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Asia to North America West Coast witnessed extreme delays in vessel arrivals, at higher levels than during the 2015 labour dispute

Supply side problems behind vessel slot crisis

The current shortage of vessel slot capacity and of empty containers is primarily driven by supply-side issues, according to maritime trade analyst firm Sea-Intelligence.

Sea-Intelligence CEO Alan Murphy maintains there is no global container shipping boom. As more capacity is currently deployed than ever before, the shortage must in turn be caused by poor utilisation of the deployed assets, specifically due to the unprecedented levels of congestion and the resulting vessel delays.

Although the analysis studies dry freight containers, tank container trade body ITCO said this partly explains the issues reported by ITCO tank operators over the shortage of timely space availability for tanks carried as SOC (shipper owned containers).

To investigate how much capacity vessel delays are effectively removing from the market, Sea-Intelligence followed a simple approach. As an example, a carrier offers a six-week roundtrip service with six x 10,000 TEU vessels. If vessels are then five days late on the head-haul and two days on the back-haul, it increases the round-trip to seven weeks, requiring one additional 10,000 TEU vessel to compensate for the delay-induced loss of capacity.

So to maintain the same weekly capacity, the carrier de-facto needs to increase nominal capacity by 16.7 percent. The effect of this is the same as if market demand had increased by 16.7 percent, as that would have required the same injection of net capacity in the market.

Using data from Sea-Intelligence's Global Liner Performance (GLP) and Trade Capacity Outlook (TCO) databases, the analyst firm found that while 2-4 percent of capacity is usually 'lost' to vessels delays, approximately 25 percent of the capacity deployed on transpacific lane in January-April 2021 has been soaked up by vessel delays, far outpacing the 17 percent soaked up by the 2015 US West Coast labour dispute.

While Asia-Europe has seen less dramatic congestion and delays, a full 11 percent of the capacity deployed in the first four months of 2021 was soaked by vessel delays.

From a global perspective, at the height of the congestion in February 2021, almost 12 percent of global container capacity was absorbed by vessel delays and in April this was still at 8.6 percent. In nominal terms, this means that in February 2021, a full 2.8 million TEU of nominal vessel capacity was absorbed due to vessel delays, and in April 2021 this had only abated slightly to 2.1 million TEU.

For comparison, the entire global fleet of ultra-large container vessels (ULCVs) of 18,000 TEU and above has a combined capacity of some 2.7 million TEU. Hence, in very real terms, the congestion problems in 2021 is of such a magnitude, that the effect is the same as if the entire industry had decided to remove all ULCVs from the fleet, without adding any new vessels.

A follow-up analysis by Sea-Intelligence at the end of June found that carrier schedule reliability has been pretty poor in all of 2021 as several ports and regions have been severely impacted by port congestion.

Looking at the number of vessel arrivals subject to extreme delays, ie, more than seven calendar days, Asia to North America West Coast witnessed vessel arrivals of 7-13 and 14-20 days late at higher levels than at the height of the 2015 US West Coast labour dispute.

In January-May 2021, a "staggering" 695 vessel arrivals were over a week late, of which 343 arrivals were more than 14 days late, with 132 of the arrivals being more than 21 days late. For comparison, from January 2012 to December 2020, 1,535 vessel arrivals were more than a week late, 330 were more than two weeks late, and a combined 104 vessel arrivals were over 21 days late.

On Asia-North Europe, 461 arrivals were more than seven days late in January-May 2021, of which 134 were more than 14 days behind schedule, and 30 were more than 21 days late.

Port congestion is far from over, Sea-Intelligence said. In just May 2021, 174 vessels that berthed in North American ports on the transpacific trade were more than seven days late. On Asia-Europe, the number was 114, while on the transatlantic it was 169, 99 on Asia-Indian Subcontinent and 134 on Asia-Oceania.

