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Tank containers ship the MCH from the AHEAD hydrogenation plant in Brunei to a dehydrogenation plant in the Keihin Refinery, Kawasaki (pictured at foot of page)



Tanks behind landmark hydrogen chain project

Tank containers are at the core of what is being hailed as the world's first international hydrogen supply chain for power generation.

At the end of May an important milestone was reached for Japan's Advanced Hydrogen Energy Chain Association for Technology Development (AHEAD) project.

AHEAD announced that it had started supplying hydrogen separated from methylcyclohexane (MCH) to fuel gas turbines run by Mizue Power Station.

Tank containers are used to ship the MCH from a hydrogenation plant built by AHEAD in Brunei. From Brunei the tanks are carried by container vessel to port of Kawasaki, Japan, and then transported to a dehydrogenation plant in the Keihin Refinery of Toa Oil, also in Kawasaki, which is midway between Tokyo and Yokohama.

At the supply end, the Brunei plant takes liquefied natural gas (LNG) from Brunei LNG Sdn Bhd. The hydrogenation plant then produces hydrogen and repackages it in the form of MCH, a stable

compound used in applications such as correction fluid, which can be transported over long distances using conventional commercial shipping.

Currently, five ISO tanks are shipped every week, each carrying 20,000 litres of MCH.

The main advantage of converting hydrogen to MCH is that it can be transported in commodity tanks rather than more expensive gas or cryogenic units. In addition, shipping the product in containerised form obviates the need for dedicated loading and unloading infrastructure associated with parcel tankers. The tanks can be simply offloaded at any standard quayside that has container handling equipment, even just a mobile harbour crane with a spreader under the hook.

AHEAD was launched in 2017 by a consortium between Japanese plant engineering firm Chiyoda, shipping line NYK and trading houses Mitsui and Mitsubishi, with the aim of building an international supply chain of hydrogen to fuel thermal power plants

in effort to combat global warming.

AHEAD receives a subsidy from Japan's New Energy and Industrial Technology Development Organization (NEDO).

As part of the project, Chiyoda developed its SPERA technology which allows hydrogen to be handled in a liquid state at ambient temperature and pressure. This is done by chemically fixing hydrogen to toluene allowing it to be converted to MCH. And in a classic example of a circular economy, toluene separated from MCH is returned to the hydrogen supply location, where it is reintegrated with hydrogen and transformed once more into MCH. The same toluene can be used repeatedly as a hydrogen carrier.

A Strategic Roadmap for Hydrogen and Fuel Cells established by Japan's Ministry of Economy, Trade and Industry in March 2019 states the importance of hydrogen-fuelled power generation, along with the transition to renewable energy, setting the commercialisation of hydrogen-based electricity as a goal to be achieved in 2030 in its Basic Hydrogen Strategy and Fifth Basic Energy Plan.

The supply of hydrogen to gas turbines marks the first consumption of foreign-produced hydrogen for power generation in Japan, raising the potential for mass consumption of hydrogen in the electricity sector.

At a press conference in June, AHEAD president Takakazu Morimoto told reporters: "We want to use hydrogen extracted from renewable energy in the future and establish a strong supply chain. Our aim is to transport 350,000 tonnes of hydrogen a year to power a 1-gigawatt hydrogen-fired power plant in 2030."

NYK said it will not only transport hydrogen but will also work to develop technology for using the element as a marine fuel. "The company will also seek to grasp business opportunities related to hydrogen, which is said to be the ultimate clean energy, and be involved in the entire supply chain," a spokesperson said.



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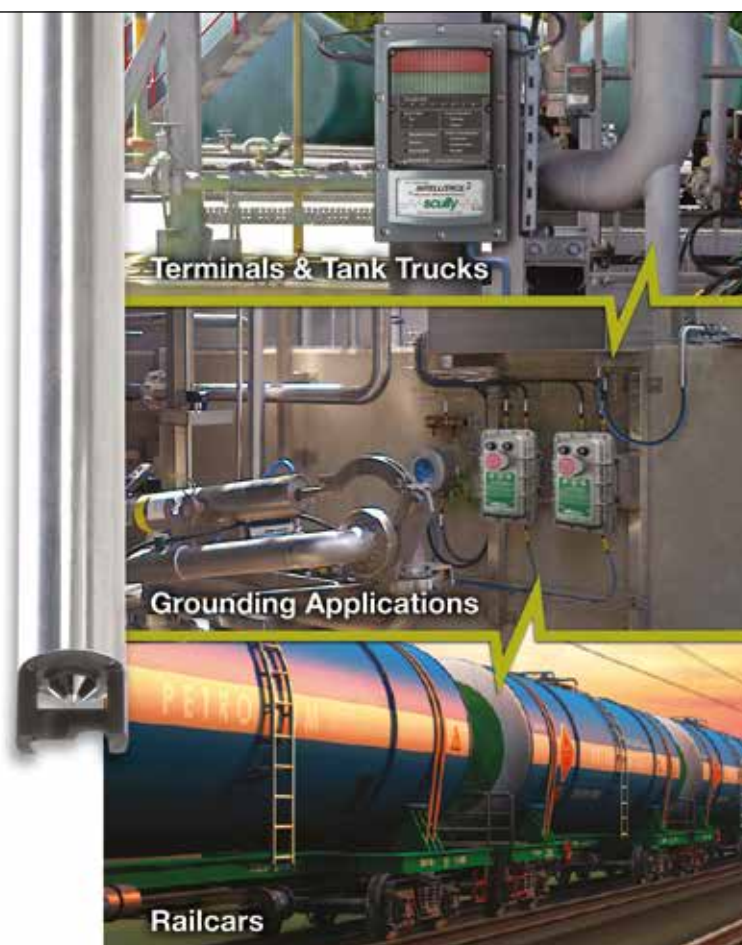
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Stolt Tank Containers



IMT's smart solar moves

Intermodal Telematics (IMT) has in a short period of time established itself as a world leading independent telematics solution partner for the tank container industry.

Offering smart sensor technology and a web application with which operators, container manufacturers, lessors and shippers can obtain the insights they need to improve their delivery performance, operational efficiency and safety, Netherlands-based IMT is 100 percent independent, with only private Dutch investors.

Speaking to *Bulk Distributor*, the company's managing director, founder and largest shareholder Dethmer Drenth says the IMT team based in the Netherlands and Spain is backed by entrepreneurial management with significant industry experience.

IMT's latest innovation is the new solar-powered Communication and Location Terminal (CLT20-Ex).

Drenth is emphatic: "This is a game-changer," he says. Such a claim is often made for new technologies, but in the case of the CLT20-Ex it looks justified.

The key is in the solar power for tank containers, wagons and other assets that do not have their own power source. When a sensor's power is limited by the durability of the battery before recharging is needed the number and frequency of data grabs becomes a balancing act, explains Drenth.

However, with solar power the CLT20-Ex offers near real-time, unlimited data. Data can now be sent every five minutes when a tank container is loaded and in transport, and every eight hours when unloaded and in situ.

"Our CLT20-Ex monitors a tank container's geographical location, its motion (shock and normal movement) and the temperature of the device," Drenth continues.

On top of that, it also serves as a central hub for all IMT sensors installed on a tank container. The measured values from these sensors are sent wirelessly to the CLT20-Ex. An overview of the collected data, like

Using solar power the CLT20-Ex offers near real-time, unlimited data



location, temperature, pressure, liquid level, liquid residue, and heating temperature can easily be accessed remotely by using IMT's web application.

This includes data such as an exact timestamp when the tank enters or exits the customer's premises or indeed a cleaning & repair depot allowing for more accurate estimated time of arrival (ETA).

The terminal switches on at configurable intervals, allowing for maximum insight. "Because the data is sent via a built-in quadruple modem, you get a nearly real-time and worldwide overview of your fleet and its cargo," he adds.

The CLT20-Ex also provides worldwide connectivity because of its two modems – a Pentaband 2G/3G modem and a 4G/5G (LTE-M, CAT M1 and NB-IoT) modem. This is important, because wireless protocols currently sit in a halfway house. 2G availability is rapidly declining and 3G will no longer be available after 2025.

However, 4G and 5G are not yet global, only scheduled to become so from 2023. That is why

IMT decided to connect all four systems in order to

maximise the sensor's connectivity.

A further improvement is a more powerful battery to store the solar energy, such that instead of replacing

the battery every two to three years, the battery is now guaranteed for at least 10 years.

"Customers want to know the sensor data and any changes straight away for quality and safety reasons," explains Drenth. "In addition, they want precise entry/exit times at customer facilities or depots to allow for correct invoicing of waiting time periods. And by installing a longer lasting battery, our customers can also reduce significantly their environmental footprint."

Thanks to ATEX IIC and IECEx certifications, the CLT20-Ex can be used to transport both non-dangerous and dangerous goods.

During the COVID-19 lockdowns in various countries IMT says it saw significant growth in interest in its solutions, possibly because customers had the time to think more seriously about digitalisation.

Drenth speculates that users could see the benefits of telematics as they could read cargo and sensor data on their computers instead of being physically present alongside the tank container.

