

The Senoplast Group's three entities reportedly make about 50,000 tonnes of senosan and senotop products each year. It generated revenues of about €200m in the 2017 financial year and reported an export rate of 90%. Senoplast employs 514 people in Austria and 660 around the globe. □



## ***SynDecor producer TI acquired Biofilm***

The plastic film manufacturer Taghleef Industries LLC (TI) of Dubai, United Arab Emirates, signed an agreement at the end of August 2018 for taking over the Latin American BOPP film manufacturer Biofilm S.A. of Bogota, Columbia. Biofilm operates two works for BOPP (Biaxially Oriented Polypropylene), one in Cartagena, Columbia, and one in Altamira, Mexico. The works in Cartagena can produce approximately 40,000 tpy. The Altamira works was opened in 2004 with one production line (25,000 t) and had a second one added in 2008 (30,000 t). The company uses eight metallization plants with a total annual capacity of 20,000 t for downstream processing.

The purpose of integrating the two Biofilm production facilities is to raise TI's total BOPP capacity to a good 500,000 tpy. The company currently operates production plants in nine countries; the total capacity of these works amounts to around 410,000 t. Two works exist in the Middle East, one in Dubai, and one in Oman. The European markets are supplied via works in Italy, Hungary, and Spain. USA (Indiana), Canada (Québec), Italy, Hungary, Spain, Egypt, the United Arab Emirates, Oman, and Australia each have one production facility. The BOPP films produced by TI are supplied to a variety of sectors; the focus is on packaging, labels, and technical applications. They are sold to customers such as manufacturers of decorative surfaces under the name of "SynDecor". Areas of application include thermoplastic films for the furniture industry and for LVT production. These films have been processed for a number of years by companies such as Interprint Inc. of Pittsfield, Massachusetts. In the form of the "SynDecor EA" product line, TI meanwhile also supplies a ready-

to-use version, which, as a uni-film, has an ESH coating on the upper side and an adhesive layer on the reverse.

The Taghleef Industries group, controlled by Al Ghurair Group, emerged in 2006 from the merger between the three companies Dubai Poly Film (Dubai), AKPP (Sohar, Oman), and Technopack (6th October City, Egypt) and was expanded by means of several acquisitions in the years that followed. Taghleef Industries also entered the decorative surfaces segment upon completion of its acquisition of Applied Extrusion Technologies Inc. (AET Films) of Wilmington, Delaware, in June 2012 and the related integration of the SynDecor business. The acquired companies were each renamed Taghleef Industries, though some of them continue to use the earlier brand names. □

## ***Glatfelter concluded sale of Specialty Papers unit***

At the end of October 2018, the specialty-paper manufacturer P.H. Glatfelter Co. of York, Pennsylvania, completed the sale of the Specialty Papers (SPBU) business unit to the private-equity company Lindsay Goldberg that had been agreed in mid-August 2018. The acquired activities are to be continued by the new company Pixelle Specialty Solutions LLC founded by Lindsay Goldberg specifically for this purpose.

The Specialty Papers business unit comprises two integrated paper mills in Spring Grove, Pennsylvania, and Chillicothe, Ohio, and value-adding works in Fremont, Ohio, and three wood-supply facilities in Delmar in Maryland, Piketon in Ohio, and Washington in West Virginia. SPBU generated sales revenue of US\$783m in the twelve months up to 30 June 2018. The BU sold a total of 764,437 t (2016: 794,318 t) in 2017 as a whole, generating sales revenue of US\$790.9m (US\$843.6m). In operating result fell to US\$15.4m (US\$41.2m).

By selling the SPBU, Glatfelter is focussing on the Composite Fibers (CFBU) and Advanced Airlaid Materials (AMBU) business units. The company has carried out several investment projects and acquisitions in the

se two segments in recent years. The most recent major transaction was the acquisition of the European non-woven business of Georgia-Pacific LLC of Atlanta, Georgia, agreed by contract in mid-June 2018 and completed on 1 October. The Steinfurt works acquired through this deal was subsequently assigned to the Advanced Airlaid Materials BU. The AMBU segment's production capacity had previously been enlarged with the start-up of a new works in Fort Smith of Arkansas in autumn 2017; regular deliveries commenced in the first quarter. □

## ***Ricoh has become sole owner of Colorgate***

The Japanese company Ricoh Co. Ltd., headquartered in Tokyo, has reached a deal with shareholders in Colorgate Digital Output Solutions GmbH, a firm based in Hanover specialising in software solutions for digital printing and colour management, to acquire all shares in the company. The transaction has been closed by the end of November 2018. With a staff of around 35 workers, the company continues to operate as an independent unit within the Ricoh group. Integration has been made easier by the fact that Ricoh Deutschland GmbH is also headquartered in Hanover.

The Ricoh group, which specialises in digital office communication systems, printing machines and cameras, intends to advance the expansion of its industrial printing business by acquiring Colorgate. The company had unveiled its Ricoh Ignite growth strategy plan in February 2018 with this goal in mind. The acquisition of Colorgate, which focusses on colour management systems and workflow software for commercial and industrial printing, is part of this plan.

Colour management systems developed by Colorgate are primarily used for digital printing in the decor segment. The company has entered into several partnerships in this area over the past two years, including with the Italian scanner producer Metis Systems s.r.l., based in Rome, and Improve Process Analytics and Control GmbH (Ipac), headquartered in Villach, Austria. □



(Photo credit: Taghleef Industries)

*Eastern Europe, Asia-Pacific (excluding China) showed biggest improvements*

# Slower growth in the global market for decor paper during the year 2017

**The upward trend that has lasted on worldwide decor paper markets (excluding China) since 2013 continued in the year 2017, albeit at a slower pace. According to Decor Paper Market Research 2017 completed by Ahlstrom-Munksjö Germany Holding GmbH in August 2018, some 765,000 (2016: 745,000) tonnes of decor paper were sold around the globe (excluding China) last year. This 3% growth in sales was within the 2-3% range forecast for the next two years by Ahlstrom-Munksjö in last year's report.**

2017 sales of 765,000 tonnes means that global decor paper sales have jumped by 140,000 tonnes or 22.4% since reaching 625,000 tonnes in 2012. A compound annual growth rate (CAGR) of 3.5-4.0% should thus be reached from 2012 to 2018. The upward trend has thus lasted longer than the last growth phase running from 2001 to 2006. The worldwide decor market (excluding China) increased by a CAGR of 6.8% from 521,000 tonnes in

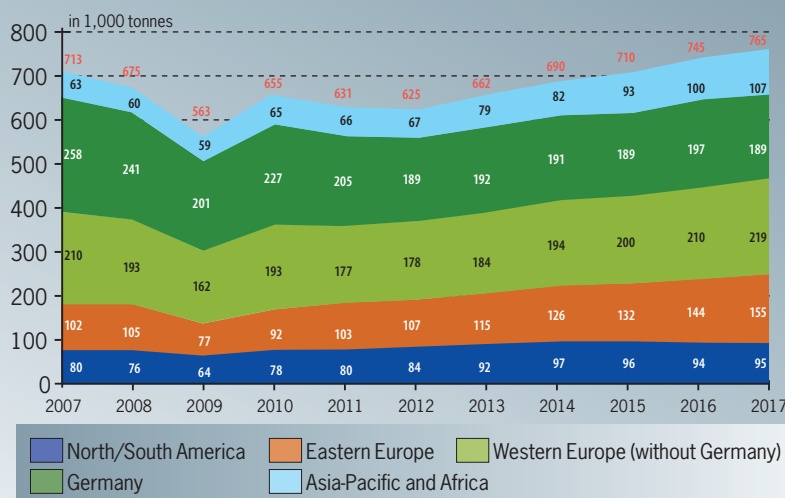
2001 to 724,000 tonnes in 2006. Sales suffered a minor setback in 2007 and 2008 before plunging more to 563,000 tonnes in 2009. Following another 16% downturn to 655,000 tonnes in 2010, additional losses were recorded in 2011 (-4% to 631,000 tonnes) and 2012 (-1% to 625,000 tonnes). A compound annual downturn of 2.4% was thus booked between 2006 and 2012. Global decor paper sales had edged 6% higher to 662,000 tonnes in 2013 before growth weakened in 2014 (+4% to 690,000 tonnes) and 2015 (+3% to 710,000 tonnes). 2016 was the third-best year since 2009 in terms of the growth rate with a 5% increase.

The different sales regions also delivered mixed performances in 2017. All regions last contributed to market growth in 2014. In subsequent years, Germany, North America and South America in particular had lagged behind other regions. German sales had rebounded by 3.9% in 2016 after falling one year earlier. On the other hand, North America and South America remained lower than the previous year. In

2017, German sales fell 3.8% to 189,000 (2016: 196,700) tonnes, according to Ahlstrom-Munksjö. The upward trend witnessed in the rest of Europe (including Turkey) in the previous year had continued at almost the same pace. After rising 4.9% in 2016, sales improved another 4.0% to 218,600 (210,100) tonnes. The weaker performance in Germany meant that sales in the Eurozone were down 0.7% at 332,200 (334,600) tonnes. The growth rate in Eastern Europe had only decreased a little compared with 2016 (+9.0%), with sales there also increasing 7.9% to 155,200 (143,800) tonnes in 2017. A 2.3% upswing to 563,000 (550,600) tonnes had been booked for Europe as a whole.

Markets in North America (-2.7% to 46,200 tonnes) and South America (+5.4% to 49,000 tonnes) showed mixed performances in 2017. In the Americas region as a whole, sales still improved 1.3% to 95,200 (94,000) tonnes. The Asia-Pacific region (excluding China) was the region with the second-largest growth after Eastern Europe with a bigger jump than the previous year of 7.3% (+6.1%) to 89,100 (83,000) tonnes. Ahlstrom-Munksjö had registered a 1.7% upturn in sales to 17,700 (17,400) tonnes in the Middle East and other regions. Consequently, Germany accounted for 24.7% of global decor paper sales in 2017. Western Europe's share (including Turkey) rose to 28.6%, as did Eastern Europe's to 20.3%. The Americas contributed 12.4%, the Asia-Pacific region (excluding China) 11.6% and the Middle East/other regions 2.3%. Ahlstrom-Munksjö's report showed that printing base paper sales edged slightly higher to 287,300 (285,800) tonnes in 2017. Pre-impregnated paper sales only increased slightly to 69,700 (69,100) tonnes. LPL paper sales rose a little more to 345,000 (331,000) tonnes, while HPL/CPL paper sales climbed to 63,000 (59,100) tonnes. Printing base paper's share of total decor

**Market development of decor paper 2007-2017 <sup>1)</sup>**



1) without China

Source: Ahlstrom-Munksjö Germany Holding



paper sales of 765,000 tonnes thus fell to 37.6 (38.4) %, while pre-impregnated paper sales' share dropped to 9.1 (9.3) %. LPL sales accounted for 45.1 (44.4) % and HPL/CPL paper sales for 8.2 (7.9) %.

In terms of the different grades, melamine paper showed the biggest improvement of 3.3% to 631,300 tonnes. Pre-impregnated paper sales were 0.9% higher at 69,700 tonnes. Edging paper sales stagnated at the previous year's level of 13,000 tonnes. Backer paper sales were down 1.0% at 51,000 tonnes. Total melamine paper sales of 631,300 tonnes broke down into 234,000 tonnes going to laminating firms (LPL), 62,100 tonnes to HPL/CPL manufacturers, 54,300 tonnes to impregnating firms and 280,900 tonnes to printers. Most of the 69,700 tonnes of pre-impregnated paper went to printers (52,800 tonnes), with 16,400 tonnes going to impregnating firms and 500 tonnes to LPL producers. The same buyer groups shared the 13,000 tonnes of edging paper sold: 6,400 tonnes were used by printers, 6,200 tonnes by impregnating

firms and 400 tonnes by LPL producers. LPL manufacturers used 41,300 tonnes of backer paper, 8,800 tonnes went to impregnating companies and 900 tonnes to the laminate industry. Across all grades, decor printers converted 341,000 tonnes of decor paper in the year 2017 (+2.0%). Sales to impregnating firms increased 3.1% to 85,700 tonnes, while sales to LPL producers jumped as much as 4.3% to 276,200 tonnes. The Ahlstrom-Munksjö figures show that the biggest jump was booked in deliveries to HPL/CPL manufacturers, primarily because of strong growth in India.

As in years past, Ahlstrom-Munksjö also analysed further sales routes after this first converting stage, although reject rates were not taken into account. Printers delivered more than two-thirds of the 340,000 tonnes sourced from the decor paper industry (229,000 tonnes) to LPL and HPL/CPL manufacturers. Treater operators sourced 58,000 tonnes from printers. The other 53,000 tonnes was delivered directly to finished product

manufacturers, especially to the furniture and laminate flooring industry. Impregnating firms purchased 86,000 tonnes from the decor paper industry directly and 58,000 tonnes from printers. The resulting total of 144,000 tonnes broke down into 122,000 tonnes sent to laminating firms (LPL, HPL/CPL) and 22,000 tonnes to the furniture/laminate flooring industry. Laminating firms used 690,000 tonnes of decor paper (339,000 tonnes from the decor paper industry, 122,000 tonnes from impregnating firms and 229,000 tonnes from printers) and delivered products to furniture manufacturers, interior remodeling firms, the laminate flooring industry and other finished product manufacturers.

A shift towards white decor paper seen for several years now continued in 2017, according to Ahlstrom-Munksjö. Some 440,000 tonnes of the 765,000 tonnes sold around the globe (excluding China) was delivered as white decor paper, 5.0% more than the previous year. Coloured decor paper sales were 0.3 % lower at 325,000 tonnes. □



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*Decor paper markets in China and the rest of the world at similar levels in 2017*

## *With double-digit growth Chinese production increased to more than 1m t*

**China's decor paper industry booked another double-digit growth in output last year. According to Decor Paper Market Research 2017 drawn up by Ahlstrom-Munksjö Germany Holding GmbH, based in Aalen, Germany, the China National Forest Products Industry Association (CNFPIA) reported a 13.5% growth to more than 1m tonnes for 2017.**

Chinese decor paper production had increased 15.7% to around 900,000 tonnes in 2016. The previous year had ended with a small growth of 1.6% to 778,000 tonnes. CNFPIA figures show that Chinese decor paper production had risen 17.8% in 2013 and 16.9% in 2014.

According to Ahlstrom-Munksjö, the bulk of the decor paper made in China is delivered to the wood-based panel industry. These buyers accounted for about 80% of decor paper production. Ahlstrom-Munksjö said that the other 20% is not comparable with basic grades and is thus excluded. Therefore, relevant production stood at approximately 810,000 tonnes last year. This paper is used in decor printing, impregnating and laminating. Ahlstrom-Munksjö reported Chinese paper output of 610,000 tonnes in 2014 by making similar corrections. A slight 4.1% improvement to 635,000 tonnes had been booked in 2015. A larger 12.6% upswing to 715,000 tonnes followed in 2016. The upward trend intensified last year (+13.3%).

Chinese decor paper exports jumped to 60,000 tonnes net last year. They had stood at 35,000 tonnes in 2014 and 45,000 tonnes in 2015. China had exported 50,000 tonnes in 2016. These exports continue to be concentrated within Asia. Decor paper shipments from Europe to China continue to be limited by variations in price and quality and import duties and are thus primarily geared towards higher-quality grades and speciality products.

Chinese decor paper sales increased 12.8% compared with the previous year to 750,000 (2016: 665,000) tonnes based on output of 810,000 tonnes and net exports. This figure broke down into 726,200 tonnes of melamine paper, 19,000 tonnes of backer paper, 3,000 tonnes of edging paper and 1,800 tonnes of pre-impregnated paper. A total of 765,000 (745,000) tonnes was sold in other regions outside China last year, Ahlstrom-Munksjö estimated (see separate report). The global market volume thus stood at 1.515m (1.410m) tonnes in 2017, comprising 49.5% in China and 50.5% in other regions. China thus now has a similar volume to the rest of the world. The global market volume of 1.515m tonnes breaks down into 1.358m tonnes of melamine paper, 70,000 tonnes of backer paper, 16,000 tonnes of edging paper and 71,500 tonnes of pre-impregnated paper. Decor printers converted some 807,100 tonnes. Impregnating firms sourced 130,700 tonnes from the decor paper industry. Some 491,200 tonnes went directly to LPL manufacturers and 86,000 tonnes to HPL/CPL manufacturers. All told, LPL and HPL/CPL producers received 577,000 tonnes of decor paper.

Ahlstrom-Munksjö outlined downstream delivery streams after this first converting stage in its Decor Paper Market Research. Out of the 807,100 tonnes delivered to decor printers, 650,000 tonnes was sold to laminating firms (LPL, HPL/CPL) after printing. Another 103,000 tonnes went to impregnating firms and 54,000 tonnes directly to finished product manufacturers (including furniture, interior remodelling, laminate flooring). Impregnating firms received 234,000 tonnes and turned 212,000 tonnes into products for laminating firms and 22,000 tonnes for finished product manufacturers. In turn, laminating companies sourced 577,000 tonnes directly from the decor paper industry, 650,000 tonnes from printers and 212,000 tonnes

from impregnating firms. Therefore, 1.439m tonnes was turned into laminated board and delivered to finished product manufacturers.