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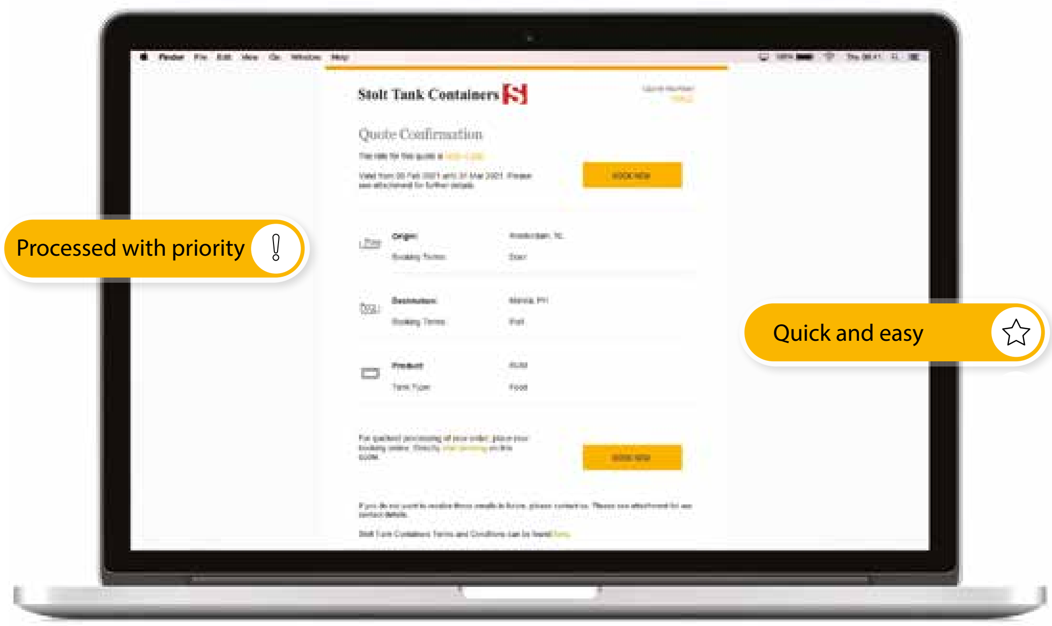

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Capacity to Move

Stolt Tank Containers

MLGTC will intensify its agency business on NCC's behalf, starting in Thailand and other Asian countries

MOL, Nichicon in tank logistics venture

A new tank container logistics operator is set to take root in Japan.

Shipping and logistics conglomerate Mitsui OSK Lines (MOL) is forming a joint venture with Nippon Concept Corporation (NCC) and MOL Logistics (MLG) called MOL Logistics (Tank Containers) (MLGTC). The JV will deepen the MOL group's business alliance with NCC and expand and strengthen its business partnership related to tank container transport globally, starting in Asia, while serving as the headquarters of NCC's overseas agency business.

NCC, whose tanks are labelled Nichicon, is an international tank logistics company. In 2018, it concluded a capital and business alliance agreement with MOL, under which MOL acquired 15 percent of NCC's shares, and began co-operative measures such as sharing and mutual use of each company's overseas offices and business networks.

MOL Group is one of the world's biggest ocean carriers

According to the latest ITCO Global Tank Container Fleet Survey, Nichicon had a fleet of 9,000 units at January 2021.

MLG, which serves as a core of the MOL Group' logistics business, already handles NCC's overseas agency business in Mexico, Myanmar, and Vietnam. Establishment of MLGTC will extend areas of the business alliance and accelerate collaboration in business and cargo transport using tank containers. Specifically, MLG will intensify its agency business on NCC's behalf, starting in Thailand and other major Asian countries showing significant demand growth for chemical products, such as China and India.

In addition, by exploiting MOL and MLG's networking capabilities, MLGTC will maximise synergies from NCC's know-how and track record in door-to-door international multimodal transport for liquid cargoes and various types of gas. In the future, the three companies will expand the business alliance, and work together as one to offer transport of chemical products on a global scale.

MLGTC will be headquartered in Tokyo

MOL Group is one of the world's biggest ocean carriers operating dry bulk ships, LNG carriers, car carriers, oil tankers, and container ships. In 2017 the container shipping division was rolled into Ocean Network Express Holdings (ONE), a joint venture company between MOL, Nippon Yusen Kaisha, and K Line.

www.mol.co.jp

Higher shipments boost Stolt results

Stolt Tank Containers (STC) posted second-quarter revenue of US$157.7 million, up from $138.9 million in the first quarter.