Smart co-operation

The launch of the CLT20-Ex followed an announcement that IMT is to work with NTtank, the world's second largest ISO tank manufacturer, to promote 'smart' co-operation

Currently, the co-operation takes the form of choosing IMT's so-called 'Pre-Kit' to install on all NTtank tank containers, and at no extra cost for newbuilds. In addition, NTtank will become the exclusive sales agent in China (excluding tank container manufacturers) for the complete telematics solution of IMT.

The IMT Pre-Kit includes a digital thermometer (Type WT17-Ex) and a bracket for easy installation the Communication and Location Terminal (CLT). Installing the Pre-Kit effectively converts a tank container into a smart tank in five minutes, at any

given moment. With the installed Pre-Kit, including the digital thermometer, the temperature can be checked in °C and °F with an accuracy of 0.3°C and no calibration is ever needed. IMT holds a patent on this non-calibration technology.

At the same time, a customer can upgrade its tank container at any time by installing the CLT17-Ex on the CLT-bracket and paying an activation fee for the WT17-Ex digital thermometer. Drenth says the installation of the CLT is straightforward; simply screwing it with two bolts onto the CLT bracket which will be pre-installed by NTtank on every new unit.

"NT-Tank clients are very happy as the Pre-Kit prepares their tank easily for the future deployment of telematics," he says. "We are also seeing more interest from customers for other sensors than the thermometer, including full-empty, pressure, residue, etc."

While NTtank has no exclusivity for installing the Pre-Kit on a newbuild tank – IMT sells its products to all manufacturers, such as CIMC, Singamas, Welfit-Oddy, CXIC, etc – the tank builder is exclusively responsible for IMT sales in China.

More to come

Looking to the future, Drenth makes the point that currently 46 out of IMT's 70 staff are on the engineering side of the company - 11 hardware engineers and 35 web application engineers. Therefore, it is devoting lots energy and resources to new developments.

"Currently, we have 15 sensors of which the Full-Empty sensor, the Residue sensor and the Cryo sensor (measuring upper pressure and exact load) are seeing lots of interest from the market," he says. "We are now working on six new sensors, including one for leakage, a Rochester Magnetel sensor (to monitor an industry-leading liquid level gauge), a bursting disc sensor, a sensor for loaded and unloaded chassis, and a heating bay sensor."

IMT is also looking at a solution for IBCs. This will likely be for metal containers first, before developing a solution for plastic IBCs.

The next focus is on the rail sector for which IMT already builds a load-unload sensor that measures the load/overload of a rail wagon, and the gas sector where the company has already started with its cryo sensor.

Finally, Drenth says the firm's 'IMT Rental' service is now getting a lot of attention as this SAAS (solution as a service) has no upfront payment for hardware. All products and services (hardware, web application, communication, updates) are bundled in one monthly fee. This means that moving into telematics is no longer a Capex decision, with its associated high investment that might have to be agreed by company boards, but becomes an Opex/M&R cost with a monthly fixed fee.

www.intermodaltelematics.com



Data can be sent every five minutes when a tank container is loaded and in transport, and every eight hours when unloaded and in situ

Nexxiot, Cargo Wagon join forces

Nexxiot and Slovakian lessor Cargo Wagon are teaming up for digital rail cargo transformation.

As of May, Nexxiot started equipping Cargo Wagon fleet with its IoT sensors that enable digital monitoring. The first upgraded 1,200 digital wagons out of a total fleet of 9,000 will be provided to customers in Poland and Austria.

Cargo Wagon's COO Pavel Holomek said: "The digitalisation of rail freight became daily reality for most of our customers and thus a priority on our marketing agenda. We will work closely with Nexxiot on improving maintenance of our railcars, fleet management and delivering value added

services to the end-customers."

The IoT sensors developed by Nexxiot, called Globehopper, provide a large amount of data. In addition to this gateway device, the company has developed a software solution to analyse the information generated. It offers the complete infrastructure with a cloud-based platform for processing the data collected. For Cargo Wagon, this means an optimised service by bringing transparency into critical supply chain events.

Nexxiot's CEO Stefan Kalmund commented: "Cargo Wagon is a key player in the freight wagon market in central and eastern Europe. The introduction of our Globehopper solution and the

Nexxiot Connect Cloud will create added value for the lessor. In addition, we will support the company as a partner with our expertise in the digitalisation of the rail sector. Our knowledge in making use of data from connectivity devices will also be of great benefit for Cargo Wagon."

The service initially includes features like location-based services, shock detection monitoring and maintenance service packages. The project will also include metadata libraries so that customers can store important wagon details in the Nexxiot Connect Cloud.

www.nexxiot.com



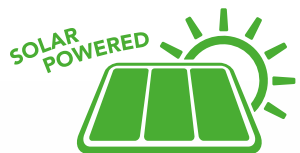
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AnQore optimises logistics using Savvy

While most truck fleets are already equipped with telematic technology, this has continued to be an exception for rail and ship transport.

For this reason, industrial companies often do not know where, and in what condition, their goods are at a given point in time.

AnQore, a Dutch manufacturer of specialised chemical products headquartered near Maastricht, wanted to change this situation. AnQore is one of the first companies in the sector to adopt an integrated telematics system for all of its several hundred tank containers and tank wagons.

By adopting the Savvy Telematic Systems solution, AnQore has optimised both fleet efficiency and shipment safety.

The chemical company attaches great importance to delivering its products, eg, liquid acrylonitrile and acetonitrile, in time, on time, and safely to its customers. This includes being in a position to provide customers with accurate information, for example when customers inquire about the status of their shipment. Moreover, good information about equipment location and expected arrival time is needed when shipments are returning to the AnQore plant. "Our customers have a few days' buffer to unload the tank containers and wagons and ship them back," explains Peter Kehrens, logistics purchasing & implementation manager at AnQore.

"In the past we were only able to estimate roughly when the containers would arrive at our plant. That's why it became clear that in order to allow our fleet to operate at optimum capacity, we would need a better overview. Modern sensory technology opens up a whole new realm of possibilities. For example, shipments can be monitored in real-time and processes can be co-ordinated with customers and logistics partners more efficiently. So, we went out to look for a telematics system. We found Savvy to be a supplier that suits us well."

Cloud platform

The chemical supplier has installed an ATEX and IECEx certified Savvy CargoTracExR telematic device in each of its tank containers and tank wagons. These small boxes, which can be installed in a few easy steps, contain robust and reliable high-tech electronics. In addition to sensors for location purposes and to measure a range of



By adopting the Savvy Telematic Systems solution, AnQore has optimised both fleet efficiency and shipment safety

variables, they contain a long-lasting battery and a module for data communication.

The latter sends encrypted data via the mobile network to the Savvy Synergy Enterprise platform. This private cloud platform is connected to AnQore's SAP system via an interface. The corresponding plan data for each new order – departure time, stops along the route, etc – are transmitted automatically from the SAP-System to the Synergy Portal. Using their account, employees log into Synergy Enterprise, from where they can check the status of all transports in real time and can have them displayed on a map overview to see where a particular shipment is located at that particular moment.

In case the incoming telematic data should for once differ from the plan data, the Savvy portal sends an alarm notification per email. This way, AnQore employees know immediately that something is wrong with one of the shipments – either a delay or safety-related event, such as for example a strong shock that could damage a tank container. This enables logistics planners and customer service representatives to immediately take action.

"An exceptional situation during the implementation phase clearly

demonstrated the advantages the new system gives us," reports Kehrens. "In spite of week-long strikes in France from November 2019 to January 2020, we were able to maintain an accurate and up-to-date overview of our fleet. This put us in a position to keep our customers informed continuously and supply them with goods, where other suppliers could not."

Fleet planning

In addition to improved customer service, the solution makes it possible to make the best use of fleet capacity, thereby reducing costs. Due to the fact that the plant where AnQore produces its liquid goods cannot be stopped easily, it is necessary to have enough containers and wagons to fill on site. At the same time, it is important to avoid having empty wagons and containers on site for a long time.

Both targets can now be met more easily by using telematic data. Logistics planners can react quickly to short-term fluctuations in fleet planning and take measures in the mid-term to optimise processes. Since AnQore always notifies customers of the exact arrival time, the customer can also make more precise plans and unload the shipment more quickly. Once the customer sends the tank wagons on their return route, Savvy's software calculates when they will arrive at the AnQore plant. This makes smooth just-in-time production possible for customer as well as AnQore.

Increased safety

Because AnQore's chemical products are hazardous goods, shipment safety is also a very important consideration. Savvy telematics devices

are certified both in accordance with the IECEx international standards and the ATEX European standards and approved for all hazardous zones.

"It is our vision and goal to be the most reliable and safest supplier in our competitive environment. Sensors enable us to track shipments with precision. And this makes it possible to monitor proactively our adherence to local, and future regulations, as well as to EU laws applying to the shipment of hazardous goods, such as the Basic Network (Basisnet) in the Netherlands," says Kehrens.