The Decor Paper Market Research also shows the amounts made in each region, the balance of imports and exports and the total market volume resulting from both variables. Therefore, 514,000 tonnes of decor paper had been made in Western Europe last year. Net exports totalled 106,000 tonnes, resulting in a market volume of 408,000 tonnes. By contrast, Eastern Europe was a net importer with output of 132,000 tonnes. The 23,000 tonnes imported mainly from Western Europe allowed estimated demand of 155,000 tonnes to be met. North America and South America also needed decor paper from other regions. Some 30,000 tonnes had been manufactured, 17,000 tonnes imported and 46,000 tonnes sold in North America. In South America, net imports (27,000 tonnes) even exceeded production (22,000 tonnes), putting the total market volume at 49,000 tonnes. Some 810,000 tonnes had been made in China last year. Net exports totalled 60,000 tonnes, while demand reached 750,000 tonnes. The discrepancy between production (12,000 tonnes) and net imports (77,000 tonnes) was the largest in the rest of Asia. The market had a volume of 89,000 tonnes.

China's share of global decor paper production of 1.515m (1.410m) tonnes has now reached 53%. Asia has contributed 54% altogether. Europe provided 42%, including 26% from Germany and 16% from the rest of Europe. Ahlstrom-Munksjö put North and South America's share of total output at 4%. In 2012, 52% of the decor paper made around the world (1.070m tonnes) was produced in Europe (Germany: 32%, rest of Europe: 20%), 43% in Asia (China: 42%, rest of Asia: 1%) and 5% in America. □



*Downtime of varying magnitudes is still not enough to stabilise capacity utilisation*

## *Barely any improvement in sales climate on decor paper markets at start of 2019*

**A slump in decor paper sales that emerged during the second half of 2018 has so far persisted in the first quarter as well.**

Apart from the usual slight recovery seen after downtime over the Christmas and New Year period, demand has hardly improved. Most manufacturers are thus able to deliver at short notice, as they had been in the fourth quarter, and are essentially interested in landing additional orders to improve capacity utilisation. Colour cycles have been shortened again in a few instances because of shorter order backlogs, although they still average four to six weeks.

Downtime of varying magnitudes taken in recent months is still not enough to stabilise capacity utilisation. Most decor paper producers are currently making normal amounts, something that is combining with continued subdued demand to send inventories higher. A few paper machines have been idled for up to a week in February as a result. Decor paper producers

had scaled back their operations to varying degrees in the third and fourth quarters. A few companies had ceased operations for up to a month throughout the entire fourth quarter. Most decor paper producers had shut down for Christmas during the third week of December. Production then resumed at the start of January. Stoppages at two mills lasted into the middle of January because of rebuilding work.

Capacity utilisation problems in the decor paper industry that have lasted for several months now are the result of changes in many buyers' ordering behaviour since mid-2018, resulting inventory reductions, the economic slowdown that surfaced in almost all sales markets over the summer and bigger falls in sales in individual countries and sales segments. For instance, a sharp decline in laminate flooring production has trickled down to decor printers and independent impregnating companies focused on this segment. Several companies have scaled back production by imposing short-time work and ceasing operations for days at

a time. Demand for decor paper from the wood-based panel industry is faring better, but has also softened in the past few months. Out of the different sales markets, Turkey and the Middle East in particular have weakened considerably in recent months. Lower sales were also recorded in Eastern European countries, China and South America.

Buyers have attempted to secure additional price cuts in negotiations to hash out first-quarter decor paper deliveries. The first price cuts had already materialised during the fourth quarter. Besides slow demand and the resulting capacity utilisation problems, customers mainly cited receding pulp and titanium dioxide prices as arguments. Decor paper producers countered that titanium dioxide prices have not fallen as much as buyers assumed. The regained strength of the US dollar has also limited the small decrease in pulp prices. Several companies have also pointed out that falling decor paper prices were having hardly any impact on volumes amidst sustained weak demand. Nonetheless, supply pressure has resulted in additional markdowns.

European contract prices for bleached eucalyptus kraft pulp have softened again in the past few months. This development comes on the heels of an upward trend lasting from the start of 2017 to the second quarter of 2018 that was followed by a period of stabilisation. Pulp markets reversed course for the first time in November. Dwindling demand around the globe since the third quarter, the slowdown on the Chinese market and manufacturers' and converters' rising inventory levels were listed as having prompted this turnaround. December and January brought further decreases. The downward slide in European titanium dioxide prices that appeared in the third and fourth quarters of 2018 has continued into the first quarter of this year. □



*High inventories in the value chain*

*(Photo credit: EUWID)*

*Titanium dioxide makers face a big drop in volumes in the fourth quarter of 2018*

## *Contract prices for titanium dioxide have been falling to varying degrees*

**Falling prices are continuing to play out on European titanium dioxide markets in the first three months of 2019 after a turnaround in the second half of 2018.**

However, the mark-downs agreed in new contracts vary wildly, depending on the supplier, contract duration and previous price. Sources within the titanium dioxide industry are quoting price cuts to the tune of €100-140. As in previous quarters, decor paper manufacturers are especially critical of this average range since it is shaped in large part by basic grades used in paint and ink.

These grades had already encountered the first price cuts of €30-50/t in the third quarter of 2018 after a lengthy upward spiral. Titanium dioxide manufacturers had managed to hold on to the second quarter's prices for higher-quality grades, at least in part. In a few instances, though, minor adjustments were made here too. Prices for grades used in paint and ink had been slashed by up to €150 in the fourth quarter. Markdowns averaged €80-100 across all areas of application.

However, decor paper manufacturers note that they had not passed on these reductions in full and to all titanium dioxide suppliers, either. A variety of companies reported that this trend continued in the first quarter, as well. While market-wide price cuts were assumed to be in the region of €100-140, decor paper industry companies managed to secure a maximum of €100-120 and only for some suppliers.

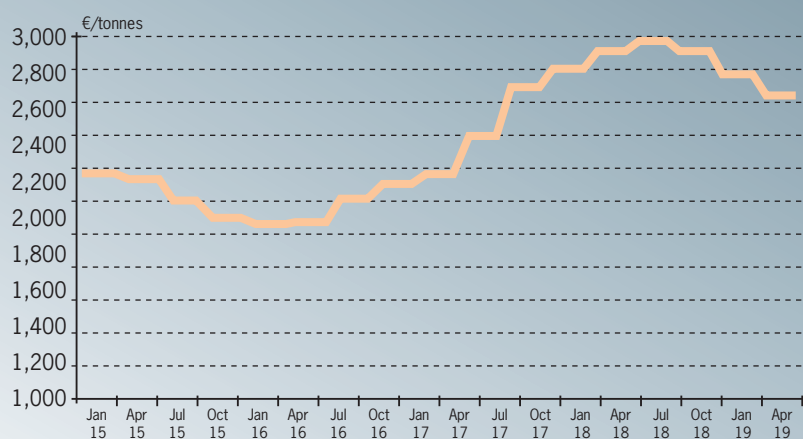
Chemours Co., based in Wilmington, Delaware, the biggest titanium dioxide supplier in the decor paper segment, has set a goal of fixing prices for a longer period of time with its Ti-Pure value stabilisation (TVS) strategy launched last year. Sources in the decor paper industry believe that the company has ceded to buyers' price demands much less than other titanium dioxide manufacturers in the latest rounds of negotiations. The price cuts enforced by a few decor paper producers in the first quarter thus remain below the maximum potential amount of €100-120, depending on the proportion of their titanium dioxide that is delivered by Chemours.

Renewed price cuts throughout the titanium dioxide market as a whole are rooted in the ongoing discrepancy between supply and demand and the resulting volume pressure. Besides slower actual demand in a variety of sales areas, inventory depletions advanced by buyers in recent months played a part in this volume pressure. Titanium dioxide manufacturers and converters feel that this process of reducing inventories has slowed during the first quarter, but is not done and dusted yet. Conversely, market-induced production curtailments are still happening in a number of buyer industries, which has also curbed demand for titanium dioxide. Titanium dioxide manufacturers have seen their sales worsen as a result.

Therefore, sales volumes fell more in the fourth quarter than they had in the third quarter, with a few titanium dioxide manufacturers responding by reducing their output as well. Chemours' Titanium Technologies division booked a 19% decline in titanium dioxide sales in the fourth quarter when compared with the prior-year period. Sales prices were 5% higher than the same stretch in 2017 in local currencies. Fourth-quarter revenues were thus 15% lower than one year earlier. The Pigment segment within the TiO<sub>2</sub> division of Tronox Inc., based in Stamford, Connecticut, faced a 17% slide in fourth-quarter revenues. Sales prices were 1% higher than the previous year, while sales tumbled 16%.

The Titanium Dioxide division of Venator Materials plc, based in Wymondley, UK, suffered a smaller downturn in sales volumes and revenues than Chemours' and Tronox's operations. This is due to special effects making a dent on Venator's performance, particularly the stoppage of its plant in Pori, Finland, after a fire, last year. The division's revenues worsened 5% in the fourth quarter. Sales volumes were down 6%, while prices were 1% higher. □

**Europe: Development of TiO<sub>2</sub> prices**



Source: Ahlstrom-Munksjö investor presentation, February 2019



*Users fear that wood-based panel recycling will be severely impeded*

# Numerous objections to titanium dioxide classification, proposed by ECHA's RAC

A total of 489 comments were received in response to an EU consultation about the decision by the Committee for Risk Assessment (RAC) within the European Chemical Agency (ECHA) to propose classification of titanium dioxide as a substance suspected of causing cancer through the inhalation route (carcinogenicity, category 2). The consultation ran from 11 January to 8 February 2019.

The comments predominantly came from associations representing the chemical, paint/ink, user and recycling industries and from companies in the aforementioned sectors. All key titanium dioxide producers also took part. Coating, ink and paint producers were the main users of titanium dioxide to participate. Ahlstrom-Munksjö Oyj, headquartered in Helsinki, was the only decor paper industry firm to submit comments. Other opinions were expressed by paper producers, wood-based panel manufacturers such as Pfleiderer Group S.A. (Wrocław, Poland) and from plastic converters such as Rehau AG+Co. (Rehau, Germany). The majority of these statements expressed opposition to the planned reclassification of titanium dioxide.

Even prior to publication of the RAC recommendation, a variety of industry associations had stressed that existing epidemiological studies did not establish a link between exposure to titanium dioxide and the incidence of cancer in people. Over the past year, criticism of the RAC recommendation has increasingly shifted to practical problems, such as processing, recycling and waste management of products containing titanium dioxide and the virtual absence of any substitutes for titanium dioxide. Products made using titanium dioxide have very different titanium dioxide levels. Opaque white paint contains up to 50% titanium dioxide. High-filled white decor paper includes up to 40% titanium



*New TiO<sub>2</sub> regulation might have an effect on recycling.*

*(Photo credit: EUWID)*

dioxide, while light-coloured single-shade and printing base paper use 30-35% in most cases. In its comments, the head association of the German Woodworking Industry (HDH, Bad Honnef) stressed that many of the upstream products relevant for the wood and furniture industry contain titanium dioxide. Besides wood and furniture coatings, printing ink and decor paper, they also mentioned plastic products, flat glass, fibres, textiles and leather for upholstered and seating furniture manufacturing as well as ceramic materials. Decor paper and surface coatings are the main applications in the wood and furniture industry. HDH noted that titanium dioxide is not a standalone substance in all upstream products, but rather is mixed into the material in question. The RAC committee feels the potential cancer-causing effect comes when it is inhaled. According to a statement of the German Wood-based Panel Industry association (VHI, Berlin), inhalation exposure of this kind does not occur when laminated wood-based panels and furniture, doors and floor coverings made out of these products are used.

Therefore, the two associations rejected the RAC's recommendation that products being labelled as suspected of causing cancer because this would confuse consumers.

The reclassification planned by the RAC would also impede manufacturing, converting and recycling of products containing titanium dioxide. According to a statement submitted by the BAV, products with a listed carcinogenicity of 2 must be classified and labelled as hazardous under EU waste law when they contain a titanium dioxide content of at least 1.0%. If classified as such, it would be virtually impossible for post-production residues from wood and wood-based panel production, for instance chips from edging and partitioning and sander dust, to be processed or incinerated. A similar situation exists for the widespread recycling of laminated wood-based panels. Dust, chips and recycled material contaminated with titanium dioxide could no longer be returned to the wood-based panel production cycle, but had to be managed as hazardous waste. □

*New business areas contributed about 20% of group revenues in 2017*

## *Felix Schoeller Holding commissions two decor paper machines in Russia and China*

**With the start-up of two paper machines at joint venture sites in Russia and China Felix Schoeller Holding GmbH & Co. KG, headquartered in Osnabrück, Germany, expanded its production capacity for decor paper and other special paper grades.**

The joint venture OOO Mayak-Technocell (MTC), based in Penza, Russia, started making coated non-woven paper for the wallpaper industry at its new PM 6 during the fourth quarter. The subsequent qualification period has now been completed at three wallpaper customers, and is now in progress at a fourth. The 2.30 m-wide paper machine, which was designed to have a production speed of up to 850 m/min, started making decor paper during the third quarter. Decor paper production was then qualified relatively quickly at Russian sites operated by three Central European printers.

PM 6 is now running in alternation, as planned, after adding non-woven paper to its portfolio. Around three weeks of

decor paper production are generally followed by three weeks of non-woven paper production. This year, PM 6 will thus make about 9,000 tonnes of decor paper and 9,000 tonnes of non-woven paper. MTC should primarily make this paper to compete with imports. According to MTC, about 50% of the decor paper needed in Russia is imported. No Russian company has made coated non-woven wallpaper until now.

The joint venture partners Mayak OAO, based in Penza, and Felix Schoeller Holding GmbH & Co. KG, headquartered in Osnabrück, Germany, had unveiled the project to build a second paper machine in September 2014. The start-up date, which was scheduled for the first quarter of 2017 at that time, was then pushed back on several occasions. These delays were blamed on financing issues and technical adjustments. Once project financing was wrapped up, MTC had awarded the Czech firm Papcel a.s., based in Litovel, a contract to deliver the entire machine starting in the se-

cond quarter of 2016. Voith Holding GmbH & Co. KG (Heidenheim, Germany), Gebr. Bellmer GmbH Maschinenfabrik (Niefern-Öschelbronn, Germany) and UMV Coating Systems AB (Säffle, Sweden) delivered individual components. The new paper machine was installed in an existing hall alongside PM 5, which started operating in March 2009. With a working width of 2.30 m, a production speed of up to 800 m/min and a grammage spectrum of 40-110 g/m<sup>2</sup>, PM 5 solely makes decor paper.

Mayak holds a 60% majority stake in the MTC joint venture, which was founded in June 2006. Felix Schoeller owns 40% through Technocell Beteiligungen GmbH. Felix Schoeller's consolidated financial statements includes MTC at equity.

### ***Winbon Technocell will start a second machine***

The joint venture Winbon Schoeller New Materials Co. Ltd. (WSNM), based in Longyou, Zhejiang Province, purchased a majority stake in Zhejiang Grandrich Paper Co. Ltd., a decor paper producer also based in Longyou, at the start of 2018. Winbon Schoeller was founded in the first quarter of 2017 by Felix Schoeller Holding and the Chinese company Zhejiang Welbon Pulp & Paper Group Co. Ltd., based in Hangzhou, Zhejiang Province. Zhejiang Grandrich had previously ceased all production activities in connection with insolvency proceedings. The largest of three paper machines resumed operations in May 2018 after Winbon Schoeller came on board. The 8 ft-wide paper machine, which has a designed annual capacity of 25,000 tonnes, made approximately 8,000 tonnes of decor paper by the year's end. Most of this decor paper was sold in China. The first exports to South-East Asia were also wrapped up.



*Mayak-Technocell started PM 6 during the third quarter.*

*(Photo credit: Schoeller)*



One of two 4 ft-wide paper machines is to start operating before the end of February. The third machine is supposed to resume operations at the end of 2019. The three paper machines have a listed combined capacity of around 50,000 tonnes per year. Winbon Schoeller intends to make a decision about whether to invest in a new decor paper machine as soon as it reaches this capacity level. Like the last major investments in the Chinese decor paper industry, this 12 ft-wide machine is to focus on serving the Chinese domestic market and exporting decor paper to other countries in Asia. The 12 ft-wide machine can be split into three widths of 4 ft each for the Chinese market or two widths of 6 ft each for the export business. The decor paper plant at the old Zhejiang Grandrich mill was renamed Winbon Technocell New Materials Co. Ltd. after Winbon Schoeller purchased a stake. The plan is for Winbon Schoeller to acquire the remaining shares too and subsequently delist the company from the stock exchange.

