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Welcome to the July 2020 issue of Global Gypsum Magazine, which provides our annual look at the Top 10 gypsum wallboard producers. The largest, since its takeover of USG, is now Germany’s Knauf, with 84 plants and nearly 3000Mm²/yr of gypsum wallboard capacity. Via its acquisition, which is still playing out in full ‘down under’ - See Page 9 - Knauf has leapfrogged into first place ahead of Saint-Gobain and China’s BNBM. Combined, these three control ~7400Mm³/yr of wallboard, around 54% of all wallboard capacity in the world. The top 10 producers control around 83% of capacity (11,363Mm²/yr), while the Top 25 control around 92% (12,687Mm²/yr). The global gypsum sector is becoming very concentrated, with further consolidation possibly to come. Turn to Page 12 to read more.

Also in this issue, we look at the gypsum sector of South Korea (Page 28), one of the largest in Asia and a market where the eventual result of the Knauf-USG-Boral dealings remains far from clear. We feature a novel spillage mitigation approach for synthetic gypsum (Page 26) and a case-study from Grenzebach (Page 18). We also speak with Christian Fliss from gypsum wallboard packaging equipment expert Jürgens Maschinenbau (Page 20). Christian discusses the company’s history, from clog maker to gypsum equipment manufacturer, taking in trends from around the industry and the effects on the company from the coronavirus outbreak. Those with an interest in the global insulation sector should turn to Page 32 for all of the latest insulation industry news.

Whichever industry you are involved in, please note that the ongoing coronavirus pandemic has prompted changes to our autumn conference schedule. Turn to Pages 27, 31 and 33 for overviews of the exciting events planned for the remainder of 2020 and the spring of 2021.

Enjoy the issue and stay safe!

Peter Edwards
Editor
Gypsum

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Virtual Global Insulation Seminar and Exhibition
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Dry mortar production
Plasterboard
Perlite expanding
Calcite processing
Plasterboard recycling
France: Saint-Gobain recovering from April 2020 production trough

Saint-Gobain says that its overall group activity fell to 60% of 2019 levels in April 2020 due to the effects of the coronavirus pandemic. Since then its level of activity surpassed 80% ‘at comparable working days, with large variations by market and country,’ according to Regulatory News Service. The group expects a ‘challenging’ second quarter 2020 before a recovery in the second half of the year. It continues to preserve cash and reduce costs.

In Europe the group reported that, by the end of May 2020, Nordic countries had almost reached 2019 levels. Germany and Eastern Europe were still seeing activity levels below those of 2019. The UK has seen activity levels progress by around 10%/week since a low point in mid-April 2020 when activity was at a ‘virtual standstill’, reaching around 70% of 2019 levels in the last week of May 2020.

In the group’s Middle East & Africa region activity levels surpassed 50% of 2019 levels since a low in mid-April 2020. In France, activity in distribution came close to the 2019 level in the last week of May 2020, but with big differences by region and brand. Spain and Italy are picking up gradually, but remain below the average level of the region. The Netherlands remains close to a normal level of activity, while the Middle East and Africa remain impacted to varying degrees.

North America has reported a ‘ contrasting situation state by state,’ but has shown improvement since the low point of mid-April 2020. Activity in May 2020 moved closer to 2019 levels due to ‘significant’ volumes in exterior solutions and a rebound in gypsum volumes. In Latin America, despite the health situation remaining difficult, activity is picking up week after week, from 40% in mid-April 2020 to around 80% in May 2020 with a ramp-up in Brazil.

In Asia-Pacific sales have now reached 2019 levels following the gradual restart of all its production sites in China in March 2020. India remains ‘severely’ disrupted with the restart dependent on the relaxing of confinement measures. The situation is varied across South-East Asia with a rebound in Vietnam where activity has surpassed 2019 levels, but disruptions still relatively significant in Thailand and neighbouring countries.

Spain: Saint-Gobain donates linings

Saint-Gobain Placo has donated plastic linings produced at its Quinto de Ebro laminated gypsum wallboard plant in Zaragoza to use in the production of personal protective equipment for medical professionals caring for coronavirus patients and those vulnerable to the virus. These include home-helpers who attend 250 elderly people in the Ribera Baja del Ebro region.

UK: Green light for Newport plant

Planning permission has been granted by Newport City Council for a new gypsum wallboard plant to be built by Associated British Ports (ABP). The unit will be built on empty land to the south west of Newport Dock’s South Dock, shown right. The building will be up to 202m long and 110m wide, with a maximum height of 21m. Gypsum for the plant will be delivered by ship. The project is expected to create up to 70 jobs and will be leased to a manufacturer by ABP once completed. (Image from ABP South Wales).
South Africa: Waste water yields gypsum

Waste water specialist Talbot is working with a coal producer in the Highveld region to remove gypsum generated as a by-product of its mine water purification process. As part of a pilot project conducted in March 2020, a hydraulic filter press was used to dewater the solids, which were then dried and pressed into briquette form for transportation to end-use customers. The remaining filtrate was directed to an evaporation dam before returning to site processes via a blend line. Talbot says it reduced the waste solids from 8400mg/L to 2900mg/L and demonstrated that the technology would extract gypsum at a rate of 100kg/hr on a full-scale site operation. Previously the company has used this method on behalf of a South African platinum producer where the recovery of precious metals from a wastewater stream uses the same technology.

UK: British Gypsum back to 80%

British Gypsum says its wallboard capacity is at ‘approximately’ 80% of pre-coronavirus pandemic levels following the scaling up of its ‘Covid-19 safe’ operations and distribution plan. Managing director Matt Pullen said that the company’s plaster capacity was already at 80% and it was increasing supply volumes to merchant and distributor customers. It is continuing to allocate wallboard and plaster at lower levels than usual as it resumes normal production. It has also restarted taking new orders for its wallboard recycling service. The subsidiary of Saint-Gobain shut down its non-essential operations in early April 2020 due to the coronavirus pandemic.

Australia: Knauf looking for buyer in musical chairs move

Knauf is reportedly looking for buyers for its business in Australia. The Royal Bank of Canada and PricewaterhouseCoopers have been helping the wallboard producer manage a potential sale, according to the Australian newspaper. The German company operates three wallboard plants in the country that are thought to be worth up to US$200m.

Any such sale is likely to be related to Knauf’s acquisition of USG in 2019. The US-based company owns a 50% share in USG-Boral, which also operates wallboard plants in Australia. Boral said in April 2020 that it thought it unlikely that the Australian Competition and Consumer Commission (ACCC) would approve its plans for USG-Boral so far. If Knauf were able to sell its other assets in Australia then its options with USG-Boral are more likely to be accepted. Speculation has mounted in the local press about partial or full asset divestments by Knauf in Australia since the USG acquisition.

Spain: Knauf supports sustainable architecture

Knauf España has signed an agreement with the Arquitectes per l’Arquitectura association with the aim of supporting sustainable and universal architecture. The partnership complements other initiatives that Knauf holds in the country, with the Higher Council of Colleges of Architects of Spain, the Green Building Council, the College of Architects of Madrid, the Alejandro de la Sota Foundations, and Architecture Society.