To ensure safe shipments, the tank containers have to be in perfect technical condition, something that AnQore previously checked every six months. This process can also be improved with telematics. Since the sensors measure service performance accurately, it is possible to provide condition-based maintenance, in other words, check-up dates are planned in accordance with the tank container's and/or chassis' actual mileage, instead of according to a rigid schedule.

A wagon operating to capacity will require maintenance earlier than a wagon operating at less than full capacity. This is both a safety and efficiency advantage.

As a result of the completed roll-out in March this, all sales and customer service representatives are now using the Savvy Synergy Enterprise portal. The next step for the chemical company will be to get long-standing customers on board: selected customers will obtain their own access to the Savvy portal, so that they will constantly have an overview of their orders; at the same time this will decrease AnQore's

customer support service workload.

"It is a lot of fun to continue to tap the potential of the solution," Kehrens continues. "From the start, Savvy has proven to be an excellent choice. Both hardware and software fully meet our expectations, and we are very happy with the support Savvy has provided. The company fully understands our specific needs, has advised us accordingly and adjusted the platform as we have envisioned it. This has enabled us to take a big step towards digitising and automating our logistics processes."

Savvy CEO Aida Kaeser added: "After all these years of working together, we have come to know and appreciate AnQore as a very innovative and highly professional company. All the more reason for us – as AnQore's exclusive partner – to be happy to support AnQore with the implementation of its digitalisation strategy. We will also continue to put all our efforts into jointly maintaining our lead on the market through innovation."

www.savvy-telematics.com



Savvy telematics devices are IECEx and ATEX certified

Abbey, Microlise look at lessons from lockdown

The roads in many countries became noticeably quieter during the pandemic as swathes of the population stayed home and many businesses closed their doors.

But what, if anything, has been the impact on HGV operators who delivered critical supplies during this time and what can we learn?

As far as the UK is concerned, Abbey Logistics and Microlise began analysing Abbey's journey metrics for its fleet of 550 drivers, 400 trucks and 550 bulk liquid and powder trailers with initial results covering the period 30 days prior to and 30 days post, the UK lockdown.

Abbey Logistics is the UK's largest road tanker logistics company for bulk food powders and liquids and has a growing reputation and fleet in the plastics, construction, minerals, animal feed and non-hazardous chemicals sectors.

The group also provides warehousing and materials handling services on the Wirral in the UK, and multimodal transport solutions throughout the UK and Europe.

CEO Steve Granite gave the background the data project with Microlise, a UK-based firm specialising in telematics and journey management.

"We have all been trading in incredibly challenging circumstances, but as a result of quieter roads, we have seen an improvement to



Across almost every key metric Abbey says it registered positive results

customer service and savings in repair and maintenance and an increase in miles per gallon (MPG) as well as a near 6 percent increase in the average speed of our fleet," said Granite. "This means the fleet is doing more with less and our assets are much more productive and require less repair and maintenance thanks to more consistent driving.

"To get a better understanding of these benefits, how they could be sustained and what it could mean to Abbey and other operators as traffic and congestion increases, we began a

project with Microlise to analyse the data to share with the sector, which will hopefully help all hauliers as we come out of the crisis and potentially also help influence decisions around traffic management and congestion in the future."

Quicker and safer

Among the key results (see graph), it was found that average speed improved group-wide by 5.66 percent, from 36.6 mph to 38.8 mph. MPG increased by 2.6 percent, while CO2 emissions saw a percentage improvement across the group of 3.97 percent from a base point in February 2020.

In terms of driving behaviour and performance, instances of acceleration greater than 95 percent decreased from 5.61 percent to 4.53 percent. Engine idling also decreased from 2.51 percent to 2.04 percent, while 'greenband' driving (where the vehicle is being driven within the most efficient and economical RPM range for that vehicle type) increased from 90.39 percent to 91.52 percent.

Use of cruise control (which can be seen as indicator of stable driving conditions) increased from 45.72 percent to 53.15 percent.

In addition to its work with Abbey, the Microlise Data Science & Operational Research team analysed recent HGV and light commercial vehicle (LCV) movement to identify changes in movement patterns.

Two metrics stood out – namely a 6-7 percent increase in MPG and a 37 percent reduction in unsafe driving behaviours, including over-speeding and harsh braking. For a fleet owner of any size, the capital cost savings to be realised across these two areas alone would be significant.

When this wider data set is included average MPG improved by 6 percent. Microlise said it observed an increase starting on 16 March which peaked in the week starting 6 April then stayed relatively stable at +6/+7 percent above the baseline, with this increase driven especially across operators travelling shorter distances and making more stops.

There was also a 37 percent decrease in the number of over-speeding events per km, with a decline starting from 23 March, which reached its lowest level in the week of 13 April (-37 percent). The data showed that it then went up to -31 percent compared to the baseline, perhaps as roads once again become busier.

The number of harsh braking events per km dropped by 37 percent. This showed a similar pattern to over-speeding data, with a decline from the week of 9 March, reaching its lowest level during the week of 6 April. It also then started rising again to -29 percent.

From 23 March there was a decrease in mileage. It dropped to its lowest level during the week of 6 April with a fall of 27 percent, but then moved up to about -16 percent.

Lessons

So what can be learned from the data analysis to apply from now on? And, importantly, are there any practical steps that the logistics sector and government can take that help maintain these positive environmental and commercial benefits?

According to Steve Granite, the sector should act on these indicators. "Across almost every key metric of vehicle performance, traffic movement, driver safety and performance, fleet utilisation, repair and maintenance and customer service, we have registered positive results.

"Increasing average speed and miles per gallon contributes to significant cost savings for fleet operators of any size. When you combine this with improvements across driving behaviour and environmental impact, the results are compelling.

"We have a perfect opportunity to rethink our operations model and do things differently," Granite added. "Longer delivery windows and more night-time deliveries, provide for a more cost-effective and reliable customer service. We can also support our professional drivers to perform at their best, reducing stress levels and keeping them safer while minimising road traffic incidents and any resulting asset damage.

"If we are prepared to shake-up our post-Covid 19 version of normal, we will all reap the rewards. We partnered with Microlise, to take as much of the guesswork out of our business analysis as possible. We now have concrete intelligence that we can and should act on.

"It is clear that data will continue to play a key role in supporting our sector as it returns to a new normal and it makes commercial and environmental sense to act on this to support hauliers and come out of this crisis with stronger and more effective operating models," he concluded.

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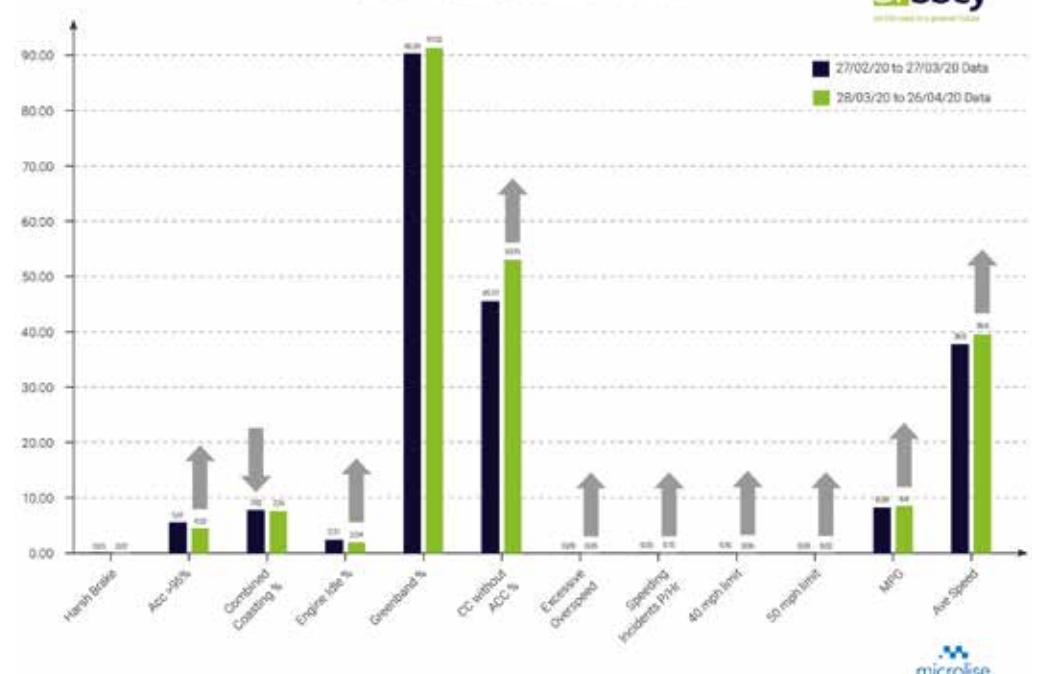
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GROUP AVERAGE DATA BY DRIVER



Packaging companies focus on sustainability

In light of growing concerns about plastic waste and packaging in particular, Bulk Distributor talked to Mauser Packaging Solutions' vice president of sales Andreas Schubert on how the company is looking to increase customers' use of reconditioned packaging and packaging that includes recycled content

In a recent McKinsey report, the growing trend towards more stringent regulations on packaging reuse in various parts of the world was highlighted. In fact, 60 percent of the commitments FMCGs/CPGs are making to support sustainability involves recycling, increasing recyclability up to 100 percent. While this naturally focuses more on consumer packaging, it is a trend that is being increasingly seen in the industry.