Transport revenue increased by a further 17.9 percent on top of solid increases in the two prior quarters, driven by an 11.1 percent increase in shipments and higher freight charges to customers due to rising ocean freight costs.

Demurrage revenue also improved by 7.5 percent as operational delays were passed through to customers and customers took slightly longer to return tanks. Utilisation increased to 72.2 percent from 69.7 percent as shipments reached record levels.

STC reported a second-quarter operating profit of $12.5 million, up from $8 million in the first quarter. The rapid increase in ocean freight and trucking expenses has continued, but the cost increases have been passed onto customers in a more timely manner, the operator said, resulting in improved transport margins per shipment.

Total tank rental costs increased as STC leased in additional tanks to meet growing demand, operational delays driven by port congestion, carrier delays and capacity management by ocean carriers. Costs related to delays are generally charged to customers as demurrage.

In Singapore, STC has expanded its tank storage space with an additional 5,000 sqm, which offers storage capacity for approximately 300 laden tank containers.

The Singapore terminal services chemical tanks, food-grade units, gas tanks and other. The depot has been active since June 1987 and offers a utilisation area of 20,000 sqm.

www.stolt-nielsen.com

Stolt's utilisation increased to 72.2 percent from 69.7 percent

New funds for Peacock

One of the benefits of being part of a private equity group has been demonstrated by Peacock Container Group.

Now owned by Arcus Infrastructure Partners, Peacock has signed a US$200 million funding agreement, refinancing both its existing senior debt facilities and the interim financing that was put in place for the acquisition of the assets of GEM Containers in May 2021.

The multi-currency (US$ and Euro) facility has a combination of senior term loans, underpinning the refinancing of Peacock's current fleet, as well as revolving credit facilities providing flexibility to support Peacock's growth plans over the coming years.

The ISO tank container leasing sector has shown resilience and stability during the COVID-19 pandemic period and continues to demonstrate strong positive growth prospects, said Arcus.

The new senior debt raising also strengthens Peacock's capital structure through the introduction of two new lending banks to the tank lessor, reduces total financing costs, and also includes 'accordion' features to increase funding when necessary.

The bookrunners and mandated lead arrangers were ABN AMRO Bank and ING Bank, Singapore Branch, with TIAA FSB participating as lender.

www.peacockcontainer.com
www.arcusip.com

The multi-currency facility underpins the refinancing of Peacock's current fleet

Hoyer's worldwide commitment to sustainability is evident in China

Hoyer supporting sustainability in China

Hoyer Group says that as a family business its world view is anchored on future generations.

The international logistics specialist sets itself clear aims and works intensively on measures to achieve greater ecological sustainability. Moreover, it does this on a global basis, wherever the company operates.

In China, Hoyer is collaborating in preparing the AICM Sustainability Report for 2021. Logistics experts from its own ranks are supporting the Chinese chemical industry's ecological objectives.

Sustainability is obviously a major topic worldwide, including China. The People's Republic has set itself ambitious carbon reduction goals and carbon neutrality. As elsewhere, the chemical industry and its partners play a key role in the Chinese economy and achieving the targets that have been set. The members of the 'Association of International Chemical Manufacturers' (AICM) are committed to this challenge and, following a 2019 report, have now presented the second AICM 2021 Sustainable Development Report without the government having given any commission.

Founded in 1988, the AICM, as the representative of the leading international chemical companies in China, wants to promote the sustainable growth of the Chinese chemical industry and Responsible Care as well as other internationally recognised principles of chemicals management among all stakeholders, eg, central and local government, the media, industrial authorities and representatives of chemical parks.

The report was presented at the China Chemical Industry and Chemical Park Forum in early June in the context of an active exchange of information and best practice among members. In the report, the AICM states practical measures for the chemical industry in order to support China's aim to achieve carbon neutrality. They include adapting energy infrastructure, improving energy efficiency, reducing the intensity of resource and energy consumption, and effective control of the overall consumption of fossil energy.