Germany: Jürgens Maschinenbau wins supplier award from Knauf

Jürgens Maschinenbau has won first place in Knauf’s supplier of excellence awards for 2019. “The entire Jürgens team looks back on a long and successful cooperation with Knauf Engineering. We are particularly proud of this award and look forward to further challenges,” said Jürgens’ chief executive officer (CEO) Albert Andreas. The engineering company supplies fully-automatic automation and packaging machines for film and non-woven rolled goods. Read more about the company on Page 20.
**US: Gypsum Association appoints new chair, among other roles**

The Gypsum Association has elected Gregory McCown as the chair of its board of directors for 2020 – 2021. McCown is the Regional Manufacturing Manager – Eastern US for CertainTeed Gypsum. Other appointments include National Gypsum’s Craig Robertson as vice-chair, Pabco Gypsum’s Emil Kopilovich, as treasurer and the Gypsum Association’s Stephen H Meima continues as the secretary. USG’s Albert R Zucco is the past chair of the board. All terms are for one year, effective from 1 May 2020.

**Australia: Boral reports slump**

Boral has reported that, in most jurisdictions, its activities were considered to be within the critical infrastructure and construction sectors that are permitted and encouraged to continue as essential businesses during the global coronavirus pandemic. It added that it expects continued decline in most markets, particularly in residential construction markets where the pipeline of work is substantially reducing in all geographies.

As a result, where it has sufficient inventory levels to supply customers, production curtailments are planned and are now taking place, including shift reductions and temporary plant closures. Boral says that these actions will help to conserve cash and minimise any unintended inventory build-up. Boral is supporting employees impacted by temporary closures with access to paid leave, unpaid leave, flexible and remote working arrangements (where possible) and assistance with accessing relevant government support.

**US: Gypsum Association revises Type X board EPD**

The Gypsum Association (GA) has released a revised and updated environmental product declaration (EPD) for 5/8” (1.5875cm) type X North American gypsum boards. Following the standards set in the association’s recently revised product category rules (PCR) for North American gypsum panel products, the EPD provides environmental performance information addressing energy consumption, water consumption, global warming, waste, air emissions and other metrics related to production.

“The Gypsum Association has an ongoing commitment to environmental stewardship. The development and release of this new ISO 21930 compliant, Type Ill, cradle-to-shipping gate EPD, demonstrates our member companies’ efforts to transparently report environmental impacts as a means of contributing to sustainable design and construction,” said Steve Meima, Leadership in Energy and Environmental Design (LEED) Green Association, executive director of the GA.

Type X gypsum board is commonly installed in commercial, institutional and multifamily/mixed-use facilities. Where fire resistance ratings are required, type X gypsum board is typically specified. The GA has also produced an EPD for glass mat gypsum panel products that will be updated in 2021 under the new PCR.

**Switzerland: Saint-Gobain starts Sika stake sale**

Saint-Gobain has started to sell its entire stake in Sika through its subsidiary Schenker-Winkler Holding (SWH). It previously acquired a 10.75% interest in Sika indirectly through the acquisition of 100% of SWH shares from the Burkard family in May 2018 as part of a global agreement with the Burkard family and Sika.

Saint-Gobain attempted to take over Sika through acquiring a share of the company owned by the Burkard family in 2014. However, a legal counteraction followed and an attempt to transfer shares of Sika from the Burkard family was blocked by a Swiss court in late 2016. Saint-Gobain and Sika eventually ended the takeover attempt in May 2018 by retaining a 10.75% share in Sika, sales of other shares and other benefits. Following a two-year ‘lock-up period’ Saint-Gobain says it decided to dispose of its stake in Sika. It added that Sika chose not to exercise its right of first offer.
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There are 107 different producers of gypsum wallboard in 2020 that range in size by a factor of 10,000: From GulfWalling’s 0.3Mm²/yr to Knauf’s capacity of 2913Mm²/yr. Due to continued consolidation in 2019, the Top 10 wallboard producers now control 11,363Mm²/yr of capacity, 83.2% of global capacity. The Top 25 control 12,687Mm²/yr (92.9%).

Global Gypsum looks at the gypsum wallboard sector along company and country lines using data from the Global Gypsum Directory 2020...

<table>
<thead>
<tr>
<th>Producer</th>
<th>Capacity (Mm²/yr)</th>
<th>% of global capacity</th>
<th>Number of plants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Knauf</td>
<td>2913</td>
<td>21.3</td>
<td>84</td>
</tr>
<tr>
<td>2 Saint-Gobain</td>
<td>2525</td>
<td>18.6</td>
<td>69</td>
</tr>
<tr>
<td>3 BNBM</td>
<td>2263</td>
<td>16.6</td>
<td>60</td>
</tr>
<tr>
<td>4 National Gypsum</td>
<td>793</td>
<td>5.8</td>
<td>18</td>
</tr>
<tr>
<td>5 Georgia-Pacific</td>
<td>677</td>
<td>5.0</td>
<td>16</td>
</tr>
<tr>
<td>6 ETEX</td>
<td>654</td>
<td>4.8</td>
<td>23</td>
</tr>
<tr>
<td>7 Yoshino Gypsum</td>
<td>616</td>
<td>4.5</td>
<td>16</td>
</tr>
<tr>
<td>8 USG Boral</td>
<td>359</td>
<td>2.6</td>
<td>10</td>
</tr>
<tr>
<td>9 American Gypsum</td>
<td>300</td>
<td>2.2</td>
<td>4</td>
</tr>
<tr>
<td>10 KCC Corporation</td>
<td>263</td>
<td>1.9</td>
<td>2</td>
</tr>
<tr>
<td>11 Boral</td>
<td>205</td>
<td>1.5</td>
<td>8</td>
</tr>
<tr>
<td>12 Chiyoda-Ute</td>
<td>194</td>
<td>1.4</td>
<td>6</td>
</tr>
<tr>
<td>13 PBGCO Gypsum</td>
<td>147</td>
<td>1.1</td>
<td>2</td>
</tr>
<tr>
<td>14 Jason Plasterboard</td>
<td>135</td>
<td>1.0</td>
<td>4</td>
</tr>
<tr>
<td>15 Panel Rey</td>
<td>86</td>
<td>0.6</td>
<td>3</td>
</tr>
<tr>
<td>16 Volma Corporation</td>
<td>85</td>
<td>0.6</td>
<td>3</td>
</tr>
<tr>
<td>17 CSR Gyprock</td>
<td>80</td>
<td>0.6</td>
<td>4</td>
</tr>
<tr>
<td>18 Shandong Taihe Dongsin</td>
<td>70</td>
<td>0.5</td>
<td>1</td>
</tr>
<tr>
<td>19 Anhui Wanjia New Build Mats</td>
<td>65</td>
<td>0.5</td>
<td>2</td>
</tr>
<tr>
<td>20 Dalsan</td>
<td>51</td>
<td>0.4</td>
<td>2</td>
</tr>
<tr>
<td>21 Shandong Baier Build Mats</td>
<td>50</td>
<td>0.4</td>
<td>1</td>
</tr>
<tr>
<td>22 Irving Wallboard</td>
<td>46</td>
<td>0.3</td>
<td>1</td>
</tr>
<tr>
<td>23 Mada Gypsum</td>
<td>42</td>
<td>0.3</td>
<td>1</td>
</tr>
<tr>
<td>24 Gypsumma</td>
<td>34</td>
<td>0.2</td>
<td>1</td>
</tr>
<tr>
<td>25 Winstone Wallboards</td>
<td>34</td>
<td>0.2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total: Top 25 Producers</strong></td>
<td><strong>12,687</strong></td>
<td><strong>92.9</strong></td>
<td><strong>343</strong></td>
</tr>
<tr>
<td><strong>Total: Producers 26-50</strong></td>
<td><strong>557</strong></td>
<td><strong>4.1</strong></td>
<td><strong>30</strong></td>
</tr>
<tr>
<td><strong>Total: Producers 51-75</strong></td>
<td><strong>300</strong></td>
<td><strong>2.2</strong></td>
<td><strong>26</strong></td>
</tr>
<tr>
<td><strong>Total: Producers 76-107</strong></td>
<td><strong>114</strong></td>
<td><strong>0.8</strong></td>
<td><strong>31</strong></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>13,658</strong></td>
<td><strong>100.00</strong></td>
<td><strong>430</strong></td>
</tr>
</tbody>
</table>