Mauser Packaging Solutions promises unparalleled packaging performance and innovation, to 'redefine sustainability for customers'. Its product portfolio consists of new packaging made from recycled content, packaging made from virgin materials as well as reconditioned, reused and recycled packaging.

The company, which since 2018 comprises BWAY, Mauser Group, National Container Group (NCG) and Industrial Container Services (ICS), has already achieved significant results. In 2019 alone, Mauser Packaging Solutions returned over 10 million reconditioned containers to the market, helping their customers keep over 1.5 million tonnes of greenhouse gases out of the atmosphere.

Good for business, good for the planet

To promote a circular economy and close the industrial packaging life cycle loop, the company has built a global network of facilities where packaging can be reconditioned or recycled and made into high quality post-consumer resin (PCR). Together, with a global collection system, customers can effortlessly return empty, used industrial packaging. By returning empty packaging, the value is increased, and the life cycle is extended. Most importantly, waste is diverted from landfills, resources are saved, and the impact on the environment is reduced.

Mauser Packaging Solutions uses in-house generated PCR in its Infinity Series product line. This product portfolio enables customers to reduce their ecological footprint and adhere to regulations in place that prescribe a certain use of PCR-materials, with the EU-Ecolabel valid for several branches.



In 2019 alone, Mauser returned over 10 million reconditioned containers to the market

Andreas Schubert says: "Through our global network of facilities and comprehensive product portfolio, we have taken a pioneering role when it comes to the use of recycled materials for industrial packaging. By transforming the manufacturing process from linear to circular, we are able to efficiently provide our customers with packaging bundles that include new packaging along with reconditioned packaging, giving packaging a second life and reducing its impact on the environment."

Customers driving demand

When asked to what degree customers are driving the demand for sustainability, Schubert replies: "Overall, sustainability is a major trend for every business and naturally, everyone is talking about



Mauser has built a global network of facilities where packaging can be reconditioned or recycled and made into high quality PCR

it. An increased focus on sustainable packaging is not only the right thing to do, it also supports innovation and creates partnership opportunities between filler, packaging manufacturer and end-user of industrial packaging."

Schubert continues by stating how diverse the focus is on sustainable packaging: "Companies are at varying points in their sustainability journeys and we support our customers with tailor-made solutions matching their individual requirements and sustainability goals. Collaboration along the supply-chain creates value for all involved parties, including the environment and will be one of the keys to success."

Long term goal

As the importance of corporate social responsibility continues to increase, sustainable products and services are becoming even more attractive to customers and consumers.

"The main challenge remains to increase the awareness and acceptance of sustainable products and services on a large scale. By working together, we can all experience the benefits of a circular economy and reduce our environmental footprint," Schubert comments.

"The availability of reconditioned packaging depends on the return of used packaging into professional hands. Reuse of reconditionable packaging must be the first priority as it provides the most economical and ecological value. Unfortunately, we still see a significant amount of suitable packaging ending up in streams that avoid reuse. The more empty packaging that comes back to be reconditioned, remanufactured or recycled, the more sustainable packaging solutions will be available to the market. If there is only demand for reconditioned packaging, without resource management ensuring that empty packaging is delivered back to professional reconditioners, it's a one-way street," says Schubert.

"In order to get a true circular economy in place, used packaging must be seen as a raw material as well. The challenge there is that the supply chain consists of several partners, including the packaging manufacturer, B2B-customer, and B2C-customer. A circular economy involves all parties, and awareness of this is needed to ensure that the packaging is returned by the last one in the chain," he adds.



Mauser uses in-house generated PCR in its Infinity Series product line

Looking ahead

Although Mauser Packaging Solutions already boasts a large portfolio of PCR-products, the company continues to expand this product portfolio and increase global availability, as it is key for packaging suppliers to be present where customers are located as well.

As well as providing solutions for customers to reduce their carbon footprint, Mauser Packaging Solutions is also striving to reduce its own by increasing process efficiency at production sites, continuing to reduce resource demand and increasing its use of renewable energies where possible.

www.mauserpackaging.com



Used packaging must be seen as a raw material as well



Varibox makes material recycling a priority

Bulk Distributor spoke with Laurent Boulet, junior UK & Ireland sales representative at Promens Montoir about the company's close co-operation with customers to ensure that sustainability goals are reached



Laurent Boulet

With material recycling being a priority for Promens Montoir, which often loses ownership of its packaging products once sold, it is putting actions in place to increase the number of products recycled.

According to Laurent Boulet: "We are developing projects to close the loop and encourage our products to be sent back to us

after their active lifetime. This way, we will keep sight of our products across their entire lifetime and will be able to manage their end-of-life."

With many of the company's customers being European chemical distributors with clear environmental targets on carbon footprint, packaging waste and business circularity, growing environmental awareness from the general public causes a chain reaction that is driving the market requirements for sustainable options.

It is for this reason that the company is developing solutions in close co-operation with its customers, to enable them to achieve their sustainability goals of decreasing packaging waste and overall energy required in the supply chain.

With customers regularly asking about the environmental benefits of reusable IBCs, and how using them can help to achieve buyers' sustainability targets, the company strives to answer questions with facts and examples. This is where the Varibox IBC products are used, to show the sturdiness and reliability of reusable packaging.

Boulet comments: "According to the Chemical Business Association (CBA), packaging is only obligated on its first trip through the packaging

chain, once it has been emptied by the end-user it can be used again in its original form and for the same purpose without picking up any further obligation, allowing our customers to avoid additional costs related to Producer Responsibility obligations. This also helps customers that use Varibox products to preserve energy, material, labour and capital costs while greatly reducing waste."

Benefits

Aside from there being little impact on the supply chain due to there being no additional costs related to reverse logistics, using reusable IBCs means that chemical distributors are relieved from expensive, time and space consuming end-of-life management.



Every Varibox SC has a lifetime of 10 years

Using data provided from chemical distributors who use the Varibox products, Boulet says that the total value of ownership (TVO) of Varibox gives a result of 64 percent hazardous waste savings along its entire lifetime of 10 years.

Aside from supplying IBCs that are designed for reuse, Boulet shared important steps that the company is taking to show its commitment to sustainability.

"Our parent company, Berry Global, has announced our sustainability strategy, 'Impact 2025', outlines an intention to reduce 25 percent of our greenhouse gas emissions by 2025, versus the company's 2016 baseline. We also joined the Alliance to End Plastic Waste in January 2019, as a founding member. Finally, in June 2019 the company became a signatory of the New Plastics Economy Global Commitment.

"In the future, we aim to improve our and our customers' environmental footprint by closing the loop and managing the end-of-life of Varibox products, effectively recycling them, allowing us to incorporate the recycled material into new Varibox products."

www.rpc-promens.com



Customers that use Varibox products can preserve energy, material, labour and capital costs while greatly reducing waste

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Quality cross-bottling

In 1976 Schütz started reconditioning used IBCs, and since 1980 has guaranteed the worldwide collection of used industrial packaging.

The prerequisite for this well-functioning circular economy is a high capacity, closely linked collection system with 50 production and service locations around the globe.

Schütz says its Ticket Service has become the largest producer-owned network for the collection and reconditioning of emptied IBCs. The emptied IBCs are fitted with original inner bottles and components produced in a globally standardised, eco-friendly process. The result is a 100 percent compatible Recobulk in a standard specification made from a Schütz Ecobulk.

Now, to expand the service Schütz is offering cross-bottling –reconditioning IBCs from other producers – to the same high standard.

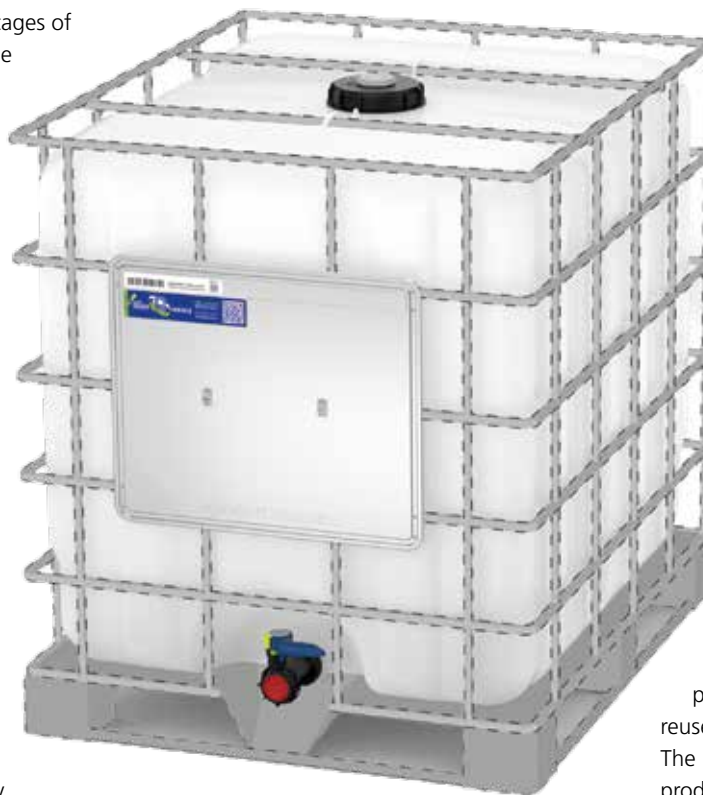
As with the reconditioning of its own IBCs, collected containers of other brands are evaluated according to the last filling product. The basis is a comprehensive internal product database with more than 200,000 evaluated filling products which is constantly updated. Possible residues are removed and appropriately disposed of. Subsequently the inner bottles are replaced.