Felix Schoeller Group and the pulp trading and speciality paper manufacturing specialist Zhejiang Welbon Pulp & Paper Group agreed to form a joint venture in January 2017. The final joint venture contracts were signed later on in the first quarter of 2017. The official inauguration ceremony followed in mid-September. Felix Schoeller was advised by the Düsseldorf law firm Hengeler Müller and the Chinese company Fangda Partners, headquartered in Shanghai, in the talks. Welbon Group hired Zhejiang Hanbo, based in Hangzhou, as an advisor. Both companies hold a 50% stake in the joint venture. Felix Schoeller's shares are in the hands of Schoeller Beteiligungen GmbH. Felix Schoeller Group's consolidated financial statements list the joint venture at equity. Purchasing costs for the joint venture share were listed at a total of €28.2m in its annual report for 2017. The equity valuation stood at €26.2m on the reporting date.

According to a report in the latest issue of Felix Schoeller's company magazine "Focus On", Welbon Pulp & Paper Group had contributed two production sites



*Winbon Schoeller was founded in the first quarter of 2017.*

*(Photo credit: Schoeller)*

in Longyou (Zhejiang Winbon Specialty Paper Co. Ltd. and Zhejiang Yibon Specialty Paper Co. Ltd.) and Shexian, Anhui Province (Anhui Winbon Special Material Co. Ltd.) to the joint venture. At the time when the joint venture was founded, eight paper machines, nine coating machines and several packaging lines were operational at these two sites. The portfolio of products has several overlaps to Felix Schoeller's range with sublimation paper, photography paper, inkjet paper and wallpaper base. Moreover, the joint venture sites make release liner raw paper, glassine paper, medical packaging paper and water transfer paper.

The joint venture was supposed to enter the decor paper market relatively soon after its establishment in order to allow Felix Schoeller Group to regain greater access to the Chinese decor paper market which continues to experience strong growth. This access had become increasingly challenging in recent years because of major capacity building in the Chinese decor paper industry. Moreover, competition from Chinese decor paper manufacturers had also gradually mounted on a number of export markets. Under the original plans, the joint venture partners wanted to build a new decor paper site through a greenfield or brownfield investment. However, it

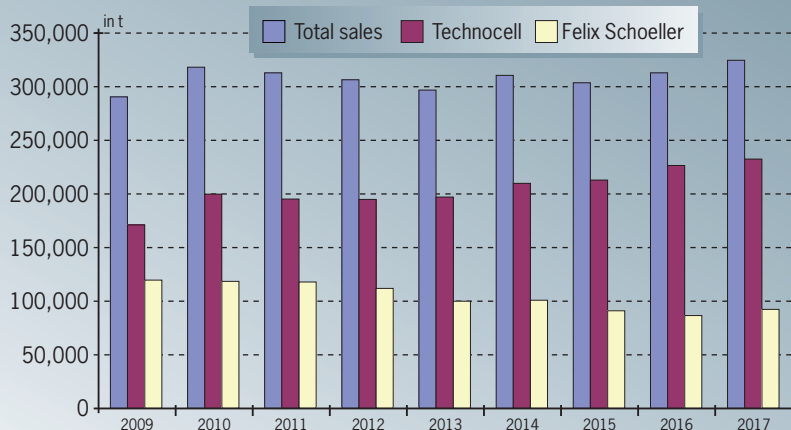
ended up being much quicker and cheaper to enter the decor paper production business by purchasing a stake in Zhejiang Grandrich and restarting paper machines there.

At the start of 2018, Winbon Schoeller bought another plot of land in direct proximity to its existing mill in Longyou where a new mill making sublimation paper, digital media and release paper called Longyou II is being constructed. Start-up is slated to take place in autumn 2019. In a next phase, machinery for extrusion coating and siliconising release liners is to be installed as well.

### ***Felix Schoeller reports rise in decor paper sales***

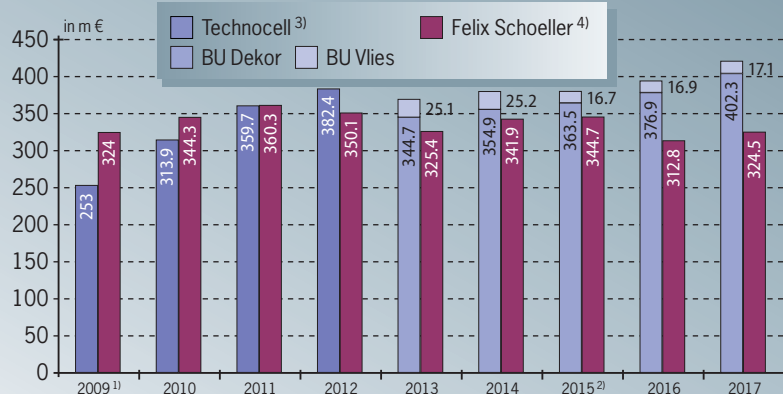
Felix Schoeller Holding GmbH & Co. KG has announced that the creation of new business areas since 2010 and advanced efforts to step up its international profile in recent years have had a positive impact on its sales, revenues and earnings in the past few years. Its new Nonwovens, Digital Media, Release and Packaging business units, which joined its existing Decor and Imaging divisions, already contributed 20% of group revenues in 2017, according to an annual report published in the German Federal Gazette. However, an internationalisation process involving

### Felix Schoeller Group: Sales development



Source: EUWID, according to information from Felix Schoeller's annual reports

### Felix Schoeller Group: Revenue development



1) until 2009 before sales deductions 2) from 2015 incl. other sales

3) until 2010 Dekor division 4) until 2010 Imaging division

Source: EUWID, according to information from Felix Schoeller's annual reports

several investments and acquisitions in 2017 and 2018 is not yet evident in the trend in revenues because foreign joint ventures are only consolidated at equity. Germany's share of total group revenues has thus hardly changed in recent years at about 18%. Felix Schoeller Group responded to shifts in its sales markets by creating new business areas and taking steps to expand its international operations. According to Felix Schoeller, the fall in silver salt photographic paper sales will continue in the years ahead, too. Annual decreases of around 8% are forecast until 2022. On the other hand, the company booked a growth in e-photography paper, small-sized ink jet paper, release paper and

packaging paper. Variations from one region to another mounted in the decor paper business. Its 2017 annual report estimates that Felix Schoeller recorded a compound average growth rate of 3% for its global operations excluding China. Including China, a 5% growth is thought possible. The Chinese market is forecast to record annual growth of around 8% up until 2022. India is following in its footsteps with a CAGR of 7%. Business in Eastern Europe is expected to increase by 6% per year. North and Central/South America will follow almost similar tracks with forecast annual growth of 3%. Western European decor paper markets will not increase as much with a 1.3% growth.

Felix Schoeller Group raised its total sales by 3.7% to 323,400 (2016: 311,700) tonnes in the 2017 financial year. Sales had headed in mixed directions in previous years (2014 +4.6% to 309,300 tonnes, 2015 -2.2% to 302,500 tonnes, 2016 +3.0%). The Technocell division's sales edged 2.6% higher to 231,500 (225,600) tonnes in 2017, with the Decor business unit booking a growth of 2.6% and the Non-wovens business unit an improvement of 4.7%. The Felix Schoeller division experienced a 6.6% recovery in sales to 91,800 (86,100) tonnes after sometimes significant downturns in previous years.

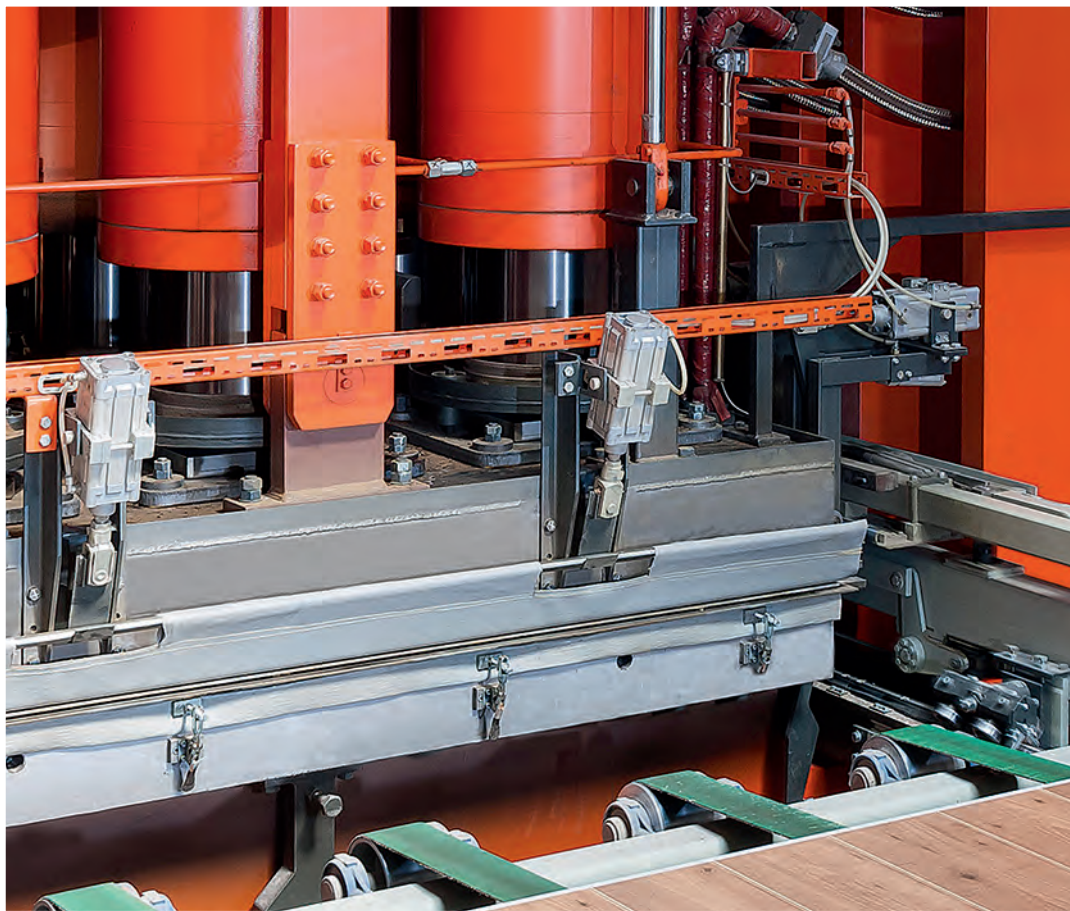
Group revenues grew at an even faster pace than sales in 2017, rising 5.2% to €747.5m (710.3m). The Decor division fared better than the group as a whole with a 6.5% hike in revenues to €419.3m (393.8m). The Decor business unit was responsible for €402.3m (376.9m) and the Non-wovens division for €17.1m (16.9m). Decor revenues broke down into €92.9m (86.6m) in Germany, €200.7m (174.0m) in the rest of the EU and €15.6m (32.1m) in the rest of Europe. North America was responsible for €55.0m (53.6m), Central/South America for €12.5m (11.6m), Asia for €21.5m (18.5m) and other regions for €4.1m (7.1m). Revenues generated by the Felix Schoeller division climbed 3.7% to €324.5m (312.8m) in 2017. In other words, 56 (55) % of group revenues came from Technocell, 43 (44) % from Felix Schoeller with Meltorec and 1% from other sources.

Material expenses jumped 9.2% to €519.7m (476.0m) in 2017 on the back of higher pulp (+12%) and titanium dioxide costs (+27%). Personnel expenses were up €7.2m due to higher pension reserves and wage increases. Yet, write-offs tumbled 15% to €35.7m (42.0m), meaning that they were much higher than investments of €24.7m (excluding Chinese joint ventures). Pre-tax profits improved 3.5% to €23.6m (22.8m) in 2017 despite rising costs. Group net profits were virtually unchanged for the fourth time in a row at €18.3m (18.2m). □



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*Ahlstrom-Munksjö Decor improves EBITDA margin slightly at the year's end*

## *Acquisition of the Caieiras mill has added €13m to Decor division's Q4 revenues*

**The MD Papéis mill in Caieiras (São Paulo, Brazil) that Ahlstrom-Munksjö Oyj, based in Helsinki, acquired with effect from 17 October 2018, contributed pro forma quarterly revenues of roughly €13m to its Decor division last year.**

The mill's contribution to earnings gave a disproportionately strong boost to comparable EBITDA. The Caieiras mill added more than €1m per quarter to the division's comparable EBITDA. According to financials released on 14 February, Ahlstrom-Munksjö Decor booked revenues of €115.1m (Oct.-Dec. 2017: 107.8m) and comparable EBITDA of €11.5m (11.0m) in the fourth quarter of 2018. The margin did dip slightly in a year-on-year comparison to 10.0 (10.2) %, but was much higher than in the first three quarters.

In its annual report for 2018, Ahlstrom-Munksjö also disclosed on a pro forma basis all key financials for the previous three quarters, to include the contributions of the Caieiras plant. Ahlstrom-Munksjö

Decor thus ended the first quarter with revenues of €112.9m, a figure that rose to €114.7m in the second quarter before receding to €109.1m in the third quarter. Pro forma comparable EBITDA stood at €8.3m in the first quarter, €10.2m in the second quarter and €7.0m in the third quarter. Excluding Caieiras, Ahlstrom-Munksjö reported revenues of €99.8m for the first quarter, €101.8m for the second quarter and €96.5m for the third quarter. Comparable EBITDA had reached €6.9m in the first quarter, €8.9m in the second quarter and €6.0m in the third quarter.

The Decor division registered a 4.7% growth in pro forma revenues to €451.9m (2017: 431.8m) in 2018 as a whole. This figure includes €407.9m (including internal revenues of €3.7m) from its old Decor division and from decor paper activities in Caieiras, which were consolidated from 18 October onwards. Decor paper revenues of €40.3m from the Caieiras mill were added to the pro forma figures for the period from 1 January until the deal closed on 17 October. The previous

year's pro forma figure of €431.8m had consisted of external (€375.4m) and internal (€2.9m) revenues from the Decor division and €53.4m from the Caieiras mill.

Comparable pro forma EBITDA fell 15.3% to €37.1m (43.8m) last year, primarily because of hikes in raw material costs. Some €32.3m of this figure came from the Decor division. The Caieiras plant contributed a pro forma sum of another €4.8m up until 17 October. The comparable EBITDA margin dipped two percentage points to 8.2 (10.2) %. Excluding the Caieiras plant, Ahlstrom-Munksjö delivered a 3.8% growth in revenues to €378.4m in the 2017 financial year. In that year, comparable EBITDA tumbled 37.0% to €33.8m. Pro forma EBITDA for 2017 took account of a €10.0m contribution from the Caieiras plant.

On a group-wide scale, Ahlstrom-Munksjö generated revenues of €2.438bn (1.960bn) last year. These figures encompass the US speciality paper producer Expera Speciality Solutions LLC, headquartered in Kaukauna, Wisconsin, which was purchased with effect from 10 October, and the Caieiras mill, albeit not until the start of consolidation. Expera booked revenues of €140.2m starting on 11 October, while the figures show that Caieiras contributed €18.7m from 18 October onwards. A new division, North America Speciality Solutions, was created for Expera upon closing of the deal. The Caieiras mill and its operations were split between the Decor and Industrial Solutions divisions.

The acquisitions of Expera and Caieiras both took the form of share deals in which Ahlstrom-Munksjö bought all shares. The purchase price for Expera stood at approximately €525m. The company paid €95.0m to the former owner of the Caieiras plant, MD Papéis Ltda. □



Caieiras mill

(Photo credit: MD Papéis)





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*Selling process underway at Interprint, shifts in shares at Surteco Group*

# *Surfaces industry in even greater state of flux under adverse underlying conditions*

**The adverse state of the market for paper-based surfaces since the third quarter of 2018 has not improved in the first two months of this year either.**

After positive development over a considerable period of time, the first signs of a slowdown became recognisable from spring 2018 onwards. Demand for printed decor paper, finish foils, and melamine films then dropped sharply when the holidays came around and have not recovered again since then in spite of a short-lived upswing in October. Various surfaces manufacturers believe the reduction in demand was amplified by the buyers altered purchasing strategy and the ensuing changes in stock levels. In view of the relatively good workloads in the whole value-adding chain over a longer period of time and the increases that occurred in costs and prices at the same time, buyers in almost all of the affected sectors had made their arrangements on a longer-term basis until well into the first half-year 2018 in order to assure their supplies. The supply situation had then

improved from the second quarter of 2018 and the growth in prices slowed. Buyers had therefore reduced their orders and ran down their stocks.

The problems this has given rise to in utilisation of the surfaces industry's production capacity had already led to adjustments in output by at least one or two companies in the fourth quarter. As the situation has not improved in the new year, further measures such as short-time working are being examined as well in the meantime.

Schattdecor AG had applied for short-time working for its main plant in Thansau in mid-February, which is due to begin in early March and then run for six months to start with. At the end of February, Surteco Group SE of Bittenwiesen, gave more specific shape to the restructuring measures it had announced in October 2018 in response to the slower pace of market development.

Several important export markets for surfaces manufacturers have also slumped during the course of the last few months.