The fate of USG Boral, a 50/50 joint venture between Boral and USG, is unclear in certain jurisdictions as a result of the purchase of USG by Knauf and is therefore treated separately.
Within the Top 25 producers, wallboard capacity is firmly in the hands of companies based in established markets (9806Mm²/yr, 77% of Top 25). Those from markets where gypsum wallboard use is less prevalent control 2881Mm²/yr (23%). Most of this is due to the large Chinese producer BNBM (2263Mm²/yr, 17.8%).

The largest gypsum wallboard producing country by installed capacity in 2020 remains the US, the first country to take construction with wallboard to its heart. It has 3632Mm²/yr of global capacity, more than a quarter of the world's total. The only country that compares in terms of size is China, with 3014Mm²/yr across 85 plants, the most of any nation. Combined, the US and China are home to nearly half of all wallboard capacity (48.9%).

The next largest wallboard market, Japan (790Mm²/yr), is just a quarter of the size of China’s. No other country has more than 500Mm²/yr, although a further 16 each have more than 100Mm²/yr. The names in these top positions are dominated by developed markets where wallboard is a well-established building material. These include South Korea (See Page 28), the UK, Canada, Australia and the larger EU Member States.

Also in the Top 25 wallboard producing countries are developing markets where the material has gained a foothold more recently. Many of these, including Brazil, Russia and Mexico, are notable for their large populations. When their relatively large capacities are divided by their even larger populations, the relative size of these industries is revealed. The developed wallboard markets, highlighted in darker blue in Table 2, have an average capacity/population ratio of 7.7m²/capita/yr. The developing wallboard markets the ratio is 1.3m²/capita/yr. Globally it is around 1.8m²/yr.

Right - Table 2: Top 25 countries by installed capacity. Developed gypsum markets are shown in darker blue. Newer markets are shown lighter blue. Source: Global Gypsum Directory 2020.
1. Knauf (including USG) • 2913Mm²/yr

Knauf, founded in 1936 in Bavaria, Germany, now operates 84 wallboard plants in 44 countries. It took over US-based USG Corporation in 2019, adding 1154Mm²/yr of North American capacity to an already impressive list of facilities across Europe, Asia, South America and Africa. It owns one half of the USG Boral joint venture, which listed separately (below).

2. Saint-Gobain • 2525Mm²/yr

Founded in 1665 by French King Louis XIV, Saint-Gobain operates 69 wallboard plants in 35 countries on all inhabited continents. It increased its wallboard capacity via the acquisition of US-based Continental Building Products in 2020, adding a further 298Mm²/yr to its US-based CertainTeed brand.

3. BNBM • 2263Mm²/yr

The largest wallboard producer in China, Beijing New Building Materials (BNBM) is part of the massive state-owned China New Building Materials (CNBM) conglomerate. It only operates in its domestic market, although it has mooted plans elsewhere in the past as part of China's Belt and Road initiative.

4. National Gypsum (US) • 794Mm²/yr

One of three ‘National Gypsums’ that make wallboard in separate markets, the US company has been established twice, once in 1925 and again as a new entity in 1993. It has been in private hands since 1995 and now operates 18 wallboard plants in 16 US States. With a capacity of ‘just’ 794Mm²/yr, National Gypsum is around three times smaller than third place BNBM.

5. Georgia-Pacific • 677Mm²/yr

Georgia-Pacific began as a wood producer in 1927. It expanded into a number of markets during the 20th Century, including gypsum wallboard via the acquisition of Bestwall Gypsum in 1965. It was acquired by the Koch Group in 2005 and has since expanded its portfolio to 677Mm²/yr across 13 US States and six Canadian Provinces, most notably via the purchase of Temple-Inland in 2013.
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6. ETEX • 654Mm²/yr
Belgium’s ETEX entered the gypsum wallboard sector in 2011 via the acquisition of Lafarge’s assets in Europe and South America. It operates a total of 23 plants across five South American and eight European countries, where it operates under the Siniat brand. It is the third-largest wallboard producer in the EU after Saint-Gobain and Knauf.

7. Yoshino Gypsum • 616Mm²/yr
The largest Japanese wallboard producer by some margin, Yoshino Gypsum was founded in 1937. In 2020 it operates 596Mm²/yr of wallboard capacity from 15 plants at home, with a single 20Mm²/yr plant operated under its Yoshino Indonesia subsidiary. It reports that its Tiger Board brand represents around 80% of the Japanese wallboard market.

8. USG Boral • 359Mm²/yr
USG Boral was founded in 2014 when Boral’s Gypsum Division and USG came together to form a 50:50 joint venture. It operates 10 wallboard plants in four countries across Asia / Australasia that share 359Mm²/yr of capacity. The acquisition of USG by Knauf means that the joint venture may not exist in its current form for much longer. Turn to Page 9 for more.

9. American Gypsum • 300Mm²/yr
American Gypsum is part of US building materials group Eagle Materials, which also has extensive cement and concrete activities. The group is in the process of separating its ‘heavy’ and ‘light’ divisions into separate group companies, which, prior to the coronavirus outbreak, was scheduled for completion in summer 2020. It operates four wallboard plants in three US States.

10. KCC • 263Mm²/yr
KCC began life as Kumkang Korea Chemical Co. Ltd, a paint and PVC sealant manufacturer, in 1974. It has since grown to become South Korea’s leading construction materials producer, with two wallboard plants and a capacity of 263Mm²/yr. Read more about the company and the wider South Korean sector on Page 28.
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From September 2020, the new Grenzebach flash dryer system on the premises of Dolina Nidy Sp.z.o.o will process some 22t/hr of moist synthetic gypsum produced from the desulphurisation of flue gas from power stations (FGD gypsum). Along with natural gypsum, the FGD gypsum is a valuable resource for manufacturers of gypsum products like Dolina Nidy. With its new flash drying system, Dolina Nidy secures its flexibility with regards to raw material use. The moist FGD gypsum will be processed into dry dihydrate and then go directly to the existing calcining facility from Grenzebach.