The recyclable grid cage of the other producer is extensively cleaned and if necessary repaired, and then fitted with a new universal Schütz inner bottle. The specially developed inner bottle has

been technically adapted to fit into the cages of numerous IBC models on the market. The inner bottle which was removed is recycled in an internal recycling system from which high quality HDPE recycle is generated and then used within the closed cycle to produce plastic components such as corner protectors and plastic pallets for the IBCs.

Furthermore, the Recontainer is equipped with a new label plate which has also been optimised for the different grid cages, as adhesive residues from labels are unavoidable on the old label plates when they are only cleaned. Further components such as screw caps and discharge valves are replaced with new original parts during the inner bottle replacement process. Thus, the packaging specialist guarantees the highest quality in cross-bottling.

The advantages include the fact that customers using the Recontainer can rely on Schütz's proven standards when using this packaging for their filling products. The IBCs are delivered as a single-type standard specification. At the same time Schütz is contributing to the conservation of natural resources through the eco-friendly reconditioning of IBCs from other



The inner bottle which was specially developed by Schütz has a shape that has been technically adapted to fit into the cages of numerous IBC models on the market

producers.

- Once again Schütz's Brazilian subsidiary has received the 'BASF Award of Excellence'. This acknowledges Brazilian suppliers who implement outstanding projects for the optimisation of processes in the supply chain.

The award winner for 2019 was determined in three categories, Innovation, Industry 4.0 and Sustainability. Schütz Vasitex competed in the category Sustainability, against 16 other companies which were nominated for this 11th award by BASF. The company had already received the Award for Best Supplier from BASF two years ago.

CEO Luiz Francisco da Cunha and sales executive Renata Carvalho, both from Schütz Vasitex were delighted about this acknowledgement.

The reconditioning process for used IBCs and drums already starts at the BASF factory premises in Guaratinguetá, in the east of the state of São Paulo.

Schütz Vasitex has invested in facilities here for the preparation of packaging – including also contaminated agrochemical packages – already on site for the optimal reuse of components and recycling of materials. The reconditioning then takes place in their production facility with a service office in Bonsucesso-Guarulhos.

Schütz Recobulk and F1 Reco drums are produced here from recycled PE material by Schütz Vasitex. The packaging unites sustainability and performance and has been certified by the Brazilian National Institute of Metrology Standardisation and Industrial Quality INMETRO.

www.schuetz.net



Schütz's Brazilian subsidiary received the 'BASF Award of Excellence'

Greif expands PCR products

Wherever possible, Greif is incorporating post-consumer resin (PCR) into its industrial packaging products and increasing production capabilities for PCR products.

Containers made from PCR significantly reduce the need to use virgin resin — in some cases eliminating it completely — which requires less energy to manufacture and no need to divert materials headed to landfills by repurposing them into new products.

As part of its EcoBalance product line, Greif is now offering its open head 55-gallon plastic drums made with PCR encapsulated with virgin resin. This 3-layer design solves the 'odour' problem with traditional PCR drums while meeting customers' sustainability goals.

Additionally, the PCR containers reduce CO2 emissions by 30-53 percent. In 2019, Greif's EMEA operations processed 7,500 tonnes of PCR to produce almost 1 million drums, pallets and drum accessories. Those products include jerry cans, open head drums made with up to 75 percent PCR, and IBCs made with up to 60 percent PCR.

www.greif.com

www.flexitankfinder.com

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Bulk Container Packaging Industry**

Flexitank Finder platform up and running

Flexitank Finder has now launched its b2b global platform.

The aim is to offer the global bulk liquid logistics market a more sophisticated and innovative way to source flexitanks.

Several leading flexitank manufacturers from China, India and Europe have already been signed up, the portal's founders say, and discussions with several other manufacturers are at an advanced stage. Flexitank Finder expects to finalise additional partner agreements during the third quarter.

Additionally, the portal has now entered into a long-term partner agreement with Premier Bulk Liquid Alliance Ltd (PBLA).

This agreement provides PBLA members instant access to global brands at preferred volume discounts offered by appointed flexitank manufacturers.

"The response from the global market has far exceeded our expectations," said president and co-founder Horst Behm. "In the first four weeks alone following the launch, we received requests from more than 25 international companies in 15 countries to access our online global portal. We cordially invite all interested parties to subscribe to our free online portal."

www.flexitankfinder.com



More than getting by

It's been quite the ride since OEC Group's Liquid Logistics Solutions (LLS) division officially launched in August last year.

One year in, the company says its team is consistently delivering results for clients, like additional carrier space it has secured by leveraging parent group OEC's relationships and wielding considerable buying power.

Moreover, the strengths of LLS's in-house designed flexitank, the OEC Shark Tank, continue to be demonstrated through client feedback.

But one key ingredient behind LLS's early success was a friend: Jason Wright, co-founder and vice president of the Premier Bulk Liquids Alliance. The PBLA played an indispensable role by helping the division enter and form lasting connections in some of the most challenging markets.

"Our partners at PBLA have played an important role in the growth of our business, supporting us

in challenging markets," LLS managing director Lynn Stacy said. "Venturing into new markets can be complicated, but our partners at PBLA have made it so much easier."

Being in the Alliance has given OEC LLS direct insight into local markets and helped it create win-win partnerships across the globe.

"PBLA been very helpful with our growth efforts," added Stacy. "We look forward to continuing our work with PBLA as it continues to support us while we move into new territories. Our strong relationship will only get closer as our team continues its global expansion."

Led and staffed by veterans of the bulk liquid transport industry, the LLS home office is in Houston and the division's other locations are in Europe, Asia and Latin America.

www.oecgroup.com

PBLA opts for virtual networking event

The COVID19 pandemic had already obliged the Premier Bulk Liquid Alliance (PBLA) to postpone its Dubai event from June to October this year.

However, the difficulties in international travel in the coming months coupled with differing levels of security and travel restrictions in each country mean that it is not realistic to entertain the idea of a physical presence conference in 2020.

So instead the organisation has come up with the PBLA Virtual Global Network Meeting. This will take place during the week commencing 19 October, and to all effects and purposes will have the same the same content, 1 to 1 meeting opportunities, speakers (webinars), workshops (virtual breakout meetings), sponsors (virtual booths), etc, as was planned for the Dubai event.

It will be spread out over four days to cater for global time zones using the most suitable virtual conferencing software available on the market.

This way, during these times of volatility, uncertainty and complexity, industry partners will still be able to meet and network encouraging new business opportunities and exchange ideas within the safe harbour of the PBLA.

The PBLA is now present in over 40 countries and expects significant participation in the virtual event.

A physical presence network event is now scheduled for March 2021.

www.pblalliance.com



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COVID-19 and supply chains

Keith Broom, finance director at Suttons Group, looks at the impact of the COVID-19 pandemic on supply chains and logistics businesses

The COVID-19 pandemic has had a significant impact on supply chains across the globe, particularly the ISO-tank market which uses specialist equipment and relies on a balance of flows.

The impact of 'lockdowns' initially hit the manufacturers of product at the beginning of the supply chain, starting in China and then progressively impacting Europe and the Americas. A fall in supply side demand came shortly after, again cycling from Asia to the Americas. This disruption led to erratic volumes and delays in discharging tanks, which in turn lead to tank shortages in some areas.

The manufacture and usage of chemicals has not been impacted as heavily as some other sectors: demand for some products has increased, while others have remained stable and some have seen significant reductions. At Suttons, we saw an initial surge in demand for industrial alcohols and solvents, both used in cleaning and sanitising products, which were in high demand at the beginning of the outbreak to support with the immediate attempt to keep economies operating and preventing the need to lockdown.

This initial rise in demand has abated somewhat, but it is likely that demand for these products will remain higher than normal until a vaccine is available, and may continue permanently with raised awareness of the need for improved hygiene to reduce the spread of other viruses.

Many sectors have seen a continuation of normal levels of demand, for example, chemicals used in the water treatment industry and foodstuffs. Other sectors have seen a severe decrease in volume, many of which are related directly or indirectly with the transport sectors and manufacturing. As the nation adapted to working from home the demand for petrol, diesel and fuel additives fell significantly in both the road and air markets. It is likely that demand will be slow to recover and if working from home and a reduction in long distance business travel continues in the long term, these industries may never return to pre-coronavirus levels.