Besides reductions in general economic activity, changes in exchange rates are playing a part in this as well. Examples are Turkey, the Middle East, a number of individual western European markets, and parts of eastern Europe. Deliveries to North and South America are still slightly slower than expected even though the situation has stabilised to some extent in one or two South American markets. In the Asia-Pacific region, European surfaces manufacturers are still struggling with the growing competition from Chinese manufacturers who are supplying to other markets, too, on an ever-increasing scale. They are meanwhile advancing towards Italy via the Middle East and Turkey.

Besides the growing competition from China, there are also other structural changes, some of which have been persisting for quite some time, that are presenting problems for decor printers, finish-foil manufacturers, and impregnators. In the printed-decor sector, it is mainly the continuing trend towards solid-colour surfaces, which is already relatively far-advanced in central Europe and is meanwhile spreading to other, more decor-oriented markets such as eastern Europe and Russia. The still increasing reduction in laminate-flooring production due to substitution by design flooring is another factor contributing to the shift from decors to solid-colour surfaces as almost exclusively decor surfaces are used for laminate flooring.

The surplus capacity created in various segments of the surfaces industry, the only limited possibilities for international expansion, the increasingly distinct vertical integration, and the increasing uncertainty about the future positioning of digital printing are further structural issues for the surfaces industry. A greater enlargement than needed in production capacity has affected the finish-foil business in particular in the last two years. Owing to the quick succession of start-ups and relocation of



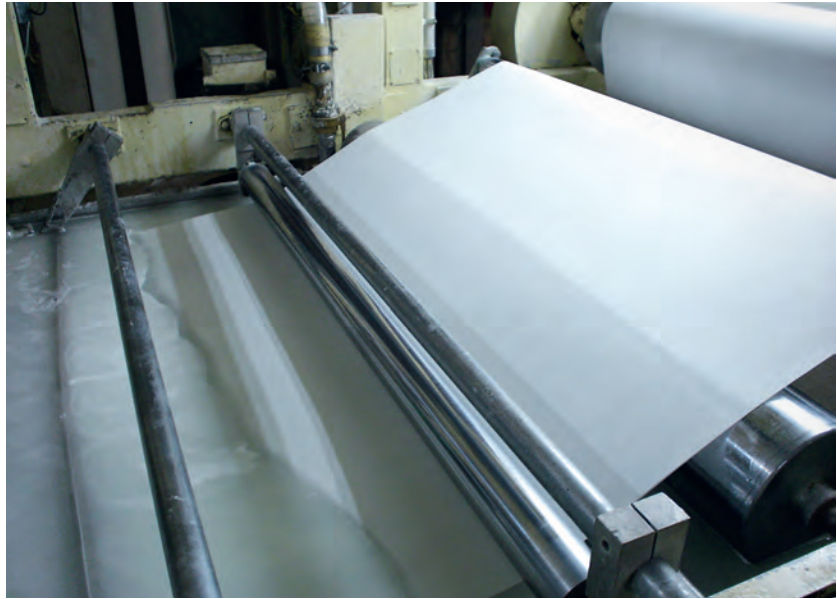
(Photo credit: EUWID)



several plants, especially in Poland, the supply has risen considerably more sharply than demand. Prices have consequently come under pressure considerably earlier than those for other surface materials. For this reason, the finish-foil business had already failed to live up to most manufacturers' expectations in 2017 and 2018.

Owing to the adequate capacity that has existed amongst decor printers and impregnators for quite some time, there have been no more than a few new or expansion investment measures in Europe recently. The international expansion that a number of individual manufacturers have been planning for some time, which is aimed at setting up their own facilities to open up the growth markets currently supplied via exports has also become more difficult due to the growing international competition. Also playing a role in this connection is the increasing importance of integrated manufacturers. Several big wood-based panel manufacturers have been largely self-sufficient in the impregnation segment for quite some time and, at least at times, have been supplying to the free market as well; a few companies are also covering other product segments in the surfaces sector.

In reaction to the slower growth in the rotogravure printing business, meanwhile almost all big printers have significantly expanded their activities with finished surfaces, particularly finish foils and melamine films. By taking over several companies and following up with further investment measures, Schattdecor has meanwhile become one of the world's biggest impregnators. The growing use of digital printing could lead to more shifts between the individual sectors. Almost all of the digital printing investment projects realised in the wood-based panel and construction-element industry as well as in the surfaces sector are still failing to fulfil the expectations, however. As such, the shift in printed decors towards value adders that a number of market players had been forecasting a few years ago has only materialised to a limited extent. This process is furthest advanced in mouldings/profiles and design flooring. Owing to the technological difficulties encountered in printing on paper surfaces with subsequent melamine impregnation, however, there



(Photo credit: EUWID)

have been setbacks in the investment projects in digital printing in the printed decor industry; one or two projects have even been abandoned completely.

Against the backdrop of the difficult market conditions again and the growing importance of strategic issues, the surfaces industry is also in a greater state of flux again at the moment. Shifts in shares have occurred at several companies. Changes in management have increased conspicuously at the same time. Examples are the planned or already completed withdrawal of Dr Herbert Müller, Dr Gereon Schäfer, and Frank Bruns at Surteco Group or Surteco GmbH (Buttenwiesen-Pfaffenhofen) and the departures of Frank Schumacher from the management of Interprint GmbH (Arnsberg) and Dr Andreas Dörfler from the management of the Impress group. The biggest issue amongst the corporate changes is the planned sale of the Interprint group by Wrede Industrieholding GmbH & Co. KG of Arnsberg. The bidding procedure coordinated by the Frankfurt branch of Roland Berger Holding GmbH of Munich is currently moving into the next round. Under discussion as potential investors are private equity companies and family investors. Strategic investors from the surfaces or wood-based panel industries are regarded as having little chance due to possible restrictions imposed by competition law or negative effects on Interprint sales. An

exception could be printing groups in the Asian region, for whom the acquisition of Interprint would significantly boost their activities in several regions and product segments.

The second big issue is the shifts in shares at Surteco Group, which had only completed its integration of the Süddekor group of Laichingen, taken over in November 2013, during the course of 2016. ECCM Bank plc of Sliema, Malta, part of the Kronospan group, acquired 12.28% of the Surteco shares in the fourth quarter of 2018 through several transactions and, according to a voting rights notification published in December, intends to increase this holding. Parallel to this, the Rudolf Ostermann Foundation of Bocholt has meanwhile acquired a stake of 5.67% in Surteco. Kronospan had already become involved with a variety of decor printers in the past, such as Maltaprint Sp. z o.o. of Posen, Poland, and Decopress Printing GmbH of Soest, Germany. According to unconfirmed information, it also has an influence on the Impress group, which has belonged to the Polish Ipopema FIZAN 76 investment fund since 2013. The former Schattdecor chief executive Harald Purainer had also purchased a minority holding in the Spanish decor printer Lamigraf S.A. of L'Ametlla del Vallès in November 2018 after the shareholdings between the existing shareholders had been clarified. □

*Investor to become sole or majority owner of Interprint's worldwide activities*

## *Wrede planning to wrap up sales process for Interprint during the next months*

**Wrede Industrieholding GmbH & Co. KG, based in Arnsberg, Germany, is looking at two options for the future of the Interprint group: either continuing to operate the firm together with a partner or selling it completely.**

The sales process initiated at the beginning of December 2018 is now entering the next round. In early January the Frankfurt branch of Roland Berger Holding GmbH of Munich, which has been commissioned to conduct the sale, sent an initial teaser to potential investors. The subsequently selected companies will be provided with further information on business-performance data in a fact book, after having signed a non-disclosure agreement (NDA). These companies can then submit a non-binding offer until the end of March. The interested parties with whom the final negotiations will be conducted will then be selected on the basis of these offers.

The investor or partner should subsequently forge ahead with the planned expansion of the Interprint group. The Interprint group,

which makes up Wrede Industrieholding's Decorative Surfaces division, has seen its revenues more than double over the past decade. With manufacturing facilities in Germany, Poland, Russia, China, Malaysia, the US and Brazil and a workforce of some 1,300 people, Interprint generated group revenues of €353m (2016: 314m) in the 2017 financial year. Projects involving a total investment of some €50m are in progress, primarily the construction of a service centre at its Arnsberg headquarters and projects to raise production in Pittsfield (Massachusetts, US), Egorievsk (Russia) and Changzhou-Wujin (Jiangsu Province, China). Interprint's medium-term plans developed over the past few months provide for even bigger investments in the years ahead to widen its spectrum of products and its degree of vertical integration.

In a statement issued on 4 December 2018, Thomas Wrede, chairman of the Wrede Foundation, said that the hunt for an investor or majority shareholder was connected to succession considerations within the Wrede family. After lengthy dis-

cussions, the family had arrived at the conclusion that the next generation does not wish to remain responsible for continuing Interprint's activities. Almost 400 people working at Interprint's Arnsberg headquarters had been informed of these deliberations and associated divestment plans on 1 December.

Thomas Wrede served as managing director of Wrede Industrieholding up until 1 July 2015 before becoming chairman of the advisory board. The three-person advisory board also includes two members from outside the family. Based on plans communicated at that time, two more advisory board members were supposed to be appointed at a later point in time, one of them from the next generation of the Wrede family. Thomas Wrede then wanted to step down from the advisory board and hand over his role to the next generation too. However, a family member could not be found to fill these roles.

Interprint's Arnsberg headquarters, production facilities in Ozorków (Poland), Egorievsk, Pittsfield, Curitiba (Paraná/Brazil), Nilai (Malaysia) and Changzhou-Wujin as well as its service centre in Affi (Italy) are part of Wrede Industrieholding. The holding firm also has a 74% stake in the affiliates Interprint Samara GmbH and OOO Interprint Samara, which pools its treating joint venture in Samara, Russia, with BMK GmbH, headquartered in Gaildorf-Bröckingen, Germany. Interprint's Malaysian subsidiary and Janoschka Holding GmbH, headquartered in Kippenheim, Germany each hold a 50% stake in the engraving joint venture Asia Pacific Engravers Malaysia Sdn. Bhd. (APE), based in Nilai. Wrede Beteiligungsgesellschaft also owns 49.2% of the shares in Arcolor Holding AG, headquartered in Waldstatt, Switzerland, which is the sole owner of the printing ink producer Arcolor. Schattdecor AG, based in Thansau, Germany, is the joint venture partner for Arcolor. □



(Photo credit: Interprint)



***ECCM, Ostermann and Lazard are now the largest shareholders in the 44.5% free float***

## ***ECCM Bank is pursuing strategic goals with its 12.28% stake in Surteco Group***

**The Maltese ECCM Bank plc, which is part of the Kronospan Group and headquartered in Sliema, intends to further increase its shareholding in Surteco Group SE, based in Buttenwiesen.**

The bank, which has been controlled by Kronospan entities since the end of June 2014, had first acquired a 5.0001% stake in Surteco in two instalments in mid-October 2018. On 14 November, the bank boosted its stake to 12.28%. In turn, HSBC Internationale Kapitalanlagegesellschaft mbH (HSBC INKA), based in Düsseldorf, Germany, which used to hold a 5.05% stake in Surteco, first cut its shareholding to 4.74% on 13 November and then sold it off altogether on 14 November.

Unconfirmed reports suggest that the new Surteco shareholder is already in talks with other shareholders, including some from the group of pool and family shareholders, which have a 55.5% stake. Based on the latest information published by Surteco Group, these pool and family shareholders include Klöpfer & Königer Management GmbH, based in Garching, which had raised its stake from 14.4% to 15.0% in May 2016, and the Linneemann, Schlautmann, Bausch, Ahrenkiel and Schürfeld families.

In a voting right statement published by Surteco on 10 December, the ECCM Bank, its affiliated foundation in Liechtenstein Luda Stiftung, Banasino Investments Ltd. and Matthias Kaindl as protector of the Luda Stiftung also made it clear that they are pursuing strategic goals with their stake in Surteco. The new shareholder also wants to influence the makeup of Surteco's Supervisory Board, which currently comprises chairman Dr Jürgen Großmann (term running until the 2020 annual general meeting), deputy chairmen Björn Ahrenkiel (2019 AGM) and Dr Markus Miele (2020 AGM), Dr Christoph Amberger (2022 AGM),



*(Photo credit: Surteco)*

Andreas Engelhardt (2023 AGM), Wolfgang Moyses (2020 AGM) and employee representatives Jens Krazeisen (2021 AGM), Udo Sadlowski (2020 AGM) and Thomas Stockhausen (2019 AGM). Surteco Group's present capital structure, notably its debt-equity ratio, and its dividend policy are to stay the same. The voting right statement issued by ECCM Bank also notes that the share acquisition to date was completely financed using its own funds.

The latest overview of shareholders in Surteco Group shows that ECCM Bank and its affiliate Luda Stiftung is the single-largest shareholder in the 44.5% free float. Rudolf Ostermann Stiftung, based in Bocholt, Germany, boosted a 3.23% stake purchased in mid-November to 5.67% on 7 December, thus becoming the second-largest shareholder. This foundation is affiliated with Rudolf und Margot Ostermann Verwaltungs GmbH, Rudolf und Margot Ostermann GmbH & Co. KG, Ostermann Daxenberger Stiftung & Co. KG and Rudolf Ostermann GmbH, according to Surteco's voting rights announcement. Rudolf Oster-

mann GmbH, which is managed by Dagmar Daxenberger and also based in Bocholt, is a wholesaler for joinery products, predominantly edging and fittings, that is active throughout Europe. Lazard Frères Gestion S.A.S. holds third place with 5.1%. Other shareholders account for just 21.4%. The updated shareholder overview does not list additional individual shareholders and no longer contains former shareholders Axxion S.A. (Grevenmacher, Luxembourg), Allianz SE (Munich, Germany) and NN Group N.V. (Amsterdam, the Netherlands) since their shareholdings are below the 3% reporting threshold. Axxion had recently owned 2.9% of the shares in Surteco, with Allianz having 2.8% and NN Group 2.7%.

The free float had last risen considerably with a capital increase carried out to finance the acquisition of Süddekor in November 2013 in which 4.4m new shares were issued. The higher trading volume meant that Surteco's shares moved up to the SDax on 24 March 2014, but was delisted from this index in June because of not enough activity. □

*Group aiming to position itself on market as independent impregnator as well*

## *With US Coating and Vasatech, Schattdecor closed two transactions in the last months*

**Schattdecor AG of Thansau, Germany, is further expanding its impregnating activities by taking over all the shares in the Malaysian impregnating company Vasatech Sdn. Bhd. of Bestari Jaya.**

After several months of negotiations, the company came to an agreement with the former owners of Vasatech on the terms of the transaction in February 2019. The final contracts were signed in the last week of February to enable the deal to be closed on 1 March. Schattdecor will integrate the Malaysian impregnator into the group in a number of stages. The company will continue to operate under the existing name of Vasatech at least for the time being and will continue to supply its existing customers with decorative films and technical films. The processed decor paper will also continue to be supplied by a variety of printers.

At the Bestari Jaya facility, roughly 40 km northwest of Kuala Lumpur, Vasatech operates two treaters supplied by the predecessor companies of Vits Technology GmbH of Langenfeld, Germany, with

a working width of 7 ft, which were put into service in 2001 and 2008 and achieve a total annual capacity of almost 50m m<sup>2</sup>. The company does not manufacture any impregnating resin itself; the impregnating resins purchased externally are prepared for production by a mixer from Ifa Technology GmbH of Rain, Germany. The produced melamine films are supplied partly to the laminate-flooring manufacturer Inovar Industries Sdn. Bhd. of Bestari Jaya, currently affiliated with Vasatech, and are sold partly on the open market. The majority of the external buyers are from Southeast Asia.

Inovar Industries was founded in 1996 under the name of Stalheim Industries Sdn. Bhd. by PC Tam, which had run the Malaysian impregnating company Kampasten Industries Sdn. Bhd. of Klang previously and then sold to the Casco group. The company, renamed Inovar Industries in 2011, achieves an annual output of approximately 5m m<sup>2</sup> of laminate flooring with two short-cycle presses and two profiling lines. The output is sold mainly

in Southeast Asia, India, Japan, Australia, and New Zealand. Tam had secured the supply of melamine films to its laminate-flooring works by establishing Vasatech in 2000. Both companies were combined to form Vasa International Group, in which further investors have acquired a stake since then in the form of the private-equity company Glenmarie Estates Sdn. Bhd. of Kuala Lumpur and its subsidiary Capital Properties Bhd.

Schattdecor's reason for taking over Vasatech is to add melamine films to its range of products that geared primarily to printed décor paper for buyers in the Southeast Asian furniture and construction elements industry and thereby become a full-range supplier as in other regions. The company has been represented in Southeast Asia with a representative office trading under the name of Schattdecor Pte. Ltd. and run by Mark Corera in Singapore since 2000. The sales company has been operating a showroom in Singapore for buyers from Southeast Asia for some considerable time. Last year, Schattdecor also set up another showroom near Kuala Lumpur.