Using the equipment supplied by Grenzebach, Dolina Nidy produces the base material for levelling plasters, finish coatings, gypsum-based adhesives, wall plasters and gypsum binders for prefabricated elements. The resulting finished products for the building sector meet the high requirements and expectations of its customers and comply with applicable environmental regulations.

Precise planning thanks to 3D scanning
“We are pleased that Dolina Nidy got in touch with Grenzebach right after taking the decision to extend its existing gypsum processing facilities. For us this is a great acknowledgement and very positive feedback on the work done so far,” says Gerhard Becker, Senior Sales Manager Gypsum Technology at Grenzebach in Bad Hersfeld, Germany. Integrating another flash dryer system into the existing calcining facility is an exciting task for Becker and his team. First, the Grenzebach experts made a complete 3D scan of the existing plant. “Thanks to the precise 3D data, the new equipment can be incorporated into the existing steelwork and plant environment in a very accurate and straightforward manner,” explains Becker.
Smooth integration thanks to close coordination

The capacity upgrade is being carried out in close cooperation with the specialists at Dolina Nidy. Together, Grenzebach and Dolina Nidy determined the optimum time for installation and commissioning. The joint objective behind this is to make sure that the production downtime at Dolina Nidy is minimised. The specialists have worked hand in hand, from installation to commissioning. Compliance with agreed deadlines and comprehensive training already during the installation phase will enable the customer to make optimal use of the new system from the start.

Building on previous installation

The new flash dryer system will be integrated into the mill drying and calcining plants that Grenzebach supplied to Dolina Nidy Sp.z.o.o. in 2002. “We are very satisfied with the Grenzebach technology and service,” explains Rafal Lisik, Head of Investment Department at ATLAS Groupe, the parent company of Dolina Nidy. “It was clear to us from the start that we would ask Grenzebach to provide us with advice and supply the equipment for the additional FGD gypsum processing system. We have enjoyed a pleasant cooperation and excellent partnership for nearly two decades now.”

At the factory premises in Pińczów, around 90 minutes from Krakow, two Grenzebach mill drying and calcining plants, each consisting of a mill drying system and rotary calciner with indirect heating system and integrated cooler, have already been in operation since 2002. They have a combined capacity of 1008t/day of beta-hemihydrate (stucco). The feed material processed there by the Polish company consists of 100% or, alternatively, blends of 90% natural gypsum and 10% FGD gypsum. The two plants produce beta-hemihydrate (stucco) or high-temperature plaster. Back in 2006, Grenzebach already supplied the first flash drying system to Pińczów, designed to process 100% FGD gypsum at a rated output of 480t/day of dihydrate. A steam-heated Grenzebach calcining plant for processing 100% FGD gypsum was installed at another of the company’s locations, Konin, about 100km south of Poznań, in 2007. It has the capacity to produce 720t/day of beta-hemihydrate.

Strategic technology expansion

Its new flash dryer system in Pińczów gives Dolina Nidy even more flexibility in its use of natural gypsum and FGD gypsum. Raw material sourcing can be placed on a broader basis and can become more strategic. Rafal Lisik adds, “With the new flash dryer system we are further extending our production capacity. We also strengthen our position as an important partner that is always able to meet the demands of our customers.”

Including the new plant for Dolina Nidy, Grenzebach has now supplied a total of 19 flash dryer systems for synthetic gypsum to customers around the world.
Global Gypsum (GG): Please could you provide an overview of Jürgens Maschinenbau?

Christian Fliss (CF): Albert Bernhard Jürgens, the grandfather of current owner Albert Andreas Jürgens, founded the company in Emsdetten, North Rhine-Westphalia, in 1921, starting out with a small trading company for wooden clogs. There was a brisk trade in Jürgens’ clogs in Münsterland and across the border at that time. The founder expanded his business together with just a few employees to include the manufacture of turning, milling and copying machines, which he used for the mechanical production of the clogs.

After the Second World War in 1947, fresh starts are on the agenda and the company laid the foundation stone at its current location, Loensstrasse 15 in Emsdetten. A new main area, the development and production of mechanical looms for the widely spread jute industry in the region was added to the company’s portfolio. It added a foundry to produce grey cast iron in 1949. Later on, heavy-duty looms for the production of sisal and coco fabrics were added to the product range, which, until the early 1970s, represented the core business of the Jürgens machine shop, now a global company. Right up to the present day, Jürgens has remained one of the three leading global manufacturers of special looms, which are used primarily in the manufacture of sophisticated fabrics for paper production.

The day-to-day business of the foundry and machine shop is today in the hands of the third generation, Albert Andreas Jürgens. He joined the company in 1989 after successfully concluding a toolmaker apprenticeship, gaining a mechanical engineering qualification and spending a few years gaining professional experience outside of the firm.

GG: What is the company’s footprint in 2020?

CF: Jürgens remains a classic medium-sized family business, with a global focus. We supply our customers exclusively from our factory in Germany, working alongside commercial agencies all over the world. Jürgens employs a total of slightly more than 250 people, 100 of them work in the machine shop and 150 in the foundry.

GG: How did Jürgens enter the global gypsum sector?

CF: Jürgens entered the global gypsum sector in 2004 when it founded its packaging technology division upon the acquisition of another company from the local area. The packaging technology division’s core competencies are fully-automatic handling and packaging machines for gypsum, film and non-woven production lines. Today Jürgens is the world market leader for fully automatic wallboard packaging systems.

When the acquisition was made, the other company already had contact with Knauf, which Jürgens has continuously expanded since. After that, it acquired Saint-Gobain and Etex as customers, as well as OEMs such as Grenzebach and Gyptech, which had become aware of us. The expansion of our network was definitely also supported by regular participation in the Global Gypsum Conferences. My first participation at the conference was in Paris in 2010.
GG: How important is the gypsum sector to Jürgens?

CF: The gypsum industry is one of the main sectors within our packaging technology unit, representing approximately 40% of its total revenue. During the past 15 years we have delivered more than 60 lines to the gypsum industry, an average of four lines per year. Requests from the global gypsum sector are relatively stable. Of course the financial crisis in 2009, and now the ongoing coronavirus outbreak, each dampened demand.

GG: What is the most common request from wallboard producers that approach the company?

CF: Definitely flexibility! Jürgens is flexible in two main ways. Firstly, product dimensions. During the last 10 years our customers have needed to accommodate market requests regarding production dimensions (600mm, 900mm and 1200mm boards) and speed. Currently, there is a clear trend towards 600mm boards, to which we are reacting with a special automatic width adjustment within our machines. Secondly, we are flexible in our reaction time. Our customers are used to receiving layouts and offers within the shortest possible time after the respective inquiry and we react very flexibly to changes in the tenders. Jürgens has, so I believe, set a new standard in this regard.

GG: How does Jürgens meet these needs?

CF: It sounds simple, but we talk to our customers and analyse their exact requirements. It is part of our philosophy to ‘keep our ears to the market.’ We develop our lines continuously together with our clients.