There was also a near instant shutdown of large scale manufacturing such as car plants, white goods, aircraft, and parts, many of which use chemicals directly, or use plastics which are made from chemicals. Some of these plants have restarted limited production, but again, recovery will be slow against a background of increased unemployment and reduced economic activity, meaning it could take years to recover to former levels of output.

During the outbreak of the pandemic, Suttons' first priority was the health and safety of our staff, both from a welfare perspective and on business level because without healthy staff we would be unable to meet our customers' needs. As a global business we had an early test of our business continuity plans with the lockdown in China, which impacted us in late January.

This tested our ability to maintain our international operation with remote working and allowed us to iron out any minor issues. As it became clear that COVID-19 was going to spread globally we introduced social distancing and hygiene measures, as well as providing PPE to allow staff to continue to work safely, while providing support for those who needed to shield due to age or for medical reasons.

We quickly adapted our operations to ensure that we could maintain the standards of safety and quality that our customers expect from us and to respond to changing demand patterns for certain products as already discussed. This included pro-actively marketing our capability to sectors where demand was increasing, or where new entrants were supporting the national effort to combat the ever-evolving pandemic. An example of this was our support to William Grant & Sons Distillery which switched from producing whisky to distilling alcohol sanitising applications.

Like many businesses, unsurprisingly, we had to react quickly at a corporate level to ensure that we had access to sufficient cash to support the business and to fund any investment required to meet our changing operational needs. The initial problem was trying to model what the impact on the businesses turnover and cash flow



Keith Broom

might be, in a situation that no one had ever lived through before.

Our two biggest concerns were that we did not know how far demand would fall and whether or not some of our customers would be unable to pay us. We were also initially unaware of the level of support that governments would provide.

We moved quickly to preserve cash. Capital expenditure plans were reviewed and some projects deemed non-essential were deferred or re-scheduled to ensure we balanced operational needs with cash management.

As we navigate through the pandemic, we are constantly reviewing the way in which we have managed the business and our operation, as well as how we have supported our employees and customers. Our existing business continuity plans worked well and allowed us to operate safely and maintain an excellent level of customer service, all while managing our cash flow. However, we are noticing areas where we could have done better or where additional investment in equipment, software, and training could improve our reaction to either a second wave of COVID-19 or some similar challenge in the future.

It is crucial for all businesses, including Suttons, to assess constantly the medium to long-term impact of the pandemic on customers and competitors in the post COVID-19 world. It is certain that the economy will take a significant time to recover from the shock of lockdown. Where coronavirus has had a negative impact, companies like ours must respond quickly to reshape their business processes, asset base and workforce to ensure that they are in the best possible shape to survive and prosper in this economy. Equally, where the pandemic generates opportunities businesses must react swiftly to capitalise on them.

www.suttonsgroup.com



The pandemic had a significant impact on supply chains, particularly the ISO-tank market which uses specialist equipment and relies on a balance of flows

Lanfer ships big tank

In co-operation with BASF and Kombiverkehr, Lanfer Logistik recently completed an initial test transport of a special 75 ton BASF tank container from the chemical firm's Ludwigshafen base on Lanfer's regular train connection to Hamm, North Rhine-Westphalia.

At Hamm the tank was unloaded using a new dedicated working platform. Lanfer said these increased capacities provided by the tank container offer customers many new possibilities in combined transport and intermodal.

www.lanfer-logistik.de





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Van den Bosch supports Plastic Bricks project

By building classrooms with bricks made from recycled plastic, UNICEF has achieved a scoop in Africa.

This year, bulk logistics operator Van den Bosch is again supporting the development project Plastic Bricks in Ivory Coast.

One and a half million children cannot attend school in Ivory Coast, simply because there are not enough classrooms. Supported by UNICEF, the Colombian organisation, Conceptos Plasticos processes plastic waste into bricks for the construction of classrooms in the country. No less than 130 tons of plastic waste were recycled and turned into bricks for schools in 2019, which led to the construction of 26 classrooms for 1,300 children.

The Plastic Bricks project is not only a solution for classroom shortages, but also reduces pollution. Only 5 percent of all plastic is recycled in Ivory Coast, as a result of which the country has become very polluted. Plastic Bricks also supports vulnerable mothers - by collecting plastic and selling it to the factory for a good price, they can secure an income. In the future, lavatories and storage for medical supplies will also be built using the plastic bricks.

Van den Bosch CEO Rico Daandels explained the decision to become involved once again in the project: "The massive increase in the amount of plastic waste is a global problem that we cannot ignore. In a unique and constructive way, UNICEF will help recycle plastic waste in the Plastic Bricks project to benefit local people in Ivory Coast. It is a promising and innovative project that our organisation gladly supports."

Van den Bosch has had a strategic partnership with UNICEF Netherlands since 2011.

Meanwhile, Van den Bosch has successfully completed the GMP+ audit.

This means that the current GMP+ certification, an international



The Plastic Bricks project is not only a solution for classroom shortages, but also reduces pollution

declaration to ensure feed safety, will be extended by another three years.

Since 2000, Van den Bosch has been allowed to carry the GMP+ certification. This means that all standards within the feed industry are met. Every three years an organisation must be recertified. The company has to demonstrate that the transport of raw materials for the feed industry is carried out in accordance with the set standards and the quality of the transported product is optimally guaranteed during transport.

Due to the coronavirus crisis, the quality audit was conducted digitally this year: a new experience for both the auditor and Van den Bosch. During the audit, the focus was in particular on the GMP+ orders that have been performed. This concerns the transport of raw materials for the feed industry, such as soy oil, salmon oil and methionine. The audit was successful, which means the GMP+ certification will be extended by another three years.

Van den Bosch has a dedicated fleet available to meet the demands of the feed safety industry. The equipment meets strict requirements and audits are conducted on a regular basis to ensure safe transport in accordance with the standards of GMP+ International, the certifying organisation. All Van den Bosch subcontractors are also GMP+ certified.

www.vandenbosch.com



Kick-off for ePlcenter

Under the co-ordination of Port of Antwerp, Den Hartogh Logistics together with a consortium of 35 partners, has officially launched the ePlcenter project. ePlcenter stands for Enhanced Physical Internet-Compatible Earth-frieNdly freight Transportation answer, and is funded by the European Horizon 2020 programme.

As a specialist in supply chain visibility Den Hartogh joined forces with various ports, forwarders, cargo owners, logistics providers, knowledge institutes and technology firms to provide hands on solutions that turn global supply chain challenges caused by increasing length, complexity and vulnerability into opportunities.

The goal will be to enable seamless transport of goods, focusing especially on the technological and operational opportunities that the internet, 'synchromodal' operations and other disruptive technologies – such as such as Hyperloop, Industry 4.0 and autonomous vehicles provide - provide.

ePlcenter has a global scope, with a number of large-scale demonstrators on main shipping routes from Europe to Canada and the US, as well as new trade routes such as the Northern Sea Route and the new Silk Road routes. Technology innovators and environmental experts will collaborate to develop new solutions which increase the efficiency and sustainability of global supply chains.

Den Hartogh says it is the ideal end user for this test case of ePlcenter solutions, providing grounded, real-world opinion and feedback on how to work in a global network. The Netherlands-based firm's expertise in transporting dangerous goods and partnership with MOLCT will be relevant to standards and design of synchromodal optimisation rules and focus on digitalisation and supply chain visibility will contribute to solutions for the supply chain of the future.

Port of Antwerp will host one of the large-scale demonstrators. The 'Link of the Future' demonstrator will focus on implementing the various ePlcenter innovations in one of Europe's largest multimodal transport hubs, as well as realising the first transcontinental cyber secure trade lane. Furthermore, Antwerp's international network will create possibilities for worldwide knowledge sharing and improvement of the tools developed in the project.

Erwin Verstraelen, chief digital and innovation officer at the port, said: "We are very enthusiastic about kicking off the ePlcenter project, which will allow us to create a transcontinental, integrated and transparent freight corridor by leveraging existing and promising technologies, frameworks and data standards. Port of Antwerp and Port of Montreal, both important nodes in the global supply chain, will act as catalysts for symbiosis among the different stakeholders."



The goal of the ePlcenter is to enable seamless transport of goods, focusing on opportunities that the internet, synchromodal operations and disruptive technologies provide

Peacock appoints new CFO

Tank lessor Peacock Container has appointed Jason Kennedy as chief financial officer.

In his role Kennedy will oversee Peacock's financial reporting, treasury, capital management and risk functions, and will have an active involvement in commercial pricing strategies and portfolio management. Kennedy is based in Peacock's Singapore office and report to managing director Jesse Vermeijden.

"We are very pleased to have Jason on board. The combination of knowledge he has gained as a senior financial executive over many years as well as his extensive experience in tank container leasing provide a unique opportunity to strengthen the Peacock team. He will be a major asset to the company," said Vermeijden.

"We aim to grow our platform through building a team of people with diverse and complementary skill sets. Jason's appointment certainly continues this strategy and we are

confident he will be an integral part of the Peacock team, enabling us to grow the business and realise our potential," he continued.