The Schattdecor group has been increasingly expanding its impregnation segment in recent years by means of several acquisitions as well as new and replacement investments. During the course of the last few years, the company has put four new treaters into service in Rosate, Italy, in Chekhov, Russia, and in Wuhan, China. As such, meanwhile five systems are in operation in Rosate. In Chekhov, Schattdecor installed a new treater in a new building. In a next step, the newest of the present three treaters is being relocated from the Schatura works to Chekhov. Afterwards, an impregnating/lacquering line is going to be set up at the facility. For this purpose, the company is going to use a lacquering line that had been set up at the Shanghai works in 2006 but which has no



*New impregnating site in Wuhan*

*(Photo credit: Schattdecor)*



longer been used in the past few years and convert it to an impregnating/lacquering line in the course of the relocation. The impregnating joint venture Saintdecor founded in Wuhan in March 2017 meanwhile operates two treaters. The infrastructure at the impregnating facility equipped with three treaters in São José dos Pinhais in Paraná, Brazil, has been optimised as well. Schattdecor operates another two plants in Tyumen, Russia. Taking into account the two old treaters in Schatura, which will be closed down when the impregnating plant in Chekhov is run up to speed, the company currently has 16 treaters worldwide. Following the start-up of the two treaters moved to Chekhov, the closure of the two old treaters in Schatura and Vasatech's two treaters, Schattdecor will be operating 17 treaters in future. In 2019 as a whole, Schattdecor wants to get its volume of melamine-film sales above the 300m m<sup>2</sup> mark.

### ***Take-over of US Coating closed end of December***

At the end of 2018 Schattdecor has acquired all shares in the US finish foil manufacturer US Coating Co., based in Lexington, South Carolina, in a share deal.

The transaction closed on 20 December 2018 when the sides put pen to paper. Several individual shareholders had sold their shares in the deal. Founded in 1994, US Coating employs 23 workers and has until now solely made solid-colour finish foils using a 5ft-wide EBC lacquering line. These foils are primarily sold to the furniture industry, to manufacturers of kitchen cupboards, shop furnishings and shelving systems and to profile wrapping companies. Its portfolio is to be expanded to include decorative finish foils with its integration into the Schattdecor group. US Coating will continue to operate under its current name. Schattdecor will therefore have two entities in the US in the future. Schattdecor Inc., headquartered in Maryland Heights near St. Louis, Missouri, now focuses on the printed decor business with two printing machines. The addition of US Coating will allow the group to expand its finish foil business in North America, which has so far been covered by imports from Europe.



*Foil production in Lexington*

*(Photo credit: US Coating)*

Schattdecor has looked into options for starting to make finish foils in North America for some time now. Commissioned in Maryland Heights in November 2017, the second printing machine had been designed together with the supplier Rotodecor GmbH Maschinen- und Anlagenbau, based in Lage, so that a lacquering station could be added at a later date. At that time, Schattdecor noted that creating a separate lacquering line was also an option. Until now, Schattdecor has concentrated its finish foil manufacturing activities in Glucholazy and Tarnowo Podgórze, Poland, and in Rosate, Italy. In Poland, its focus has been on lacquered pre-impregnated materials, while the Rosate site makes post-impregnated finish foils. Schattdecor operates five separate lacquering lines processing acid-curing lacquers in Glucholazy. The start-up of PML 8 in the first quarter of 2015 marked the end of the complex's expansion for the time being. Schattdecor now has a total capacity of about 350m m<sup>2</sup> per year there. The Tarnowo Podgórze printing site has also been able to make EBC-cured pre-impregnated surfaces using printing and lacquering line PMD 42 since September 2014. Post-impregnated finish foils are made using three of five treating lines in Rosate. In the medium term, Schattdecor hopes to start making finish foils in China, too. A new printing site under construction in Quzhou, Zhejiang Province, might gain a lacquering line in

future investment projects. A foil technical centre built at its Thansau headquarters in January 2008 is now equipped with two laboratory lacquering lines; existing technology for acid-curing lacquering systems was joined by a line using EBC lacquering during the second half of 2018. Based on the latest published information, the Schattdecor group sold a total of approximately 340m m<sup>2</sup> of pre-impregnated and post-impregnated finish foils in the 2017 financial year.

The acquisitions of US Coating and Vasatech has boosted the number of Schattdecor production facilities to 17. In Europe, the company has production operations at its headquarters in Thansau, in Tarnowo Podgórze and Glucholazy, in Rosate and at its printing ink joint venture Arcolor AG, based in Waldstatt, Switzerland. Schattdecor is present in Turkey with a printing site in Gebze. In Russia, it has facilities in Schatura, Chekhov and Tyumen. The printers in Shanghai, the decor paper joint venture Kingdecor Co. Ltd., based in Quzhou, and the joint venture Saintdecor, headquartered in Huangang, Hubei Province, serve the Asian market. A fourth site in China will be added with the start-up of the printers in Quzhou in 2019. Schattdecor operates a printer and an impregnating site at its Brazilian location in São José dos Pinhais, Paraná. The company has two plants in the US. □

*Closing expected at the end of Fletcher Building's financial year 2018/2019*

# *Broadview Holding set to acquire Formica after buying Trespa, Arpa and Westag*

**Broadview Holding B.V., headquartered in s'Hertogenbosch, the Netherlands, is planning to buy the Formica Group with its management company Formica Corp., based in Cincinnati, Ohio.**

Broadview has long controlled Trespa International B.V. (Weert, the Netherlands) and Arpa Industriale S.p.A. (Bra, Italy) and spent roughly €170m on acquiring a majority stake in Westag & Getalit AG (Rheda-Wiedenbrück, Germany) in August 2018. The company signed an agreement to this effect with Formica's current owner, Fletcher Building Ltd., based in Auckland, New Zealand, in mid-December 2018. Last spring, Fletcher Building had awarded the Macquarie Capital arm of Macquarie Group Ltd., based in Sydney, a contract to carry out the divestment process. The law firm Paul Weiss Rifkind Wharton & Garrison LLP, based in New York, advised Broadview in the negotiations. The purchase price for Formica Group was set at US\$840m without cash and on a debt-free basis. In return, Fletcher Building must cover

a variety of expenses, such as pension obligations for Formica Group employees and transaction costs. Once required anti-trust approval has been received in the different countries, the sale of Formica Group is set to close by the end of Fletcher Building's current 2018/2019 financial year (30 June).

Upon closing, Fletcher Building intends to wrap up the divestment process that started in April 2018 for the Formica/The Roof Tile Group unit, which was spun off from its former International division on 1 July. In a first stage, the company sold the Roof Tile Group (RTG) to the Canadian company IKO Group, headquartered in Brampton, Ontario, with effect from 1 November. By selling the Formica/The Roof Tile Group division, Fletcher Building is moving forward with a strategic reorganisation developed by CEO Ross Taylor, who has been in office since November 2017. This plan includes concentrating on its operations in Australia and New Zealand. The wood-based panel manufacturer Laminex Group Pty. Ltd., which

is based in Doncaster, Victoria and used to be part of the old International division, will thus remain part of the company, at least for the time being. The divestment process for Formica Group and RTG was first made public in mid-April. Unconfirmed reports suggested that Fletcher Building had already forged the first contacts with potential investors, including companies in the wood-based panel and surfaces industry, during the spring. Towards the middle of August, Macquarie Capital sent out a first teaser for the planned sale of Formica. More detailed information was released by the start of September. Fletcher Building had invested about US\$700m in buying Formica at the start of July 2007. At that time, the sellers were the investment firms Cerberus Capital Management LP and Oaktree Capital Management LLC.

According to Broadview, Formica Group employed 3,400 people at manufacturing locations in North America, Europe and Asia and generated revenues of US\$713m or approximately €630m in the 2017/2018 financial year. In Europe, Formica has production facilities in North Shields and Newton Aycliffe (both in the UK), Valencia (Spain), Kolho (Finland) and Herzberg (Germany).

With operations in areas such as materials technology (including Trespa, Arpa and Westag & Getalit), personal protective equipment (Intersafe and Elacin) and Energy (Broadview Energy Solutions, Barents NaturGass and Molgas), Broadview Holding now employs about 2,900 people and generates annual revenues of approximately €700m. The acquisition of Formica will allow the group to focus even more on laminates and elements. In its offer document for the stake in Westag & Getalit, Broadview Holding listed pro forma revenues of €681.5m for the 2017 financial year, including €447.1m from Broadview interests at that time and €234.4m from Westag & Getalit. □



Broadview is majority owner of Westag & Getalit.

(Photo credit: Westag & Getalit)





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## Ingka to integrate branches into distribution

The Ingka Group wants to integrate the stationary Ikea furniture stores into the distribution and fulfilment network for delivering online orders in future. As the group reported in its report for the business year 2017/2018, the branches are to be equipped with an appropriate digital infrastructure for this purpose in order to ensure cost-efficient and fast delivery to customers. 14 new distribution units have already been created by this means in the business year 2017/2018. This concept is not being implemented in Germany yet, though Ikea Deutschland is examining the option of a smaller-scale furniture store with additional storage areas for Nuremberg enabling delivery of online purchases. The plan is part of the Ingka Group's reorientation, which, besides the increased positioning of Ikea stores in inner-city locations, also provides for the expansion of the e-commerce platform as well as investment in fulfilment and distribution centres.

The Ingka Group recorded total sales revenue of €37.050bn (2016/2017: €36.295bn) for its business year 2017/2018, an increase of 2.1% compared to last year. Besides the Ikea retail sales revenue, this also includes the rental income from the Ingka shopping centres and the revenue from provided services (€1.35bn). The Ikea retail business generated total sales revenue of €34.8bn (€34.1bn), equating to growth of 1.9% against the previous

year. Currency-adjusted growth was 4.7%. Growth was achieved in 29 of 30 markets. Online sales revenue was raised by 45%. Germany remained the most important market with a 15% share to total sales revenue, followed by the USA (13%), France (8%), the UK (6%), and China (6%) whereby China remains the fastest growing market. The USA closed one percentage point down on the previous year. 367 (355) Ikea stores are operated worldwide at the moment, 244 of them in Europe, 62 in den USA, 37 in Asia, 14 in Russia, and ten in Australia. Twelve new branches were opened in the last business year.

The Ingka shopping centres generated sales revenue of €0.9bn (€1.0bn) whereby the highest growth was achieved in the Ingka centres in China. New centres were opened on the Algarve, Portugal, in Lublin, Poland, and in Zagreb, Croatia. Two new shopping centres are currently being developed in Russia in Novoselie near St. Petersburg and in Adygea. In China, Ingka Group has purchased land-use rights for building three new shopping centres in Changsha, Shanghai, and Xian.

The Ingka group's key-performance figures deteriorated in the period under review in connection with the initiated reorientation process. The operating result fell to €2.251bn (€3.031bn), and net profit to €1.468bn (€2.473bn). □

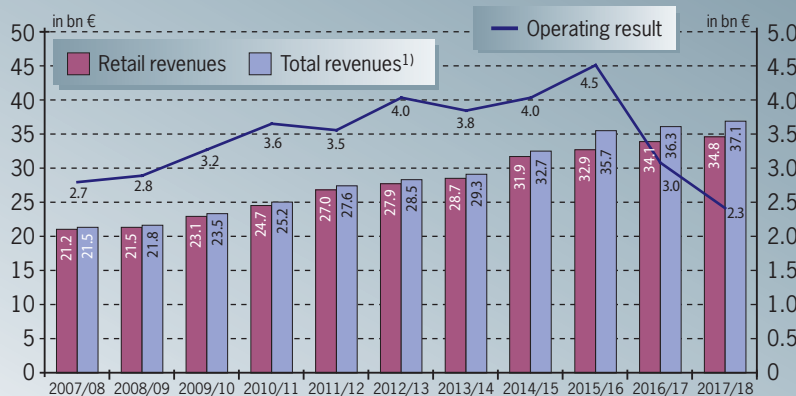
## Neue Alno's output boosted to roughly 1,000 cabinets

Roughly a year after it was founded, Neue Alno GmbH of Pfullendorf, Germany, has raised its production volume from approximately 600 cabinets in March 2018 to the present level of around 1,000 cabinets per day. According to information from managing director Thomas Kresser, the company's capacity is being well utilised in other segments too, such as components. Roughly 60 % of the manufactured components are used internally; the remaining 40% is supplied to external partners. Neue Alno GmbH supplies components to other furniture manufacturers, shopfitters, and competitors in the kitchen-furniture industry. There are currently no plans to increase the number of employees or step up to two-shift operations.

In order to further increase efficiency and flexibility in production, manufacturing has been reorganised since the restart in January 2018. Three of the facility's former four factory buildings are still in use at present. Works 2 has been integrated into Works 1. Carcasses used to be produced in Works 2. The entire component fabrication process (fronts/carcasses) now takes place in Works 1, for series production as well as for production from a batch size of one. Components for external buyers are produced here as well. Final assembly and shipping are located in Works 3. Crafting and surface-finishing takes place in Works 4. The company has also invested in plant and machinery in the last few months. More measures are planned for improving the production processes.

Neue Alno GmbH's working capital is still being provided by the London-based financial investor RiverRock European Capital Partners LLP. RiverRock had acquired the key assets of the insolvent company Alno AG on 1 January in the course of restructuring by transfer. Kresser is meanwhile working from the assumption that Neue Alno GmbH will reach the break-even threshold in 2020 and then regain its financial independence from that point on. □

### Ingka: Revenues and results development



<sup>1)</sup> from 2015/16 incl. rental income and service revenues, until 2014/15 incl. rental income and wholesale business

Source: EUWID, according to information from Ingka



## ACProducts to take over Elkay Wood Products



(Photo credit: Acpi)

The US kitchen and bathroom-cabinet manufacturer ACProducts Inc. ("acpi") of The Colony, Texas, is aiming to take over Elkay Wood Products Company, owned by Elkay Manufacturing Company of Oak Brook, Illinois, and also active in kitchen and bathroom-cabinet production. The purpose of the acquisition is to augment the product range and make acpi one of the leading kitchen-cabinet suppliers in North America. The merger would create a USA-wide network of production facilities through which customers could be served through dealers, DIY stores, and large-scale project business in all 50 states. The transaction is subject to the usual conditions precedent; acpi is expecting the deal to be closed at the end of the first quarter of 2019 at the latest.

Elkay Wood Products says it is the fifth-biggest bathroom and kitchen-cabinet manufacturer in the USA with 1,600 employees and five production plants in Independence in Oregon, Aurora in Colorado, Waconia in Minnesota, Culver in Indiana, and Mifflinburg in Pennsylvania.

acpi emerged from the sale of the kitchen division of Armstrong World Industries Inc. of Lancaster, Pennsylvania, to the private-equity company American Industrial Partners (AIP) of New York, which was completed in October 2012. After the conclusion of the transaction, the acquired activities continued to appear on the market for another two years under the name of "Armstrong Cabinet Products" through a licencing agreement and were subsequently renamed acpi. Roughly 750 employees were working at the plant in Thompston, Pennsylvania, at the time of the takeover.

In the last few years, the company has considerably enlarged its production capacity by means of various takeovers. acpi had purchased the former Mount Union works in Pennsylvania of FCI Inc. Cleveland, Ohio, a manufacturer of parts for sectors such as the aviation and automotive industries, in 2016 and set up a cabinet production plant there. The works was put into operation in July 2017. In January 2017, acpi took over Smart LLC ("Smart Cabinetry") with its headquarters and production plant in New Paris, Indiana. The acquisition of Cabinets 2000 LLC of Norwalk, California, in early April 2018 enabled acpi to round off its range with a higher level of products. Master WoodCraft Cabinetry LLC with a production plant at its headquarters in Marshall, Texas, and one in Jefferson, Texas, has been part of the acpi group since June. □

## Tvilum achieves positive operating result

In the short 2018 financial year, Danish flat-pack furniture manufacturer Tvilum A/S, Fårvang, achieved an operating result of DKK91.8m (equivalent to some €12.3m). This was reported by the Wood Supply news portal approximately one year after the takeover of the company, which was insolvent at the time, by an investor group. In the last six years prior to the insolvency, in contrast, the company suffered an accumulated loss of DKK461m, according to Tvilum CEO Torben Porsholdt.

Pre-tax profit and the annual surplus in the current reporting period amount to DKK77.4m and DKK59.2m respectively. Turnover is indicated at DKK756.8m. The figures only include the Danish activities of the company with the locations in Fårvang and Kjellerup, where Tvilum currently employs 523 persons. The plant in Poland is not included in the balance sheet. In the previous months Tvilum has streamlined its product range, for example, and is again focussing on the core business of large-scale production. □

## New shareholder at Störmer Küchen

Investor Partners GmbH has recently become a new shareholder at Störmer GmbH & Co. KG (Rödinghausen). According to a statement issued by Störmer on 7 December 2018, the two managing partners Christoph Fughe and Michael Otto had commenced the search for an investor as Störmer's financial leeway was exhausted due to the introduction of the new 2020 Insight ERP system, which was concluded in mid-July. As a result of the Störmer family's withdrawal in spring 2018, company shares had become free and have now been taken over by Investor Partners. Störmer has not disclosed any details concerning the number of shares acquired by the financial investor. Fughe holds a minority share in the kitchen manufacturer. The company did not wish to provide information on the number of shares held by Otto.