When we entered the plaster industry in 2004, roller, chain and slat conveyors were the standard for transporting stacks of wallboard. Together with our customers we developed the modular belt conveyor, with the first delivery to Saint-Gobain in Scholven, Germany in 2009 and worldwide as standard since 2010. Today we use different versions of the modular belt conveyors, which are used in more than 60 lines worldwide.

Another example: Knauf requested that we find a way to substitute the ink-jet printers at the cold end. It wanted to use pre-printed packaging film with its own company logo on the plastic film. The result was our ‘side-film-packaging-machine,’ which won Innovation of the Year at the Global Gypsum Awards in 2018.

In 2019 we added XPS culls in our automatic culls infeed system. Now we are able to handle all kinds of different culls underneath the plasterboard stacks: Gypsum dunnages, industrial bearers and XPS culls. For us, direct customer proximity is the only way to go. And our customers seem to appreciate that as well. In May 2020 we were named Supplier of the Year - 2019 by Knauf (See Page 9).

GG: How long does production of such a line take?

CF: In general, a wallboard packaging line has a delivery time of 8-10 months, depending on the complexity. After a detailed planning phase and signing the order, the design and engineering will take approximately six weeks. After four weeks we start our purchasing. Around three months later we will start manufacturing and, later on, we begin assembly. Due to the fact that we produce all controls and control cabinets in house, we can start wiring the lines directly after assembly. In parallel we manufacture our control cabinets. Internal commissioning and preliminary acceptance with our customers at the Jürgens factory is part of the delivery process.

After delivery of the line we support our customers with installation and commissioning directly at site. Of course, every customer receives a comprehensive spare parts service and technical support in case of any glitches.

GG: Which types of manufacturer and world regions have been most prevalent in terms of orders over the past 12 months?

CF: During the last 12 months we have received orders from North Africa, Greece, Chile and China. The last delivery for the El Volcan wallboard plant in Chile is currently delayed by the coronavirus outbreak and still to come. The current projects we are working on right now are mainly from the ‘usual suspects,’ Knauf, Saint-Gobain and ETEX, either directly or via our OEM partners, which integrate our systems into their overall designs.
GLOBAL GYPSUM: PACKAGING

GG: How has this changed from previously or is it changing at the moment?

CF: We currently observe a trend to higher demand from Africa and Eastern Europe. Some established customers are planning to expand their existing production lines at the respective locations and therefore need a second packaging line.

The only problem is that all projects are ‘on hold’ due to the pandemic. We are working on it but nobody knows exactly when we will come back to business or when the investments will be released again.

GG: How are gypsum client requests changing with time?

CF: Delivery speed and costs are always an issue. We have been able to reduce our delivery times thanks to a modular system that we developed after an intensive market analysis of all customer requests over the past 15 years. Thanks to that modular system, we are able to split our lines, starting from basic systems to fully automatic sophisticated units.

Basically, our customers assume that our plants operate trouble-free and reliably. Perhaps our reputation may precede us. A business partner of an OEM once summed it up as follows, “I always integrate Jürgens systems into our overall production line to have no problems on the construction site. In the end, my calculation always works out.”

GG: What do clients expect from the equipment in terms of automation / digitisation and how do you meet these needs?

CF: Our customers expect digitalisation to provide easier and faster reactions to potentially problematic situations. Our machines are highly automated and the corresponding skilled workers are not always available. Therefore Jürgens is always on the other end of the line to help. We have direct access to the equipment.

In the future our documentation, which is directly available from the machine, will support our customers to identify spare parts quickly and easily and to order them directly. Orders will be received online and processed immediately.

In addition, we are working on a concept for ‘predictive maintenance,’ i.e. a system that provides us with information about increased wear or loads on critical parts (bearings, motors, shafts, etc.) by means of temperature and/or speed monitoring. This will allow us to identify and replace components before they fail in order to prevent long downtime periods.

GG: What new products, projects or other advancements can you tell our readers about?

CF: The coronavirus outbreak has made us think. At the beginning of 2020, nobody would have believed that the hamster wheel would ever slow down, let alone come to a standstill worldwide. Now the first relaxation is taking effect, the economy is starting up again and our customers will try to make up the production backlog. For this purpose, we offer to replace individual prefabricated complete assemblies at short notice instead of costly retrofits, in order to keep plant downtimes very short. Due to the prefabrication approach, we are able to offer these components at very attractive prices. A component exchange is also always cheaper than a costly mechanical retrofit, so our customers also benefit once again.

GG: How do you see the situation unfolding over the rest of 2020 and into 2021?

CF: Until the end of 2020 we will process and deliver our existing orders. The current travel restrictions must be relaxed first so that we can visit our customers again. Unfortunately, we cannot sell our ‘explanation needed’ systems and machines via video or telephone conferences. We feel that trust with a customer can only be developed through personal contact and visits. We machine builders and our customers are still very conservative in this respect.

I assume that investments will be made very carefully in 2021, always depending on how the liquidity recovers in the respective companies. Without cash flow, there can be no investment. In this respect, I hope that the situation will normalise by the end of the year to the extent that the announced projects are actually realised.

GG: Christian Fliss, thank you for your insights today.

CF: You are very welcome indeed.
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Colin Hanson, one of the founders of gypsum wallboard moisture measurement expert Sensortech Systems Inc., retired from his position of President of the company on 14 May 2020.

A native of Southport in the north west of England, Colin Hanson established Sensortech Systems in Oxnard, California, along with Logan Mosteller and Bob Blankenship, in 1983. He had previously worked for leading moisture measurement equipment manufacturers in the UK and US and in the oil exploration sector in the UK.

Hanson was the pioneering developer behind Sensortech’s resonant frequency (RF) radio approach to moisture measurement. This offered higher accuracy, and hence control, to wallboard manufacturers, as it was more directly dependent on moisture content than the established techniques based on power-loss measurements. The RF approach has since risen to become the dominant approach to wallboard moisture measurement worldwide.

The company’s first product based on the RF approach was the ST-1100 moisture sensor range, which was replaced by the ST-2200 in 1992 and, subsequently, the ST-3300 range in 2018. Sensortech also produces the Instantaneous Moisture Profiling System (IMPS), which analyses moisture across the full width of the board, and has an extensive offering of near-infra-red sensors. It most recently developed the Kiln Jam Detector for use inside board dryers.

A new era with KPM Analytics

As Sensortech grew in the 1980s and 1990s, Hanson took over the shareholdings of the other two directors. He became sole owner of the company in 1996. He sold Sensortech Systems to KPM Analytics on 14 May 2019, remaining as President until his retirement a year later. He will remain on hand in an advisory capacity and will continue to offer his considerable insights and expertise to the company, with a focus on the development of existing and new products.

Speaking upon the sale of Sensortech to KPM, Hanson said, “There is a depth of talent within Sensortech, supplemented by KPM, that will provide a seamless transition to a successful future. KPM is putting resources into growing Sensortech, which is fantastic. The company has a development queue representing years of research but there are opportunities to accelerate that with KPM.”

Ron Geis, KPM Analytics’ President, has taken over the role of President of Sensortech Systems.
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Innovative controls for moist and sticky dust

The dream of every plant operator is to eliminate dust and spills on belts and transfer points and to minimise maintenance requirements of the conveyor system. An added bonus is to be able to cope efficiently with the challenges of moist and sticky materials such as flue gas desulphurisation (FGD) gypsum. The contact-free AirScrape® conveyor belt skirting system, developed by ScrapeTec, has been designed to do just that.