For his part Kennedy commented: "I am strongly motivated to join what is a young, energetic and very capable team. Over many years Jesse and the team have built a well-respected and capable business with strong foundations. The company has a bright future, and I look forward to becoming an integral part of the Peacock family, excited by the opportunities that lie ahead."

Prior to joining Peacock Kennedy was chief financial officer of Singapore-based lessor Raffles Lease and Buss Global, a German KG fund with a focus on intermodal assets, having been with both companies since 2010.

www.peacockcontainer.com

Hoyer's Deep Sea business unit achieved 3.6 percent turnover growth and earned 24.5 percent of the group's overall turnover



Hoyer reports higher turnover

Hoyer closed the 2019 fiscal year positively.

The Hamburg-based group increased turnover to €1.177 billion, up from €1.167 billion the previous year. The equity ratio remained at the previous year's level of 44 percent, while equity capital was strengthened by €25 million to €380 million. Earnings before taxes was €38.052 million.

The global market's economic development moved into a cooling phase during 2019, the group said. The chemical industry in particular showed production volume downturns. Contributions to turnover came from larger volumes with service station supply contracts in Great Britain, new business and transport growth in the gas area, higher turnovers from tank container leasing, and currency effects in overseas business with a strong US dollar.

Due to the economic slowdown in 2019, Hoyer reduced to €106 million the investments of €173 million planned for the year. Nonetheless, total investment was above that of the previous two fiscal years. The funds were used to rejuvenate and modernise the tank container fleet, to equip with the latest generation of telematics systems, and for transport equipment replacement and expansion needs such as road tankers and IBCs.

The investment budget originally planned for 2020 was €146 million. Due to the COVID-19 pandemic, the planning was revised and expenditure focused on essential strategic projects. Group chairman Thomas Hoyer explained: "Hoyer will remain one step ahead, even in times of crisis. The executive board manages prudently and sustainably. That enables targeted investments even in economically difficult times."

This includes investments in a dangerous goods terminal, buildings and technical installations, further expansion of the Smart Logistics concept, information technology, international business acquisitions and joint ventures.

The Hoyer Bulk LLC joint venture with the USA-logistics specialist Dupré was begun in 2019 to strengthen the overseas business. According to CEO Ortwin Nast: "Thanks to our global presence and strong network, we can meet our customers' regional and international logistics needs along the supply chain in an optimum way."

Total turnover was generated by a total of five business units. The Chemilog business unit contributed 34.1 percent of total turnover in the past fiscal year. This business area achieved 0.6 percent higher turnover compared to the previous year, and exerted a positive effect on the result through increased capacity utilisation and greater efficiency.

The Deep Sea business unit, responsible for overseas business, achieved 3.6 percent turnover growth due to currency exchange rate effects, and earned a total of 24.5 percent of the group's overall turnover.

The Petrolog business unit, which combines mineral oil supply activities to service stations and airports, aircraft refuelling and bitumen transport, contributed 22.8 percent of total turnover. Earnings before taxes in this business area improved significantly, despite declining turnover. Gaslog recorded turnover growth by almost 6 percent, and generated 10.7 percent of total turnover.

Development in the transport logistics business with industrial, chemical and special gases was pleasing, especially in Germany. The Netlog business unit, responsible for global container management, technical services such as cleaning and maintenance, and depot

services, contributed a 7.9 percent share of total turnover. This business area again increased turnover by 6 percent.

- Hans-Christian Sievers, formerly chairman of Helm AG, is joining the Advisory Board of Hoyer.

Sievers brings expertise from the chemicals sector. He started his career at Helm and rose from product manager to managing director responsible

for Mexico, before being appointed as a member of the firm's executive board in 2001.

In this function, he was responsible for managing the international subsidiaries until 2011. He took over as chairman in 2012, a position he held until March 2020.

www.hoyer-group.com

Safe entry guidelines

ITCO's latest Technical Guidelines document is *Safe Entry into a Tank Container*.

The document provides guidance for ITCO member companies engaging in activities that require personnel to enter the interior of a tank for purposes such as inspection and maintenance. Tank entry presents inherent risks which need to be managed by implementing a safe entry process.

Where possible, process changes should be introduced to permit tasks to be carried out without entering the tank - for example, by viewing the interior from the man-way or by the use of CCTV. However, when personnel are required to enter a tank, appropriate safety procedures should be in place to minimise the risk. These are provided in the new Guidelines.

These guidelines (TG05) complement a number of others published by ITCO, such as the recent TG04 *Guidance for working on top of a Tank Container*.

www.itco.org



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Hans-Christian Sievers

BNP Paribas appoints Michelin as preferred supplier

Michelin is now supplying tyres for BNP Paribas Rental Solutions' UK fleet, as part of a new agreement with one of Europe's largest asset finance, leasing and rental specialists.

The deal sees Michelin's services & solutions division supplying all tyres on a fully managed basis across a nationwide fleet of specialist vehicles – each with individual policies tailored to meet the needs of BNP Paribas customers.

Fitting and maintenance will be carried out on Michelin's behalf by service partners ATS Euromaster and Tructyre ATS, whose mobile technicians are in the process of rolling out the manufacturer's tyres across the fleet.

Benoit Laflamme, head of BNP Paribas Rental Solutions UK, said: "We are delighted to announce this new partnership offering quality and professionalism that will ensure delivery of first-class service to our customers.

"It's not a one-size-fits-all policy; Michelin is using the full extent of its tyre range to cater for our varied customer base, which operates everything from specialist vans to HGVs, including fuel tankers, cranes, car transporters, refuse collection vehicles and refrigerated trucks on intensive multi-drop work."

The partnership has already hit the ground running, with BNP Paribas supporting fleets in the fuel, builder's merchants, traffic control, distribution,



The BNP-Michelin partnership has hit the ground running supporting fleets in many sectors including fuel distribution

healthcare and waste sectors that have helped keep the nation during the coronavirus pandemic.

"Delivering maximum fleet uptime is one of our key value pillars and we pride ourselves on delivering a fast, efficient, market-leading service," said Ged Mellish, head of operations at BNP Paribas Rental Solutions.

"The early feedback we've had has been outstanding. One of our large national customers reported the level of service it has received is the

best it has ever had. The Michelin product, as a whole, fits perfectly with what our company is all about – quality."

Andrew French, Michelin's director of services & solutions for the UK, Ireland and Nordics, added: "We have a track record for delivering customer-centric solutions backed by high-technology products, alongside quality customer service, and this reputation was key to winning this significant new contract.

"The team at BNP Paribas Rental Solutions were clear from the outset that they wanted a tyre management solution where the focus was on sustainable mobility, enhancing their green credentials, and that's precisely what we've been able to deliver. It reinforces the shared values of both companies and it will allow us to partner on a number of different levels going forward."

www.michelin.com

SABIC contract for Abbey

Road tanker operator Abbey Logistics has added another major plastics producer to its growing list of customers in the plastics sector.

SABIC Europe has awarded Abbey a distribution contract to transport bulk polymer granules throughout the UK.

The contract will see Abbey use its large fleet of speciality tipping silo road tankers. The haulier's business development director Mike Ellis said: "All of us at Abbey are excited to begin this contract with SABIC and work together to drive service and flexibility improvements and identify ways to optimise the operations under our management.

"This contract is another major milestone for Abbey, establishing us as one of the largest bulk tanker distributors in the polymers sector and indicative of Abbey's commitment to growing our footprint in the polymers sector.

Meanwhile, Abbey has also ordered 52 tractor

units from DAF and Mercedes Benz. The order follows a "significant improvement in financial performance, despite COVID-19".

CEO Steve Granite commented: "Performance in the financial year to June 2020 has seen a major improvement and a return to profitability since earlier this year. I am incredibly proud of what our team has achieved since we made structural and operational changes in late 2018, and not only are we back to where we should be financially, our service to customers is back to industry leading standards and our workforce is motivated and engaged."

The group says more investment is planned in its fleet in 2020 as the company continues to see growing sales despite challenging market conditions.

Abbey's latest order is a mix of DAF CF and XF and Mercedes Benz's latest generation Actros. The vehicles are expected to go into service in September and will operate across Abbey's fleet

of bulk liquid and powder road tankers.

The majority of vehicles in this order are dual purpose which means they are equipped with both pumps for liquid products and blowers for powder or granulated products. The benefit of this is that they can be used across both liquid and powder operations creating additional flexibility in the fleet.

Gary Lawson, national fleet manager, said: "Following extensive trials of these vehicles, we felt each model would benefit our fleet and our customers in different ways depending on the type of work it would be doing.

"Our operations require specialist vehicles with specific equipment needed for the sensitive products we carry, and we were very pleased with the performance of both the DAF and Mercedes Benz vehicles in our trial and look forward to taking delivery in September."

www.abbeylogisticsgroup.com



VTG completes LPG pool modernisation

VTG Rail Logistics has successfully completed its LPG pool modernisation operation.

The company has been gradually renewing its fleet since 2014, with around 800 of the near 1,500 tank cars having been retrofitted or replaced.

The modernisation of the fleet carries a number of advantages. The wagons can now carry a larger payload, for example, which improves transport efficiency. In addition, newly installed braking systems are significantly quieter, and crash buffers ensure that dangerous goods can be transported even more safely as the energy absorption units absorb the impact energy, protecting the tank.