Over the past six years Fughe and Otto have restructured the kitchen manufacturer and modernised production processes. For example, in 2014 an investment was made in a storage/sawing concept for quantities of one upwards in connection with two laser edging machines. Furthermore, premises, fixed assets as well as machinery of insolvent kitchen furniture manufacturer Brinkmeier System Form Küchen GmbH & Co. KG (Rödinghausen) were taken over via Eschbach GmbH & Co. KG, which was established in mid-2014 within the scope of an asset deal. Subsequently, Störmer headquarters as well as parts of the production in Enger were transferred to Rödinghausen. The involvement of an investor, according to Störmer, is necessary in order to drive growth further in future. □



(Photo credit: Störmer)

## Chmiel family intends to sell BRW Group

The Chmiel family, owners of Polish Black Red White S.A. (BRW), Bilgoraj, intends to sell the company. According to the Bega Group, Lügde, a long-term cooperation partner of BRW, the company's founder Tadeusz Chmiel intends to withdraw from the company. According to Bega managing director Dieter Hilpert, the sales process at BRW is expected to take place in various stages, over the course of which company shares will gradually be sold. As a result of the potential involvement of a new creditor, Hilpert expects BRW to be strengthened and the further expansion of the Bega Group to be supported. The investor has already indicated an intention to continue the existing collaboration with the Bega Group. BRW is the largest Bega supplier.

With annual turnover of PLN1.8bn, equivalent to approximately €419m, and some 7,000 employees, according to Hilpert, BRW is the largest furniture manufacturer and retailer in Poland. According to the company itself, in terms of turnover, BRW has a market share of 20% in Poland. The export rate amounts to some 40%. Nevertheless, over the last two years the group has suffered losses due to the decline in business in Ukraine, for example. Furniture was predominantly exported to Russia from Ukraine. In the course of the

Ukraine conflict, however, the EU imposed sanctions on Russia which, in turn, affected BRW business in Ukraine. BRW owns 21 subsidiaries, including eleven foreign companies in Ukraine, Belarus, Slovakia, Hungary, Russia and Bosnia-Herzegovina. BRW furniture is produced in Poland and abroad. In Poland BRW operates ten larger production facilities, of which six are cabinet furniture plants and four upholstered furniture plants. BRW also operates a logistics centre in Mielec, Poland, as well as two further warehouses. Two large cabinet furniture plants are also located in Nowowolynsk and Włodzimierz Wolynski in Ukraine. A further cabinet furniture factory is located in Brest, Belarus. The largest BRW plant in Mielec, Poland, and the site in Brest are located close to the production facilities of the Kronospan Group. BRW's range includes kitchens, living room, dining room and bedroom furniture, furniture for children and teenagers, office furniture, wardrobes, upholstered furniture as well as household accessories and interior design articles. Sales take place via some 100 of the company's retail branches as well as via external trade partners. In Poland alone there are 400 BRW franchises. The furniture is sold in a total of over 40 countries. □

## Hüls group seeking strategic partner

The Hüls Group of Stadtlohn, Germany, is seeking to cooperate with a strategic partner for strengthening and internationalising the "Hülsta" brand. A structured process has been initiated in the second half of 2018 to identify potential cooperative partners worldwide. The group says it

is hoping that a partnership will generate additional stimuli for permanent further development of the business model and export activities.

Internationalisation is a component of the Hüls Group's continued reorientation announced in April 2018. Further restructuring measures such as refinancing, consolidation, automation, and digitalisation have already been or are currently in the process of being implemented. An agreement with banks for refinancing the Hüls Group had already been signed in April 2018. The consolidation process most recently entailed the sale of the upholstered furniture manufacturer Rolf Benz AG & Co. KG of Nagold and the two companies Loddenkemper GmbH of Oelde and Femira Schlafsysteme GmbH of Herzebrock-Clarholz. □



(Photo credit: Hüls)

## Wellemöbel filed insolvency application



(Photo credit: Welle)

The Wellemöbel Group has filed an application for opening of insolvency proceedings. This affects Wellemöbel Beiteiligungs GmbH & Co. KG, Wellemöbel Verwaltungs GmbH, Wellemöbel GmbH, MF Bad Lippspringe GmbH (all Bad Lippspringe) and Howelpa Logistik GmbH (Paderborn); the responsible district court in Paderborn approved the application on 19 December 2018. Düsseldorf-based lawyer Dr. Frank Kebekus has been appointed insolvency administrator. 530 employees are affected by the insolvency.

Wellemöbel manufactures furniture for nurseries/kids bedrooms, teens bedrooms, bedrooms as well as office furniture at locations in Alsfeld and Bad Lippspringe. Some 1m pieces of furniture are manufactured at the two facilities each year. The Detmold production location had been closed down in mid-2015 within the scope of restructuring proceedings in self-administration which were concluded in the same year. Even at that time, in addition to the general decline in demand for furniture, the company had attributed the financial difficulties to the loss of market shares to Polish competitors. Within the scope of the restructuring at the time, 260 of the original 880 jobs were cut. Restructuring proceedings in self-administration which were opened in April 2015 affected Wellemöbel GmbH as well as MF Bad Lippspringe GmbH and Howelpa Logistik GmbH, as is also the case with regard to the current proceedings. The logistics company delivers to the specialised furniture trade sector. The predecessor company, Welle Möbel GmbH (Paderborn), had applied for insolvency in May 2002. Transfer to the newly established Wellemöbel GmbH took place as per 1 September 2002. □



### ***Polipol Group increases capacities with IMS plant***

In April 2018 the Polipol Group (Diepenau) took over a former plant of IMS AG (Bendern, Liechtenstein) together with the remaining 200 IMS employees in Kobylnica in the Slupsk district of Poland. The 15,000m<sup>2</sup> factory meanwhile operates under the name Maripol meble polska Sp. z o.o. Sp.k. Polipol has increased the number of employees to approximately 250. By the start of 2018 a transition process had already taken place at the Kobylnica location within the scope of which manufacture of IMS products was shut down and production of upholstered furniture of Polipol brand Megapol started up. Polipol continued to produce for IMS for a period of approximately three more months following the takeover.

The new production facilities in Kobylnica will help to relieve capacity peaks at the existing Polipol production location in Janikowo, Poland. At the the Janikowo plant, which was last expanded in 2014 and currently covers an area of some 25,000m<sup>2</sup>, circa 1,100 employees manufacture Megapol upholstered furniture for the young living division.

Upholstered furniture production is also currently starting up at the 10,000m<sup>2</sup> plant in Iwazewitschy, Belarus. This plant, where meanwhile some 100 employees produce 200 sofa sets per week, is leased by Polipol. Over coming months an increase in the number of employees to 300 and in the production volume to 100 pieces of upholstered furniture per day is intended. The intention is to have the plant producing at full capacity by autumn 2019. The new plant will be operated via the Polipol Mebel Bel production company.

The investment agreements with the Belarusian government, which are required in a second stage for construction of the company's own plant, have not been finalised as yet. The company expects, however, that a contract will be signed within the next two to three months. Construction of the new plant is to take place on premises directly adjacent to the rented buildings. Polipol intends to construct a 50,000m<sup>2</sup> plant in which over 1,000

employees will produce upholstered furniture in future. Building work is planned to commence in summer 2019 and commissioning is scheduled for summer 2020. The investment volume is currently expected to amount to some €25m. □

### ***Steinhoff and Cotta agree on Steinpol sale***

On 11 January 2019 Steinhoff International Holdings N.V. (Amsterdam, Netherlands) came to a final agreement with Liechtenstein Cotta Collection AG (Bendern) concerning the details of the sale of Polish upholstered furniture manufacturer Steinpol Central Services Sp. z o.o. (Rzepin). According to a statement published by Steinhoff on 22 January, the company value amounts to €26.5m.

The companies had announced the planned sale of Steinpol to Cotta in mid-September. The existing Steinpol management team is to remain in office after the takeover, and all locations are to be kept. According to Steinhoff, Steinpol operates eight plants in Poland and has one location in Hungary. Steinpol generates turnover of some €200m with 3,000 employees according to Cotta managing director Patrick Poltera. At the beginning of September Cotta had acquired Bosnian upholstered furniture manufacturer Sinkro d.o.o. (Sarajevo). In combination with Sinkro, Cotta currently has some 2,000 employees. The plan was to increase the consolidated turnover of Cotta and Sinkro to €250m within 18 months of the takeover, according to earlier information. Together with Steinpol, the group would then generate turnover of some €450m. Sinkro manufactures boxspring and upholstered beds as well as upholstered furniture at the company headquarters in Sarajevo. Cotta products are manufactured in two plants in Arad and one plant in Sebis (all Romania) as well as at the two Polish locations in Steszwe and Oborniki.

In addition, 100% shares of Hungarian upholstered furniture manufacturer Quatro Mobili are to be taken over via Designwerk AG (Gamprin-Bendern), which was founded on 20 December and is managed by

Cotta's managing directors. The plans were registered with the federal cartel office for review on 22 January 2019. According to the registration, a total of four companies are affected by the transaction. Approval was granted on 12 February. □

### ***Team 7 anticipates further turnover growth for 2019***

For the current 2019 financial year Austrian solid wood furniture manufacturer Team 7 Natürlich Wohnen GmbH (Ried) anticipates turnover growth of some 7%. According to CEO and owner Dr. Georg Emprechtinger, in 2018 a slight turnover decline of 1% to €99m (2017: 100m) was recorded for the first time in seventeen years. After a good start to the year, demand slackened off significantly in the summer. Over the past months, however, positive development has been recorded again. For the current year Emprechtinger is thus optimistic and anticipates further growth again. In 2017 turnover of the company had increased at a double-digit rate of 11%. In the two preceding years, at +5.9% in 2016 and +4.3% in 2015, increase rates were in the mid single-digit percentage range. Since 2001, when some €30m was generated, turnover volume has more than tripled.

In 2018 the kitchen area was the only segment in which an increase was achieved, amounting to a proportion of some 20% of total turnover. The other segments such as living, dining and sleeping remained, at best, at the same level as the preceding year. The proportion of exports was stable and amounted to 86%. Exports to Germany alone amount to 50% of total turnover. Following 14% growth in the 2017 financial year, stable development was recorded in 2018 in this connection. Other relevant export markets of Team 7 include Switzerland, Italy, France, the Benelux countries and Great Britain. Outside Europe the company is active in Australia, Japan, India, China, Russia and the USA. According to Emprechtinger, the latter three countries in particular offer potential for further growth. The company sells its products in more than 30 countries in total. □

*Greater growth within Nobilia, Häcker and Schüller led to an increase of market shares*

## *Largest German kitchen furniture producers reach further sales growth*

**The three major German Kitchen furniture producers Nobilia-Werke J. Stickling GmbH & Co. KG (Verl), Häcker Küchen GmbH & Co. KG (Rödinghausen) and Schüller Möbelwerk KG (Herrieden) have fared better in the financial year 2018 than the industry as a whole. The greater growth than the kitchen-furniture industry as a whole led to a further increase in the three companies' share of the German market.**

Häcker and Schüller have reached double-digit growth rates, the growth achieved by Nobilia was only slightly below 10%. In comparison, the sales statistics of the association of the German kitchen furniture industry (VdDK) of Herford, shows an increase of 6.3% for the months of January to November in the industry as a whole. At +5.1%, growth in domestic sales was slightly weaker than in export, which improved by 8.2%, boosting the foreign share of the industry's sales revenue to 40.5%. The domestic growth was partly attributable to the shift in volumes induced by the insolvency of the Alno Group and which continued well into

2018. Companies that gained market shares as a result of this were able to produce at full capacity for quite some time on the strength of overhangs in orders from the previous year and a consistently high influx of orders in the early months of 2018. In many cases, this also gave rise to an increase in delivery periods.

In its financial year 2018, Nobilia achieved an increase of 9.1% to €1.228bn (2017: €1.126bn), which was even greater than in the preceding years and the highest absolute rise in sales revenue in the company's history. The total growth of €102m comprised €39.5m from the domestic market and €62.5m from abroad. Domestic sales revenue rose by 6.6% to €642.0m (€602.5m). Growth in export was almost twice as high at +12.0% to €585.5m (€523.0m).

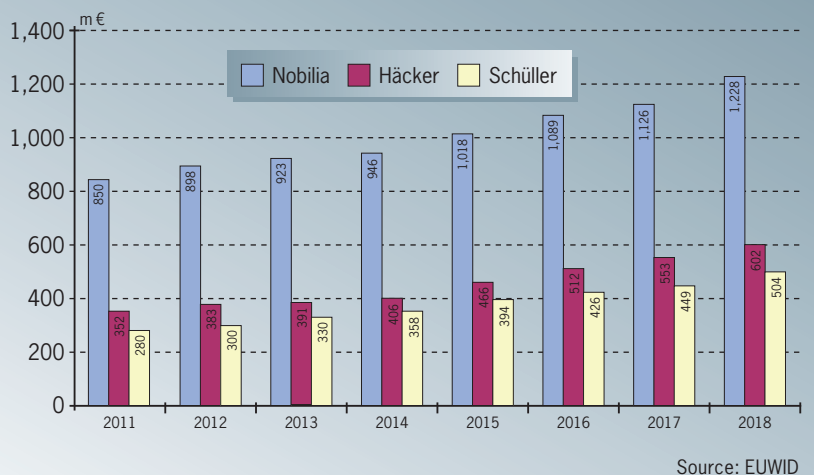
The Nobilia group's revenue from external sales, which, besides the consolidated sales revenue of the Nobilia works, also includes the sales revenue generated by the foreign retail companies corresponding to their respective shares as well as the franchise fees of the Franchise

Business Division Group (FBD) of Roissy, France, rose by €118m or 9.4% last year to €1.378bn (€1.260bn). This rate of growth was between that of 2015 (+11.6%) and 2016 (+6.8%) after growth in 2017 had turned out to be slightly lower in the group as a whole, too, at +2.6%.

Häcker Küchen boosted its sales revenue by 9% to €602m (2017: €553m) in its business year 2018, perpetuating the positive development of the last few years. The company had already achieved similarly high growth rates in 2017 (+8%) and 2015 (+9.9%). In 2016, growth had been in a double-digit range at 15%. At +11% to €368m (€332m), last year was the first time in quite a while that development in domestic business was stronger than in foreign activities, which rose by 7% to €234m (€221m). The export share consequently fell slightly in 2018 to 39% (40%). In the two preceding business years, the growth rates in export had turned out to be higher than those for the domestic market.

In 2018 Schüller Möbelwerk generated turnover of €504m (2017: 449m) and thus exceeded the €500m mark for the first time. This represents an increase of 12.2% vis à vis the preceding year. Growth has therefore accelerated again. Schüller last recorded a double-digit increase of 10.1% in 2015. In 2016 (+8.1%) and 2017 (+5.4%) the increase rates were lower. Domestic turnover in the current reporting period increased by 10.7% to €381m. Concerning export turnover an even higher increase of 17.1% to €123m (105m) was achieved. The export rate increased accordingly to 24.4% (23.4%). Export business is to be expanded significantly in the existing markets over coming years. Important export markets include France, the Benelux countries, Austria, Switzerland and Great Britain. □

**Development of turnover in the kitchen furniture industry**





*Review of strategic alternatives for Cabinetry Products division to be finalised by June*

# Masco seeking a buyer for kitchen furniture, window and door operations

**The US consumer goods producer Masco Corp., based in Livonia, Michigan, is set to part ways with the two smallest of its four divisions: its kitchen furniture business, which is grouped in the Cabinetry Products division, and window, door, plastic profile and glass activities pooled in the Windows and Other Specialty Products division.**

According to a press release issued on 1 March, the company has begun reviewing strategic alternatives for these two divisions in a process that is to be completed by the end of the first half. Masco's president and CEO Keith Allman said that the group was taking this step as part of efforts under way in the past five years to focus on its core businesses. This process involved gradually expanding its two biggest divisions - Plumbing Products and Decorative Architectural Products - through acquisitions and investments.

The two divisions up for sale generated combined revenues of about US\$1.705bn, adjusted EBITDA of US\$161m and opera-

ting profit of US\$120m during the 2018 financial year. These two segments hence account for approximately 20% of group revenues, 11% of consolidated adjusted EBITDA and 10% of consolidated operating profit. Their revenues and earnings showed weaker trends than the two other divisions.

The Cabinetry division includes the kitchen furniture manufacturer Masco Cabinetry LLC, Ann Arbor, Michigan, and makes and distributes a relatively wide portfolio of flat-pack and ready-built kitchens with a total of 20 product lines under the "Merillat", "KraftMaid", "Cardell" and "Quality Cabinets" brands. The company is also active in the worktop business with the "DeNova" brand. Masco Cabinetry operates seven kitchen furniture plants in Middlefield and Orwell (both in Ohio), Sayre (Pennsylvania), Mount Jackson and Culpeper (both in Virginia), Mount Sterling (Kentucky) and Duncanville (Texas). Masco also used to hold stakes in several European furniture manufacturers. The Spanish kitchen, bathroom, cabinet furniture and furniture

part producer Grupo Alvic, headquartered in Alcaudete, was owned by Masco from 1997 to 2004. All shares in Alvic have been in the hands of the Rosales family since a management buy-out in 2004. The Danish flat-pack furniture producer Tvilum ApS, based in Faarvang, was sold to the US private equity firm Revolution Capital Group (RCG) in December 2013.