The AirScrape conveyor belt skirting system prevents dust formation, reduces material spill, enables thorough belt-cleaning and minimises the risk of explosion at critical sections along the conveyor route and at transfer points. It does this via a highly-effective side seal that lies over the conveyor belt, without contact. It creates negative pressure on the belt due to its specially-designed lamella structure. As the system hovers freely above the conveyor belt, skirt friction and belt damage are eliminated and service life of every component of the conveyor is extended. Unlike conventional systems, it also works well with moist and sticky materials, such as flue gas desulphurisation (FGD) gypsum.

The AirScrape handles moist and sticky materials at the Inashco processing plant in Wuppertal, Germany, which process the slag and ashes from waste incineration plants into usable raw materials.

“‘Inashco’s slag and ash process involving the recovery of all metal components from what remains after incineration,’ explains Marcel Angerhausen, the Inashco’s plant’s Operations Manager. ‘Marketable mineral recycling fractions are then produced from residual ashes, which can be used as aggregates in non-structural concrete products.’”

“The fact that it is possible using our technology to process ashes with a high moisture content directly from incineration, is a real advantage for metal recovery. However, it is a curse for further processing of the remaining minerals into mineral aggregates. Nevertheless, this process is important, because on average, the ashes contain about 80% stone, glass and ceramic contents.”

“Material with a grain size of 0-10mm ends up in our plant, which we prepare for recycling via various screening and cleaning stages to 0-3mm and 3-10mm,” continues Angergausen. “The Airscrape system, which was installed in late 2019, has exceeded our expectations. This system works efficiently, even with our difficult materials and significantly reduces material spills on belts and transfers. Prior to the installation of AirScrape at the plant, our team had to spend hours each day, cleaning the belt periphery and all transfer points due to material spills. We had previously tried various methods to cope with material spills in the plant’s moist and sticky environment, without success. The six-week trial operation period with the AirScrape showed that, although cleaning at critical points is still necessary once a week, 90% of the time previously spent cleaning is now available for productive work at the plant.”
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Korea achieved its independence from occupying Japanese forces on 15 August 1945 at the end of the Second World War. Its southern portion remained under a de-facto US military government until elections produced a national assembly and elected Syngman Rhee as the first president of the Republic of Korea on 15 August 1948.

South Korea has three coasts - on the Yellow Sea, the East China Sea and the Sea of Japan - and one land border - with the Democratic People’s Republic of North Korea (DPRK). It has trade links with China worth US$136bn/yr (25% of exports), with the US worth US$73.6bn/yr (14%) and with Vietnam worth US$48.2bn/yr (8.9%).

South Korea is an Asian Tiger and G-20 major economy with a per-capita gross domestic product (GDP) of US$31,400 in 2018, up by 5.4% year-on-year from US$29,700 in 2017. In 2019 Bloomberg named it the world’s most innovative economy for patents filed, value of manufacturing, high-tech companies, investment in research and development and number of students in higher education for the sixth consecutive year. Its manufacturing sector is the world’s fifth largest, generating US$441bn (27% of GDP) in 2018. South Korea uses more robots in manufacturing than any country - 71 per thousand employees, compared to a global average of 8.5. At 516 people/km², South Korea has the 13th highest population density of any country. The Seoul Capital Area’s 20.5m people inhabit the world’s second most populous metropolitan area after Tokyo. Unlike Japan, South Korea’s 51.6m-strong population is growing - by 0.5% year-on-year in 2018 from 51.3m in 2017. The population’s housing and infrastructure needs generate a gypsum wallboard demand roughly equal to the country’s production capacity of 413Mm²/yr (approx. 8m²/capita/yr).

Dependency on FGD

Upon its founding, South Korea cut itself off from the peninsula’s natural gypsum reserves in the north. Its gypsum wallboard sector has become reliant on flue gas desulphurisation (FGD) gypsum. The country has 13 coal-fired power plants with a total capacity of 36.8GW and eight gas-fired power plants with a total capacity of 12.1GW. South Korean law limits sulphur dioxide (SO₂) emissions for plants built since 2007 to 80ppm and 100ppm for those established before 2007. FGD gypsum is therefore produced at all such power plants. It is sold to wallboard producers and cement plants, both at home and abroad. US$1.14m-worth of South Korean FGD gypsum was exported to Japan in 2019, unchanged from 2018. A further US$466,000-worth was exported to Vietnam in 2019, a 2.5% year-on-year rise from US$455,000 in 2018, and US$456,000-worth was sent to China in 2019, up by 28% from US$356,000 in 2018.

Although the government subsidises renewable energy projects and taxes coal use, as of May 2020 there has been no sign of an oncoming energy transition in South Korea. In 2019 the country replaced its 543Mt/yr CO₂ emissions target for 2020 with a more manageable target of 536Mt/yr net CO₂ emissions by 2030. This would suggest that gypsum wallboard production’s domestic FGD supply is secure for at least another decade.
Wallboard production

South Korea has a gypsum wallboard production capacity of 413Mm²/yr, the world’s fourth largest after China’s (2.91Bm²/yr), the US’s (2.32Bm²/yr) and Japan’s (795Mm²/yr). As Figure 1 shows, capacity is divided 64:36 between KCC and USG Boral. KCC controls 263Mm²/yr and USG Boral controls the remaining 150Mm²/yr.

South Korea’s five gypsum wallboard plants are all situated on the coast, in two provinces and one metropolitan city. Chungnam Province hosts the KCC Daejuk plant and USG Boral Karatsu plant, Jeonnam Province hosts the KCC Yeocheon plant and USG Boral Yeosu plant and Ulsan Metropolitan City hosts the USG Boral Ulsan plant. Figure 2 shows plant locations and total production capacity by region.

KCC

KCC began life as Kumkang Korea Chemical Co. Ltd, a paint and PVC sealant manufacturer, in 1974. It has since grown to become South Korea’s leading construction materials producer, with two wallboard plants and a capacity of 263Mm²/yr.

South Korea’s first gypsum wallboard plant is KCC’s Daejuk plant in Seosan, Chungnam Province. It produces all 11 classes of KCC’s gypsum wallboard to an incredible range of specifications, for example, it has 21 sub-classes of KCC fireproof board. The plant received its third line in July 2017. KCC also operates the 100Mm²/yr Yeocheon plant in Yeosu, Jeonnam Province. Solar power systems supply electricity to both plants. Its 3.13MW solar power plant is the largest urban power plant of its kind in South Korea and even has its own blog and social media accounts.

KCC says that its Central Research Institute at Yongin, Seoul Capital Area puts it ‘at the forefront of the development of future technologies’ in gypsum wallboard production.

KCC’s 2019 annual report shows a loss of US$181m in 2019, up by 860% year-on-year from a loss of US$19.7m in 2018. Sales of building materials fell by 6.0% year-on-year to US$1.21bn (39% of total sales) from US$1.29bn. Total sales fell for the third consecutive year, by 2.1% to US$3.08bn from US$3.15bn. The company attributed the decline to falling prices for most of its products, including gypsum wallboard.