Most of the wagons are also equipped with the VTG Connector telematics module, allowing for the provision of additional services, such as tracking and tracing.

"We're thrilled to have been able to conclude the modernisation operation successfully and according to plan, especially in these challenging times," said Frank Bensaid, managing director of VTG Rail Logistics Deutschland. "With our modern fleet, we are now able to offer our customers increasingly safe and efficient ad hoc transport."

With its pool of tank cars, VTG Rail Logistics operates the largest private LPG fleet in Europe. Annual volumes and, to a large extent, ad hoc volumes can be transported.

www.vtg.com



Abbey ordered 52 tractor units from DAF and Mercedes Benz

Antwerp looks to halve CO2 emissions

At the end of 2019 port of Antwerp brought seven chemical and energy companies together to reduce CO2 emissions and take practical steps in the transition to a sustainable, low-carbon port.

The consortium consists of Air Liquide, BASF, Borealis, ExxonMobil, INEOS, Fluxys, Port of Antwerp and Total. With the project entitled Antwerp@C the partners aim to keep CO2 out of the atmosphere and so to make a significant contribution towards major climate objectives, thanks to applications for capturing and using or storing CO2, all within a relatively short time span and at reasonable costs.

The project has the potential to reduce CO2 emissions within the port (18.65 million tonnes greenhouse gas emissions in 2017) by half between now and 2030, says the port. Now Fluxys, Port of Antwerp, Total and Air Liquide have submitted EU subsidy applications for taking the project a step further.

Antwerp is home to the largest integrated energy and chemicals cluster in Europe. This makes it an



Antwerp@C has the potential to reduce CO2 emissions within the port by half between now and 2030

ideal location to set up new, cross-border collaboration projects for innovative CO2 reduction, the port says. To this end, the partners will investigate the technical and economic

feasibility of building CO2 infrastructure to support future carbon capture utilisation & storage (CCUS) applications. Carbon capture & storage (CCS) and eventually also carbon capture & utilisation (CCU) – ie, reusing CO2 as a raw material for the chemical industry – are seen as important routes in the transition to a carbon-neutral port.

Antwerp@C is carrying out a feasibility study with the support of the Flemish Agency for Innovation & Enterprise (Vlaams Agentschap Innoveren & Ondernemen, or VLAIO). This will investigate the possibility of building a central 'backbone' in the form of a pipeline along the industrial zones on both the right and left banks of the Scheldt, along with various shared processing units, a shared CO2 liquefaction unit, interim storage facilities and cross-border transport of CO2, both by ship and by pipeline.

Since Belgium does not have suitable geological strata, international collaboration will be necessary to transport the CO2 across borders and store it permanently in, for example, depleted offshore gas fields. For this purpose, Antwerp@C is looking at the possibilities of transport to Rotterdam by pipeline or by ship to Norway.

However, broad support – especially financial – by the EU, the Belgian Federal Government and

the Flemish Government will be essential to ensure the success of the project. Antwerp@C is pursuing two initiatives for cross-border CO2 transport infrastructure, namely the CO2TransPorts project for a pipeline to Rotterdam and the Northern Lights project for transport to Norway by ship.

Since CCS is seen by the EU as an important lever to combat climate change these initiatives have been granted recognition as Projects of Common Interest (PCI). Subsidy applications for detailed studies have been submitted for both projects under the terms of the Connecting Europe Facility (CEF). A decision for grant award is expected in November. In addition, subsidy applications are being prepared for the European Innovation Fund as part of the Green Deal.

"This project will enable us to play our pioneering role even more effectively," said Port of Antwerp CEO Jacques Vandermeiren. "It demonstrates once more that collaboration is key for generating a cluster effect and creating innovative, operational added value. If this shared infrastructure can actually be realised then it will benefit the entire industrial community in the port and make a valuable contribution towards the Flemish, Belgian and European climate goals."

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Events

The following event dates were correct at time of going to press

LogiChem (VIRTUAL)
8-11 September 2020
Rotterdam, Netherlands
www.logichem.com

Powtech Special Edition
29 September - 1 October 2020
Nuremberg, Germany
www.powtech.de

EPCA Annual Meeting
The 54th EPCA annual meeting will now be held in a virtual format on the same dates.
5-7 October 2020
www.epca.eu

PBLA Annual Meeting (VIRTUAL)
w/c 19 October 2020
www.pblalliance.com

World Bulk Wine
23-24 November 2020
Amsterdam, Netherlands
www.worldbulkwine.com

All4Pack
23-26 November 2020
Paris, France
www.all4pack.com

Annual GPCA Forum
7-9 December 2020
Dubai, UAE
<https://gpcaforum.net/>

Interpack
25 February - 3 March 2021
Messe Düsseldorf, Germany
www.interpack.com

New tanks at Noord Natie Odfjell

A new, fully automated tankpit comprising seven tanks of a total 12,700 cbm has been installed at Noord Natie Odfjell Antwerp Terminal (NNOAT).

The investment significantly increases storage volume for the European chemical market, said Odfjell. "In a time of increased demand, customers now get a welcomed addition of quality accommodation for a wide range of chemical and base oil products," the company stated.

Adrian Lenning, global head of terminals,

commented: "Noord Natie Odfjell Antwerp Terminal is a strategic component to our terminal platform and the expansion of the tankpit marks another step in realising the potential of the Antwerp terminal. The team and contractors have done a fantastic job in safely and successfully bringing the new capacity on-stream during these unprecedented times."

The new tankpit is the third fully automated installation at the terminal and forms part of NNOAT's expansion programme at the fourth harbour dock in Antwerp.



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Dekker grows in Rotterdam

Dekker Group is expanding in Port of Rotterdam. The group, which specialises in storing liquid edible oils, fats and biofuels in stainless steel tanks, recently extended its long-term lease contracts on behalf of subsidiary Maastank for its location at Welplaatkade in the Botlek area by 25 years.

Dekker also signed contracts for the adjacent sites at this point. In due time, the firm, which has its headquarters in Ouderkerk a/d IJssel, plans to scale up its existing tank storage.

Over the next few years, the present allocation will allow Dekker to double the storage capacity of its tank terminal for vegetable oils, oleochemicals and biofuels at Botlekhaven, to approximately 140,000 cbm. In addition, Dekker plans to expand the existing maritime infrastructure.

Port of Rotterdam's throughput was hit in the first quarter, thanks to COVID-19 pandemic.

In the first three months, throughput amounted to 112.4 million tonnes, 9.3 percent lower than in the first quarter of 2019. Falling throughput was seen mainly in the coal, crude oil and oil products segments. There was, however, a rise in iron ore, biomass, LNG and other liquid bulk.

Oil products fell by 32.8 percent. There was a sharp fall in the trading of fuel oil between Russia and Singapore, for which Rotterdam has been the throughput location in recent years. Instead, much of the fuel oil went directly from Russia to the United States for refining. The throughput of diesel fuels also declined.

The incoming flow of crude oil fell by 8 percent in the past quarter. Stocks built up last year were used for production in the past quarter.

However, LNG was up by 18 percent to more than 2 million tonnes

Over the next few years Dekker will be able to double the storage capacity of its tank terminal for vegetable oils, oleochemicals and biofuels



with, in particular, more LNG going to the European gas network. More gas was used for electricity production because of the low gas price.

Throughput of other wet bulk rose by 710,000 tonnes (9.3 percent).

This consisted primarily of an increase in chemical products and biodiesels. Rotterdam is increasingly becoming a central logistical location in Europe for these products, with both imports and exports to other European countries.



Sixin of the BEST

In June, Hutchison Ports' Barcelona Europe South Terminal (BEST) welcomed the second largest container vessel in the world.

MSC Sixin, operated by Mediterranean Shipping Company, has a capacity of 23,656 TEU, and is the largest ship to berth at any terminal in Barcelona.

"The arrival of MSC Sixin at Barcelona is the start of a new era in our container sea trade," said Guillermo Belcastro, CEO of BEST. "MSC Sixin operating at BEST is symbolic of the effort of both shipping lines and port operators who continue to work together, in spite of the current social and economic world situation, pushing efficiency levels to even higher standards to enable goods to arrive at their destination."

Belcastro added that the terminal's location and equipment enables it to handle vessels of this size in the shortest time possible. BEST is the only container terminal in Barcelona with a depth of at least 16m along the entire length of its 1,500m berth. In addition, container handling operations of almost 10,000 moves require a high number of mega cranes working at the same time with a very high operational performance rate per crane. These operations also need to be controlled by a highly efficient operational system.

BEST is used to operating with up to eight cranes simultaneously which under the control of nGen, Hutchison Ports' own terminal control system, can achieve productivities per crane of over 40 moves per hour. Usually, operations of 10,000 moves can be completed in a couple of days, compared with four or five days in other ports, the terminal operator said.



EPCA 54TH ANNUAL MEETING

FROM 5TH TO 7TH OCTOBER 2020 **Virtual Edition** Registration will open early September 2020