The Windows and Other Specialty Products division comprises Milgard Manufacturing Inc. („Milgard Windows & Doors”), based in Tacoma, Washington, and Masco UK Window Group Ltd. (UKWG), headquartered in Cardiff, which have both been part of Masco since 2011. Both companies make windows and doors and are also relatively heavily integrated into upstream product manufacturing with their own profile and glass factories.

Masco's Cabinetry Products division raised its revenues by 2% to US\$950m (2017: 934m) in the 2018 financial year. Adjusted for Moores Furniture Group, a British kitchen and bathroom furniture manufacturer based in Wetherby that was sold in a management buy-out in the fourth quarter of 2017, the growth rate stood at 7%. The spin-off of Moores Furniture meant that 100 (95) % of turnover was booked in North America last year. Some 69 (65) % came from renovation projects and 31 (35) % from new residential projects. Cabinetry Products faced a much weaker trend in revenues in the second half of the year (Q1: US\$231m, Q2: US\$251m, Q3: US\$229m, Q4: US\$223m). Adjusted operating income, which fell to US\$86m (92m) in the full year because of rising logistics costs, saw less volatility from one quarter to the next (Q1: US\$16m, Q2: US\$31m, Q3: US\$20m, Q4: US\$25m). The operating margin dwindled to 9.1 (9.9) %. Masco expects this division to deliver a small improvement in revenues to the tune of 0-3% and a stable margin in the current financial year. □



(Photo credit: Masco)

*Joint venture founded by Olon and Ilcam subsidiary Licar will run the facility*

## *New furniture-front production plant in Jeffersonville to open in early 2019*

**The Canadian furniture-component manufacturer Olon Industries Inc. of Georgetown, Ontario, and the front manufacturer Licar International S.p.A. of San Quirino, belonging to the Italian company Ilcam S.p.A. of Cormons, want to set up a new works for furniture and drawer fronts at the Olon facility in Jeffersonville, Indiana, through OL Frontal Solutions LLC, a new joint venture founded specifically for this purpose.**

The works is to be geared to so-called "five-piece doors" and large quantities. With the product-development resources and production technology put into the joint venture by Licar, Olon's intention is to increase its range of products currently geared above all to film-wrapped furniture components and mouldings. According to information from both of the joint-venture partners, the new works is scheduled to start up in the first quarter of 2019.

Olon currently operates six works at its head office in Georgetown (100,000

sqft, production of draw components and mouldings lamination), in Washington in Indiana (112,000 sqft, film-wrapped drawer components), in Geneva in Illinois (40,000 sqft, polyester impregnation, lamination, CPL, distribution of edging materials), Jeffersonville (100,000 sqft, mouldings lamination), Lexington in North Carolina (220,000 sqft, solid-wood drawers), and in Union Grove, North Carolina (solid-wood drying, solid-wood processing, gluelam-timber production).

The works in Lexington and Union Grove were acquired by the takeover of the drawer producer Carolina Drawers Inc. (CDI) completed at the beginning of June 2015. At the beginning of March 2017, Olon was taken over by the Canadian private-equity company White Owl Family Office Ltd. of Marham, Ontario, and the existing management. The vendor was the private-equity company Huron Capital Partners LLC of Detroit, Michigan, which had acquired a stake in Olon in July 2007 through a recapitalisation.

Through its expansion into new product areas and markets by means of various acquisitions and investment projects, Ilcam Group has been growing at an ever-increasing rate in the last few years. The group's sales revenue has more than doubled since 2009; €208m (2016: €171m) was generated in its business year 2017. Besides the parent company Ilcam S.p.A., the group meanwhile comprises seven other companies. Two eastern European production companies, Ilmest d.o.o. (furniture-front production) of Nova Gorica, Slovenia, and Ilrom Legno S.A. (solid-wood fronts) of Sannicolau Mare, Romania, were established in the 90s. Ilcam acquired a minority stake in Licar in 2013, the remaining shares were taken over in 2014. Licar produces veneered fronts as well as fronts and five-piece doors wrapped with paper films or PET films.

Ilcam has also been a minority partner in the solid-wood front manufacturer Mobilclan S.p.A. of Gaiarine since 2013. The Mobilclan subdivision "Mobillac" set up in 2015 produces fronts with high-gloss and matt finishes at the Valvasone facility. This was followed in 2015 by the founding of Lanta s.r.l. of Oderzo, geared to PET lamination. Dalian Mato Furniture & Components Co. Ltd. of Dalian-Jinzhou in Liaoning province, China, a production facility of solid-wood fronts, was added in 2016. The last major step in expansion was the founding of the UV-painting plant Techno Painting System s.r.l. (TPS) of San Vito al Tagliamento in 2017. □



*A joint venture founded by Olon and Ilcam is to produce furniture fronts at the Olon facility in Jeffersonville.  
(Photo credit: Ilcam)*



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### ***Mohawk planning to scale back its investments***

The US flooring company Mohawk Industries Inc., based in Calhoun, Georgia, is set to invest less in 2019 than in previous years. In a presentation accompanying its 2018 financials, its planned investment volume (excluding acquisitions) was put at US\$550m-580m. According to Mohawk's financial report, which was published on 28 February, internal investments had already tumbled to US\$794.1m (2017: 906.0m) last year.

The Flooring Rest of the World division ran counter to the trend last year. The firm had invested US\$144.2m in this area in 2016, compared with US\$221.8m in 2017 and US\$232.9m in 2018. Investments in the Flooring North America division fell to US\$262.7m (355.9m) last year, while the Global Ceramics division invested US\$281.1m (310.7m). Flooring NA had invested US\$248.8m in 2016, while Global Ceramic had spent US\$263.4m. Total investments thus reached US\$672.1m in 2016. These overall figures also include group-level investments, which had not altered much at roughly US\$16m-17m annually in the past few years.

Internal investments had jumped US\$233.9m between 2016 and 2017. At the same time, Mohawk had spent another US\$250.8m on acquisitions. Investments in acquisitions had leapt US\$318.2m in 2018, while internal investments had fallen by US\$111.9m. Mohawk had thus allocated a net sum of US\$1.332bn for investments and acquisitions last year, compared with US\$1.241bn in 2017 and US\$671.4m in 2016.

The biggest acquisition in 2017 was its 4 April acquisition of the Italian tile manufacturer Emilceramica s.r.l., based in



(Photo credit: Mohawk)

Fiorano Modenese, in a deal valued at US\$186.1m. Several smaller acquisitions were also undertaken by the Global Ceramics (US\$37.3m) and Flooring RoW (US\$1.4m) divisions. Last year Mohawk completed its takeover of the Australian firm Godfrey Hirst Group, based in Geelong, Victoria, on 2 July. The acquisition of the Brazilian tile manufacturer Eliane S/A Revestimentos Ceramicos, based in Cocal do Sul, Santa Catarina (US\$148.7m), followed on 16 November. In the first quarter, Flooring RoW purchased Berghoef Hout B.V., based in Amsterdam, and two flooring distributors for a total of US\$24.6m. □

### ***Unilin starts distribution in the Netherlands***

Unilin bvba, based in Wielsbeke, Belgium, intends to acquire the Dutch flooring wholesaler Koninklijke Peitsman B.V., headquartered in Rotterdam, thus entering the distribution business in the Netherlands too. An agreement to this effect was signed in December 2018. As in other countries, the acquisition - which has still to be approved by the competition authority Autoriteit Consument & Markt (ACM) - is connected to succession plans. Peitsman has sold Unilin's Quick Step laminate flooring since 1990. Peitsman's portfolio of products also includes its Beaufloor and Eurocol private labels, design flooring from MFlor International B.V., based in Deventer, and mouldings/profiles from Küberit Profile Systems GmbH & Co. KG, headquartered in Lüdenscheid. Unconfirmed reports suggest that Peitsman generates about 80% of its revenues from Unilin products.

The Unilin group, which constitutes the Flooring Rest of the World division of the US flooring group Mohawk Industries Inc., based in Calhoun, Georgia, has created its own distribution structures in 10 countries to date. These entities generally used to be former Unilin distributors. In the UK, Unilin had acquired Spectrim Distribution Ltd., based in Stretford, in 2009, subsequently renaming it Unilin Distribution. In September 2011, it acquired the Australian firm Premium Floors Pty Ltd., headquartered in Dandenong, Victoria. Its mid-November 2017 acquisition of the Australian firm God-

frey Hirst Group, based in Geelong, Victoria, closed at the start of July 2018. Unilin had previously acquired its former distribution partners in Italy and Switzerland when it purchased Area Pavimenti S.p.A., based in Udine, and Eich Handels AG, headquartered in Lenzburg/Aargau, during the first quarter of 2018. The two companies now do business as Unilin Italia s.r.l. and Unilin Swiss GmbH. Unilin is not currently considering setting up its own distribution channel in Germany because of the relatively strong wholesale structure. □

### ***Scheucher commissioned lines at the start of 2019***

The Austrian parquet manufacturer Scheucher Holzindustrie GmbH, based in Mettersdorf, Styria, has wrapped up an expansion project at its headquarters. It commissioned new production lines at the start of January 2019. Overall, Scheucher invested approximately €14m in extra manufacturing and storage space, in new machinery and in modernising existing technology. This figure is slightly higher than the originally earmarked sum of €13.5m.

The centrepiece is a press line delivered by Düspohl Maschinenbau GmbH, headquartered in Schloß Holte-Stukenbrock, Germany. Düspohl, a subsidiary of the Italian machinery and plant producer Cefla s.c., based in Imola, has until now specialised in profile wrapping machinery and laminating lines for the wood and plastic industry. The press delivered to Scheucher is not a traditional multi-opening press, but a throughfeed press. The line will be used to make Scheucher's Multiflor range in the future. Scheucher started work to expand its site at the end of 2017 amidst strong demand for Multiflor. This project boosted its annual capacity from 2m m<sup>2</sup> to approximately 3.2m m<sup>2</sup> of multi-ply parquet. The new production area is currently operating a single shift at first. The company plans to reach two-shift operations by 2020 at the latest. Besides investing in the throughfeed press, Scheucher has also purchased a new surface processing line and a packaging line. □



### ***JFK buys majority share in Junckers***

The Danish solid-wood parquet manufacturer Junckers Industrier A/S of Køge has a new majority owner. The private-equity company Jysk-Fynsk Kapital A/S (JFK) of Hedensted, Denmark, acquired 56.7% of the shares in the company on 12 October 2018. Junckers had previously been wholly owned by an investor group comprising members of the management and supervisory committee. The remaining 43.3% is still held by this circle of investors. According to Junckers' CEO and shareholder Carsten Chabert, talks with JFK commenced before last year's summer holidays.

The last change in ownership was in August 2014. At that time, all of the shares changed hands through a management buy-out (MBO). The new owner, which, besides Chabert, also included the supervisory-committee chairman at that time Holger Hansen and the supervisory-committee member Asbjørn Berge, had purchased all of the shares in Junckers through HCB Invest ApS. In the course of this transaction, HCB Invest had provided additional capital to the tune of roughly DKK45m; a loan agreement with the key lender and running until the end of 2017 had been signed parallel to this. Prior to the MBO, the shares in Junckers had been held by the investment company Axcel A/S of Copenhagen, the LD Equity 1 fund, and several smaller investors. Axcel joined Junckers as the majority owner in March 2004. Extensive funds were subsequently made available to the company that had been in financial difficulties at that time. When the restructuring process failed to produce the desired success even years later, Axcel and the other investors discontinued their involvement.

At its headquarters, Junckers produces solid-wood floors for homes as well as sports floors. The company has seven of its own sales companies in Europe and the USA and sells its products worldwide to more than 45 countries. Roughly two thirds of the sales revenue are generated by exports. The company currently has some 450 employees. □

### ***Armstrong concludes sale of wooden-flooring division***

At the end of last year, the US flooring group Armstrong Flooring Inc. (AFI) of Lancaster, Pennsylvania, concluded the sale of its wooden flooring division announced in November 2018. The buyer is the private-equity company American Industrial Partners (AIP) of New York. The two companies had agreed a purchase price of around US\$100m. Minus the charges and taxes connected with the deal, AFI generated proceeds of around US\$90m. Part of the income is to be distributed amongst the shareholders. The board of directors is currently examining the details of these plans.

AIP handled the acquisition through the newly-founded company AHF Holding Inc. based in Lancaster, where the present AFI wooden-flooring business will be continued in future. The transaction covers the six US production facilities in Warren in Arkansas, Somerset in Kentucky, West Plains in Missouri, Titusville in Pennsylvania, Oneida in Tennessee, and Beverly in West Virginia with a total of approximately 1,700 employees. The wooden flooring produced is distributed mainly on the North American markets. In the course of the deal, AHF has taken over all of the Armstrong Flooring brands for the wooden-flooring segment, including the "Bruce", "Homerwood" and "Robbins" brands. In addition, the company is also permitted to use the "Armstrong" umbrella brand for selling the wooden flooring in a two-year transition period.

As such, AFI has been an exclusive supplier of resilient flooring since the beginning of 2019. Besides luxury vinyl tiles (LVT) and rigid-core products, the product portfolio also includes vinyl composite tiles (VCT) and sheet vinyl. These products are currently covered by the "Resilient Flooring" division. Production takes place at the works in South Gate in California, Kankakee in Illinois, Jackson in Mississippi, Stillwater in Oklahoma, Beech Creek and Lancaster (both in Pennsylvania) as well as at the foreign facilities in Braeside (Victoria, Australia) and Wujiang (Jiangsu province, China). LVT floor coverings and rigid-core products are also imported from China on a large scale. □

### ***Pedross starts up another digital printer***



(Photo credit: Pedross)

The South Tyrolean mouldings manufacturer Karl Pedross AG set up a single-pass digital printer for direct printing onto substrates at its headquarters in Latsch, Italy, in the third quarter of 2018. The installation was completed at the end of September. Regular production is due to start during the course of the first half of 2019. On the new digital printer, which has a working width of around 280 mm, Pedross intends to print directly onto solid spruce, MDF mouldings, and PP plastic substrates in future. Technical challenges exist in direct printing onto moulded substrates due to the three-dimensional surface and the resultant radii. This, however, enables wrapping the moulding with veneer or paper films and the use of adhesives that this requires to be dispensed with. This in turn prevents quality-related problems in the finished product, such as veneer and paper becoming detached.

Pedross says it has developed the technology for digital direct printing onto moulded substrates and registered it for patent jointly with the system's manufacturer over the last one and a half years. In return, the undisclosed system manufacturer has granted Pedross exclusive use of the technology for a limited period of time. In the set-up at the Pedross works in Latsch, the new digital printer has been installed separately to start with to enable its performance to be controlled independently of the upstream and downstream stages of production. The system is to be integrated into a complete production line in the medium-term, however. The substrates for printing onto are this moulded upstream of the digital printer; this is followed by surface coating and packaging. □

***EPLF member companies faced a 4.6% year-on-year decrease in total sales in 2018***

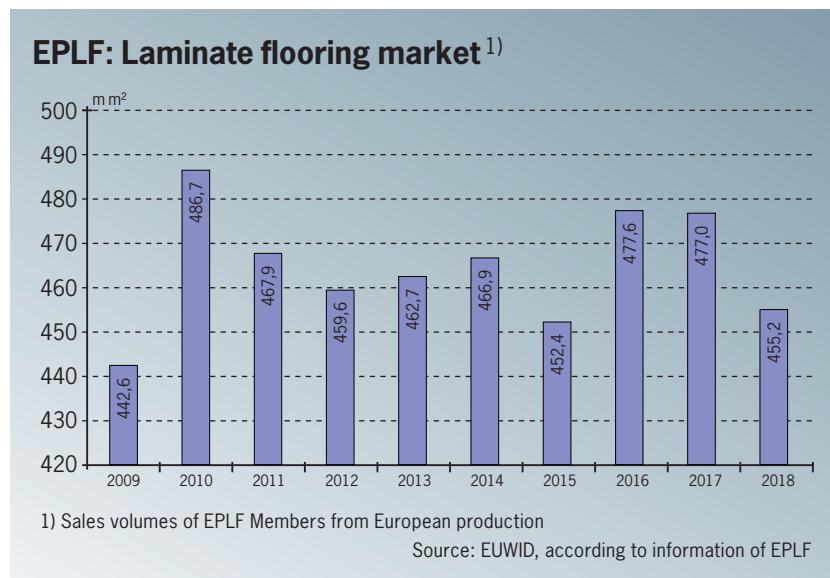
## *Pronounced slump in laminate flooring sales in Western Europe and North America*

**Companies belonging to the association European Producers of Laminate Flooring (EPLF), headquartered in Bielefeld, Germany, sold 455.2m (2017: 477.0m) m<sup>2</sup> around the globe from their European plants in 2018.**

This represents a 4.6% decrease compared with 2017 - the biggest year-on-year downturn since 2008 when EPLF sales had fallen by 8.9%. Dwindling sales had also been recorded in 2009 (-4.1%), 2011 (-3.9%), 2012 (-1.7%) and 2015 (-3.2%). However, EPLF members had raised their sales in 2010, 2013, 2014 and 2016. Sales had been roughly in line with the previous year in 2017.