South Korea contributed 77% of KCC’s total sales (US$2.37bn) in 2019, while China contributed 12% (US$370m) and the rest of Asia contributed 5.1% (US$156m). Europe contributed 3.0% (US$93.7m). With debts of US$2.36bn to settle, any prolonged construction weakness in the wake of the coronavirus crisis is likely to raise tough questions for South Korea’s largest gypsum wallboard producer.
USG Boral

USG Boral, the joint-venture between US-based USG (now owned by Germany’s Knauf) and Australian building materials producer Boral, traces its history in South Korea back to 1998. At that time the Lafarge Boral joint venture acquired two wallboard plants - the 46Mm²/yr Ulsan plant in Ulsan Province and the 34Mm²/yr Yeosu plant in Jeonnam Province. In 2002 it completed work on a third plant, the 40Mm²/yr Karatsu plant in Dangjin, Chungnam Province. Lafarge left the joint venture in 2011 as part of its wholesale exit from the global gypsum sector. USG took over 50% of the same assets in 2014. USG Boral expanded the Karatsu plant to its present capacity of 70Mm²/yr in2016, bringing the company’s total Korean gypsum wallboard production capacity to 150Mm²/yr.

In its first half report for the Australian financial year ending on 30 June 2019, USG Boral said that a main cause of a fall in its earnings before interest, taxation, depreciation and amortisation (EBITDA) was a ‘slowdown in South Korea.’ It said that the period had brought a ‘market decline’ and increased competition, along with operational disruptions resulting from Typhoon Soulik.

On 28 May 2019 USG Boral South Korea announced a major personnel change in the appointment of Hyuk-Joon Kwon as its CEO. Kwon joined USG Boral from Otis Elevator Korea, where he had been operations director and general counsel, advising on business areas including corporate restructuring and investment strategy.

The Future

South Korea is a typical developed economy that has seen moderate wallboard capacity expansion in recent years. Even in ‘business as usual’ conditions, further new capacity would be unlikely. However, given the current coronavirus outbreak the opportunities for new capacity would appear vanishingly small, at least in the short term. Debt-laden KCC may even be forced to sell assets, at home or abroad, to pay down some of its debt if demand is affected for a prolonged period. USG Boral is also poorly positioned to expand at present. Knauf recently took over USG, but it has been forced to delay the proposed sale of the joint-venture’s Australian and New Zealand assets to Boral due to competition concerns in Australia. This, along with the imminent departure of Boral CEO Mike Kane, provided Boral with little capacity to think about expansion, even before the coronavirus outbreak hit.

However, South Korea appears to be weathering the coronavirus storm well, having taken early steps to halt transmission and track cases thoroughly. This may enable it to reopen its economy, including the construction sector (and hence generate wallboard demand), earlier than comparable nations. Coupled to this, there is insufficient housing in South Korea, particularly in major cities. The phenomenon of micro-apartments, recently highlighted by the Oscar-winning Parasite, has become a depressing norm for many. There is massive pent-up demand for gypsum-intensive apartment blocks, along the lines of the many thousands already built all over the country. However, with major cities hugely dominant in terms of the national economy, there is a lack of building space in the locations that people want to live. This is not a problem that the gypsum sector can solve alone, but it will surely benefit if and when South Korea’s pent-up demand can be released.

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Denmark: Rockwool sales fall marginally

Rockwool’s insulation sales declined by 0.6% year-on-year to Euro483m in the first quarter of 2020 from Euro486m due to slowdowns in Asia, in technical insulation sales and in its sandwich panel business. Despite this its earnings before interest and taxation (EBIT) rose slightly to Euro56m. Overall the group’s net sales and EBIT rose slightly to Euro649m and Euro80m respectively.

“Despite turbulence from the Covid-19 pandemic, whose impact we began to feel late in the quarter, we achieved solid first quarter results. Climate change isn’t going away, however. Energy renovation is a high-impact economic recovery measure that creates local jobs, a more resilient and healthy society while at the same time contributing to reaching long-term global climate ambitions,” said chief executive (CEO) officer Jens Birgersson.

The group reported that, due to coronavirus, its sales were affected in Asia and started to decrease during the last weeks of March 2020 in southern Europe. In China, production lines were temporarily closed early in the quarter and re-opened four weeks later. Factories in Malaysia, India, France and Spain were closed at different times in March 2020. It said that all these factories had now partly resumed production. The company is planning to adjust operations based on reduced demand and a decline in construction spending in future quarters. It also intends to seek, “market opportunities resulting from political and fiscal responses to drive economic recovery.”

Ireland: No big Covid-19 impact for Kingspan in first quarter

Kingspan Group’s sales fell by 3% year-on-year to Euro1.03bn in the first quarter of 2020. It said that the coronavirus-related lockdowns did not ‘significantly’ impact activity for most of the reporting period although the, “landscape changed markedly from the middle of March onward.” The UK and Germany reported improvements, the Americas did well and both Australasia and the Middle East saw rising orders. Insulation board sales were strongly impacted by falling prices. Looking forward the group said that its global sales fell by nearly 35% year-on-year as various construction markets were closed down.

UK: SIG revenue falls by a third

SIG’s group revenue fell by 37% year-on-year to Euro154m during March and April 2020 due to disruption caused by the coronavirus outbreak. In its annual report for 2019 the insulation producer said that trading had returned to pre Covid-19 levels in most of its companies as it adapted to social distancing measures. It also reported cash reserves of around Euro150m following the sale of its Air Handling division.

In 2019 the group’s statutory revenue fell by 13% year-on-year to Euro2.4bn in 2019 from Euro2.7bn in 2018. It made an operating loss of Euro97m. This was blamed on loss of market share in the UK and Germany. In response the company’s board says it taken ‘decisive’ action including appointing a new leadership team and developing a new customer-centric strategy that reprioritises sales.

UK: Insulation schemes provide ‘cheap’ jobs

The Energy Efficiency Infrastructure Group (EEIG), a coalition of businesses and charities, has published a report into the creation of jobs post-coronavirus lockdown, in which it concluded that 40,000 insulation jobs lie in modernising the UK’s energy-inefficient housing stock before mid-2022, and a further 110,000 jobs before 2030. BBC News has reported that each job would cost Euro65,800 to create, compared to Euro279,000 per job in road repairs, and would be evenly spread across the UK. Besides generating wealth, the EEIG says that the work will cut pollution, improve health and cut energy bills by Euro558/yr per household. EEIG chair Sarah Kostense-Winterton said, “Our country is in dire need of a green stimulus recovery. There could be no better time to future-proof our homes while providing buoyancy to our drained economy.”
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US: Johns Manville makes medical gowns

Johns Manville says that it has begun production of a new specially-developed coated polyester spunbond nonwoven fabric for use in Level 3 medical gowns for healthcare professionals fighting the coronavirus outbreak. It is producing the material, called Evalith, at its Spartanburg special applications building materials plant in South Carolina.

Johns Manville engineered products president John Vasuta said, “Given the urgent need for action, we quickly decided to build on our own capabilities and develop a coated product to supply the domestic medical gown manufacturing industry. The fabric offers superior liquid barrier performance compared to materials used for Level 1 and Level 2 medical gowns, while also providing comfort and stitch-strength.”