In terms of the different regions, a downward spiral seen for some time in Western Europe has continued. Sales there dropped 7.4% from 243.0m m<sup>2</sup> to 225m m<sup>2</sup>. EPLF members had sold 52m (57.0m) m<sup>2</sup> in Germany, 36m (37.6m) m<sup>2</sup> in France and 30m (33.8m) m<sup>2</sup> in the UK. The next-largest markets were Turkey with 20m (24.9m) m<sup>2</sup>, the Netherlands with 18m (19.7m) m<sup>2</sup>, Spain with 17m (16.8m) m<sup>2</sup> and Belgium with 8.5m (9.4m) m<sup>2</sup>. A total of 44.5m (44m) m<sup>2</sup> combined was sold in other Western European markets.

The EPLF statistics showed that Eastern European laminate flooring sales were virtually unchanged compared with the previous year's level at 128m (128.4m) m<sup>2</sup>. The biggest sales markets were Russia with 39m (35.5m) m<sup>2</sup>, Poland with 29m (30.4m) m<sup>2</sup> and Romania with 11m (13.2m) m<sup>2</sup>. The next places were held by Ukraine with 7.5m (7.4m) m<sup>2</sup>, Hungary with 7m (6.5m) m<sup>2</sup>, Slovakia with 4.7m (4.7m) m<sup>2</sup>, Bulgaria with 4.4m (5.1m) m<sup>2</sup> and the Czech Republic with 3.7m (4.1m) m<sup>2</sup>. Other Eastern European markets purchased 21.6m (21m) m<sup>2</sup> combined. The downturn recorded in most Eastern European countries was largely offset by bigger growth in Russia and minor increases in Ukraine and Hungary.



Shipments to North America tumbled 10.3% to 44.3m (49.4m) m<sup>2</sup> last year. The US market stayed virtually unchanged for EPLF manufacturers with sales of 30.7m (31.4m) m<sup>2</sup>. By contrast, Canadian sales were down almost a quarter at 13.6m (18.0m) m<sup>2</sup>. Minor growth was registered in Asia to 30m (29.1m) m<sup>2</sup> and Latin America to 18.5m (17.6m) m<sup>2</sup>. The biggest single Asian markets for EPLF members were China/Hong Kong with 8.9m (9.6m) m<sup>2</sup> and Kazakhstan with 4m (3.6m) m<sup>2</sup>. Business in South America was shaped by developments in Chile and Mexico, which received about two thirds of laminate flooring shipped to this region. Exports to Chile increased in a year-on-year comparison to 8.1m (7.7m) m<sup>2</sup>, while deliveries to Mexico dropped to 3.9m (4.3m) m<sup>2</sup>. Shipments to other regions were listed at 9.3m (10m) m<sup>2</sup>.

According to final figures compiled by the EPLF based on information from its members, last year's slump in sales was primarily fuelled by downturns in Western Europe and North America. Slight growth in other regions was not able to make up for the resulting decline. Sixteen of the

countries listed separately in the EPLF presentation booked lower sales. Eleven countries experienced growth, with one country registering stagnant sales. Growth was primarily reported in countries outside Europe. The main sales markets tended to contract.

A biennial expert assessment drawn up by the EPLF, which includes information from laminate flooring producers and their suppliers, indicates that the global laminate flooring market had a total volume of about 1.037m m<sup>2</sup> in 2018. EPLF members accounted for 45% of this sum with their manufacturing facilities in Europe and Russia. This analysis does not include mills operated by individual laminate flooring producers in North America, South America and Asia and joint venture locations. The EPLF cautioned that figures for Russia are incomplete, as they were in years past, since two members still do not report sales data for their Russian sites. EPLF experts estimate the unreported amounts at 28m m<sup>2</sup> in 2018. Adding this unreported data to the EPLF statistics results in EPLF sales of around 67m m<sup>2</sup> in Russia in 2018. □



*Western Europe fares better than German-speaking countries in both classes*

## *Total multilayer flooring sales of MMFA members climb to almost 75m m<sup>2</sup> in 2018*

**Multilayer flooring sales increased again last year in a trend that has lasted since 2016.**

The then 22 ordinary members of the Multilayer Modular Flooring Association (MMFA), headquartered in Bielefeld, Germany, sold 12.115m (2017: 9.876m) m<sup>2</sup> of class 1 products (wood substrate with a polymer/cork surface without dedicated coating systems) world-wide, 22.7% more than in 2017. Sales in Germany, Austria and Switzerland jumped 17.9% to 9.553m (8.106m) m<sup>2</sup>. The first quarter was the best stretch with 2.559m m<sup>2</sup>. Sales fell slightly in the second (2.334m m<sup>2</sup>) and third quarters (2.231m m<sup>2</sup>), before rebounding to 2.428m m<sup>2</sup> in the final quarter. Other regions fared even better in the full year with a 44.7% growth to 2.562m (1.770m) m<sup>2</sup> compared to the preceding year. This figure breaks down into 674,164 m<sup>2</sup> in the first quarter, 648,094 m<sup>2</sup> in the second quarter, 582,886 m<sup>2</sup> in the third quarter and 657,090 m<sup>2</sup> in the fourth quarter.

Class 2 (substrate made out of polymer or polymer composite with a polymer

surface and/or polymer coating system) sales continue to be influenced by the growth in MMFA member numbers. After rising 40.2% in 2017, MMFA members' total global sales increased 27.8% to 61.714m (48.296m) m<sup>2</sup> last year. After major volatility in sales volumes in the two previous years, little change was seen in the first three quarters of 2018 (Q1: 14.787m m<sup>2</sup>, Q2: 14.813m m<sup>2</sup>, Q3: 14.732m m<sup>2</sup>), before a surge to 17.382m m<sup>2</sup> in the last three months of the year. Looking at the year as a whole, sales reached 14.707m (11.105m) m<sup>2</sup> in Germany, Austria and Switzerland, an increase of 32.4% compared to the preceding year.

Class 2 sales in the rest of Western Europe jumped 40.7% to 16.602m (11.797m) m<sup>2</sup>. Western Europe as a whole ended up with a 36.7% growth in sales to 31.309m (22.902m) m<sup>2</sup>. North America did not deliver as strong a performance with a 26.0% improvement to 25.985m (20.630m) m<sup>2</sup>. MMFA members' sales in other regions slipped 7.2% to 4.421m (4.764m) m<sup>2</sup> compared to the preceding year.

The global market for design flooring reached a total volume of 472m m<sup>2</sup> across all product types in 2017, according to professional estimates drawn up by MMFA, based on information from producers and suppliers. The market had likely topped the 500m m<sup>2</sup> mark last year.

North America was the biggest sales region in 2017 with an estimated 252m m<sup>2</sup> or 53% of the global market. Western Europe accounted for roughly 168m m<sup>2</sup> or 36% of the global market. The MMFA professional estimates indicate that the Asia-Pacific region was next with 18m m<sup>2</sup>, Eastern Europe (including Russia) and South America with 12m m<sup>2</sup> each, the Middle East (including Turkey) with 8m m<sup>2</sup> and other markets with 2m m<sup>2</sup> combined.

MMFA experts also broke down figures by product structure and installation system for sales in Western Europe. This breakdown showed that fully glued LVT dry-back products accounted for 81m m<sup>2</sup>, click connection products for 71m m<sup>2</sup> and loose-lay products for 11m m<sup>2</sup>. □

### **MMFA: Development of sales of multilayer flooring**

in m <sup>2</sup>	2012	2013	2014	2015	2016	2017	2018
<b>Class 1 (HDF substrate)</b>							
D, A, CH	2,725,007	4,005,508	4,842,859	6,225,494	7,485,559	8,106,112	9,553,052
Other regions	655,685	1,140,067	1,431,497	1,593,164	1,819,451	1,769,743	2,562,232
Total	3,380,692	5,145,575	6,274,356	7,818,658	9,305,010	9,875,855	12,115,284
<b>Class 2 (Substrates made out of polymer or polymer-composite)</b>							
Western Europe	2,348,947	3,572,109	5,632,834	3,860,195	17,225,958	22,902,401	31,308,580
of which D, A, CH	1,683,651	2,440,819	3,320,025	2,384,020	8,419,665	11,105,103	14,706,787
North America	23,680	12,643	88,446	43,863	15,473,094	20,629,557	25,984,928
Other regions	57,815	113,112	234,754	2,442,098	1,749,669	4,764,244	4,420,684
Total	2,430,442	3,697,864	5,956,034	6,346,156	34,448,721	48,296,202	61,714,192

Source: EUWID, according to information from MMFA

*Laminate/wood revenues of Flooring North America are heading in the other direction*

## *Mohawk Flooring RoW division posts growth in laminate/wood business*

**The US flooring group Mohawk Industries Inc., based in Calhoun, Georgia, has delivered a slight upswing in revenues from its laminate/wood product area in the past few years.**

Revenues had climbed 1.7% from US\$1.494bn in 2016 to US\$1.519bn in 2017. A slightly bigger improvement of 2.2% to US\$1.553bn was recorded last year. According to Mohawk's annual report for 2018, which was published on 28 February, laminate/wood revenues from its Flooring North America and Flooring Rest of the World divisions headed in mixed directions. North American revenues had fallen from US\$739.9m in 2016 to US\$710.7m in 2017 before slipping a little less to US\$702.8m last year. Flooring RoW generated US\$754.4m from laminate and wooden flooring in 2016. Revenues reached US\$808.7m in 2017, before rising to US\$850.3m in 2018. However, these figures also include currency effects.

The Other product unit, which is part of Flooring RoW and comprises licensing

business handled by Flooring Industries Ltd. S.a.r.l., headquartered in Betrange, Luxembourg, together with its wood-based panel, insulating materials and roofing elements operations in Belgium France and the Netherlands, enjoyed an even larger growth in revenues in recent years. They had already increased from US\$794.1m in 2016 to US\$830.8m in 2017. An even bigger 9.0% jump to US\$905.7m was recorded in 2018, due in part to the integration of the wood-based panel processor Berghoef Hout B.V., based in Amsterdam, which it acquired in March 2018.

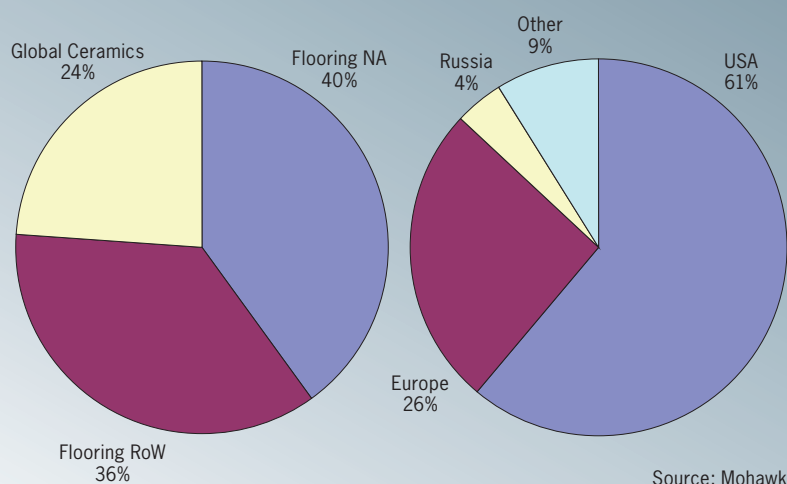
Acquisition and investment effects had an even bigger impact on the carpet/resilient flooring business. Flooring RoW had booked revenues of US\$370.1m from textile and resilient flooring in 2016. This figure had reached US\$435.9m in 2017. Revenues soared by almost half to US\$645.7m in 2018. The LVT business, which is primarily handled by International Vinyl Company N.V. (IVC Group), based in Avelgem, Belgium, is responsible for a significant portion of this sum.

Last year, some 37.7 (2017: 40.0) % of Flooring RoW's total revenues of US\$2.401bn (2017: 2.075bn) came from the Other unit, 35.4 (39.0) % from laminate/wood and 26.9 (21.0) % from carpet/resilient. In terms of the different regions, Flooring RoW generated about 77.5 (81.9) % of its total revenues in Europe. Revenues from other regions increased by more than half last year to US\$435.1m (283.7m) with its July 2018 acquisition of Godfrey Hirst Group, based in Geelong, Victoria, representing a 18.1 (13.7) % share. Some US\$103.4m (91.0m) or 4.3 (4.4) % of total revenues were generated in Russia and US\$1.3m (2.1m) in the US.

The US was the largest sales region by some margin for Flooring NA with revenues of US\$3.851bn (3.809bn) and a share of 95.6 (95.0) %. The entire division posted revenues of US\$4.029bn (4.011bn). Other regions were responsible for US\$171.4m (182.5m) and Europe for US\$6.5m (19.1m). While Flooring NA has experienced a decline in laminate and wood revenues over the past two years, carpet/resilient flooring booked slight increases. Revenues had climbed 5.8% from US\$3.043bn in 2016 to US\$3.220bn in 2017. A minor improvement of 1.2% to US\$3.258bn was recorded last year.

Mohawk's group revenues increased 5.2% to US\$9.984bn (9.491bn) last year. The Flooring RoW division fared best with a 15.7% growth. Global Ceramics enjoyed a 4.3% upswing, while revenues from Flooring NA were just 0.4% higher than the previous year. Carpet and resilient flooring was the biggest product category with revenues of US\$3.903bn (3.656bn) and a 39.1 (38.5) % share of group revenues. Ceramic and stone flooring added US\$3.621bn (3.485bn) or 36.3 (36.7) %, while laminate and wood flooring was responsible for 15.6 (16.0) % of group revenues. □

**Mohawk: 2018 sales mix**





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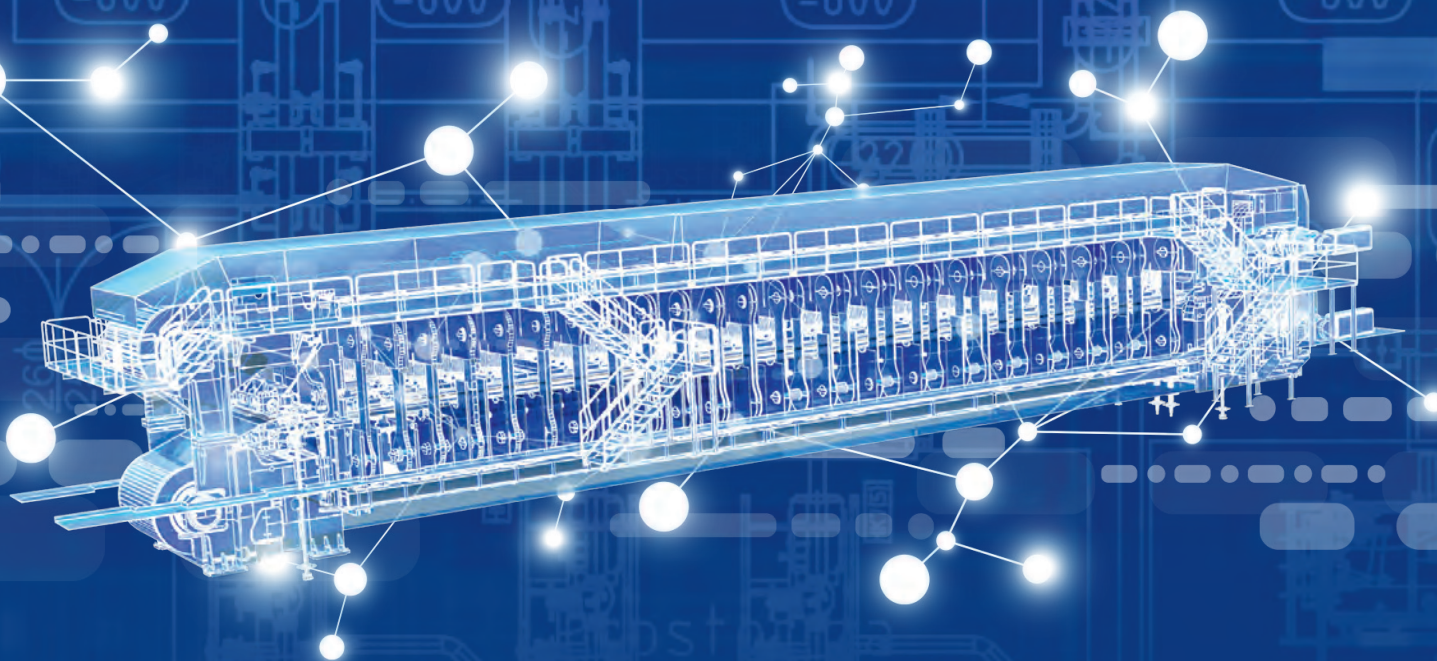
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