US: Knauf / BIMsmith project

Knauf Insulation North America has partnered with BIMsmith to provide 3D models of its leading insulation products for building product research and selection by architects. The models contain ‘key properties and data’ and integrate with Autodesk Revit building modelling software.

Germany: Supafil is ‘Red List Free’

Declare has certified Knauf Insulation’s Supafil blowing wool insulation ‘Red List Free’. The declaration signifies that Supafil contains no Red-Listed chemicals designated as harmful to health by the International Living Future Institute.

Knauf Insulation Blowing Wool business development & residential market manager Thomas Baguette said, “Our Declare label underlines the natural credentials of our blowing wool. Supafil is composed of 99% glass mineral wool and less than 1% of antidust and antistatic.”

Switzerland: Sika produces masks

Sika has begun production of facemasks at its Dexel building materials plant in Les Salles du Gardon, Gard department. Sika says that the plant produces 15,000 masks/day ‘almost entirely from Sika products’. It will distribute the masks around customers and employees and has received an order for 165,000 masks.

Sika Europe, Middle East and Africa regional manager Ivo Schädler said, “We find ourselves in an exceptional situation that confronts us with new challenges on an almost daily basis, especially in those countries worst hit by coronavirus. Our top priority is to protect our employees, their families, and our customers – which also includes finding unconventional ways of helping them.”

Canada: New Rockwool product

Rockwool North America has released its Safe’n’Sound stone wool insulation product in a new thickness of 15.24cm (6”) in Canada. The new thickness offering is planned to help reduce installation time. The product is designed for fire insulation and sound dampening between floors.

Australia: Award for Somerton plant

The Green Building Council of Australia has awarded Kingspan’s Somerton phenolic foam insulation plant for ‘leadership in sustainability, innovation, and promotion of more energy efficient building stock across nine impact areas.’

Green Building Council of Australia CEO Davina Rooney said, “What sets this project apart is that it is the first manufacturer to pursue and deliver performance certification, representing world leadership in sustainable building practices.” Kingspan Insulation Australia managing director Scott Gibson said, “Our facility in Somerton proves that with some effort, and using the right products, we can build better manufacturing buildings in Australia, not just offices and residential. I hope that more manufacturers decide to take this challenge on in the future.”
SIG and Kingspan have agreed to terminate the sale of SIG subsidiary Building Solutions (National) to Kingspan for €42.1m. The Competition and Markets Authority (CMA) had referred the deal for a Phase 2 Investigation on 21 April 2020. SIG said that it anticipated the investigation to conclude in October 2020. The deal will expire on 7 July 2020. Due to ‘prevailing market conditions,’ the parties terminated the agreement.

SIG said, “It has not been possible for the company and Kingspan to agree commercial terms for the extension of the agreement.”

Germany: Knauf is ‘safe as houses’

Knauf Insulation has launched its ‘As Safe As Home’ marketing campaign to promote health and safety issues in relation to new working environments created by the coronavirus pandemic. Chief executive officer (CEO) Jean-Claude Carlin said, “Safety has always been our first priority but when the crisis hit our business, it inspired the best in us. We learnt to create places that are safer than ever. Safety had to be everywhere for everyone. At home. At work. 24/7. Having achieved so much, this approach can now never be compromised.”
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T he Covid-19 pandemic is unprecedented in modern times, both in terms of its effects on individual health and the global economy. While SARS, MERS, Swine Flu and Ebola outbreaks have been devastating for those affected, there has not been a full-blown pandemic since 1918-1919. Thankfully, we are extremely unlikely to reach the estimated 50 million deaths seen due to that pandemic during the current outbreak, although the situation remains very bad indeed.

There are many reasons why we are better prepared for a pandemic in 2020 rather than in 1918 and many lives have been saved as a result. There has been a Century of medical breakthroughs and, on the organisational side, we have the WHO and the UN. The EU has marshalled over US$10bn of donations to help fund the research needed to beat the pandemic.

However, more has happened in the past 20-30 years than in the prior 70-80 years that enables our society to continue to function in the face of the pandemic, albeit at a reduced capacity. Firstly, modern modelling and behavioural research continues to inform our knowledge of how to not catch Covid-19, adding to previous advice on social distancing and the need to close schools and workplaces, first seen in 1918-19.

Once someone is infected however, modern healthcare systems have, broadly speaking, not been overloaded through careful planning and allocation of resources. Antigen (do I have it now?) tests have been developed at incredible pace. Gene sequencing allowed us to study the virus to screen drugs that may limit its spread and/or effects. This recently led to the approval of the anti-Ebola drug Remdesivir being approved for extreme Covid-19 cases in the UK. While the world still awaits a reliable antibody (did I have it before?) test for Covid-19, it is generally accepted as being a matter of time. Having been warned in early 2020 that a vaccine may be 12-18 months away, we are now told of candidates that could be available in September.

To illustrate the pace of change, one study will sequence the DNA of 35,000 Covid-19 patients to find out why some are asymptomatic and others have multiple organ failure. For comparison, the original Human Genome Project lasted from 1990 to 2003. The above approach would have been a non-starter just a few years ago. In our time-sensitive efforts to learn more about the virus, rapid and (relatively) inexpensive research has already saved many lives.

Also in the medical sphere, diverse manufacturers have been able to design and supply medical ventilators in weeks rather than years. They used computer-aided design and cheap, ubiquitous broadband. The latter has enabled many office workers to continue in their jobs in a way that would have been impossible prior to 2010. This has prevented economic damage being even more severe. Meetings have migrated online and wallboard and insulation plants have operated with skeleton staff. Indeed, remote connections now allow equipment suppliers to commission systems from off-site locations.

The internet has also been crucial to limiting transmission, and hence deaths, by providing social outlets. After a few weeks of lockdown, everyone misses their friends and family, even with social networking and video calls. Imagine the temptation to visit them in the pre-smartphone world! This would likely have led to lower lockdown compliance and problems with enforcement. Mental health has also taken a knock during lockdown. We should be grateful that discussing it is no longer taboo in many countries.

Modern connectivity has also ensured that supply chains have broadly avoided major disruption, including in the gypsum and insulation sectors. After an initial ‘wobble’ brought on mainly by panic buying, deliveries have reached supermarkets and pharmacies as planned, while online orders zoom around the streets.

Even when people have to venture out of the house, many can walk through an automatic door and pay contactlessly, in many cases not even coming face to face with a cashier at all. While we shop and exercise, our anonymised smartphone tracking provides a proxy for individual movement that feeds directly into governments’ calculations of the crucial virus reproduction (R) rate and, hence, their anti-virus measures. Phone Apps could yet help us navigate back to normality.

So, while ‘Lockdown 2020’ and its aftermath continue to have very detrimental effects on so many aspects of our lives, it will not be as long, fewer people will die and the economic fall out will not be as severe, as in a hypothetical ‘Lockdown 1990.’ Thankfully we are not faced with Covid-19, rather than Covid-89.

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Next issue: September 2020
Distribution: Virtual Global Insulation Seminar & Exhibition

Advertising deadline: 28 August 2020
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