Hoyer's worldwide commitment to sustainable action in all steps of the logistics process is also evident in China, where the transport of bulk goods, liquid foodstuffs and liquefied gases, and associated services such as packing, storage and distribution management, together with the leasing of equipment and technical services, are offered alongside the intermodal transport of chemicals.

The company has pursued concrete sustainability objectives for decades, and also demonstrates them transparently in the Sustainability Report published annually. Ricky Zhou, Hoyer's managing director, China domestics, explains: "The fact that we are the only logistics company participating in the preparation of the AICM 2021 Sustainable Development Report illustrates the value of Hoyer, its commitment and in particular its contribution to the country's carbon neutrality." To achieve its own sustainability objective, Hoyer is investing in a modern truck fleet, using engines fuelled by LNG and CNG, and in particular concentrating on less emission-intensive intermodal means of transport. This allowed Hoyer to reduce its worldwide transport emissions to below 20g of CO_2 per tonne-km in 2020.

Mark Binns, head of group SHEQ and sustainable management, illustrates that: "Hoyer has not only an interest but also an obligation to play its part in shaping a sustainable future."

Mark Binns continues: "Our global sustainability management is made clear by the alignment of the entire company to the United Nations' 'Sustainable Development Goals', eight aims of which we have defined as guidelines for our own target settings."

In addition to climate action and economic growth, these aims also include 'no poverty', quality education and an obligation to responsible consumption – and these apply to the activities of Hoyer Group worldwide.

To achieve its self-imposed aims, China must make ambitious long-term efforts to transform its economy, industrial structure and energy ecosystems. AICM members and Hoyer say they are willing to play a positive, supporting role in this target-setting.

Today, the AICM represents nearly 70 large multi-national companies in China's chemical industry. The members of the AICM include five companies that are among the top ten firms worldwide, and 28 of the world's 50 largest chemical companies. Their business areas comprise the manufacture, sale, transport, marketing and disposal of chemicals.

www.hoyer-group.com

Jost acquisition

Luxembourg-based Jost Group has taken over Anné-Louagie srl, increasing its capacity in container transport.

Anné-Louagie, based in Temse, Belgium, was set up in 2003 by Marc Anné and his wife Mady Louagie.

The company specialises in the international transport of containers by road, mainly 'one way'. As a specialist in France and Switzerland, Anné-Louagie enjoys an excellent reputation among customers and in the transport sector.

Jost is taking 100 percent of the company, all staff (consisting of two managers, five employees and 10 drivers), the 10 Volvo motor vehicles and towed vehicles (ADR multipurpose container carriers with generator and reefer equipment), as well as the company office.

In 2020, Anné-Louagie's turnover was €12 million.

According to Marc Anné, Anné-Louagie has a bright future ahead of it with the acquisition: "With Jost, we have found a buyer with whom we can continue to offer the same flexibility to our customers, while enjoying the benefits of being part of a larger group. I myself will stay on board, together with my wife, to ensure a smooth transition for staff, customers and the 70 subcontractors."

The acquisition reflects Jost's strategic decision to add even greater value to its container division.

www.jostgroup.com

CSX close on Quality deal

US rail carrier CSX Corp has completed the acquisition of Quality Carriers, Inc, one of the largest bulk liquid chemicals truck transport companies in North American, from Quality Distribution, Inc.

Financial terms of the transaction were not disclosed.

Quality Carriers operates over 2,500 trucks and 6,400 trailers that serve many of the largest chemical producers and processors. The addition of Quality Carriers enables CSX to extend the reach of its network and gain access to new products, markets, and regions through a competitive multimodal solution that leverages the reach of truck transport with the cost-advantage of rail-based services. As such, CSX can now provide more comprehensive transport services to customers throughout supply chains.

"We are thrilled to welcome the Quality Carriers team to CSX," said James M Foote, president and CEO of CSX. "We strive to provide chemical producers and shippers with the most efficient, cost-effective transportation services possible. By combining CSX's and Quality Carriers' capabilities, we can deliver an unparalleled multimodal solution that will generate substantial value for our customers."

"Joining the CSX family strengthens our position as the leading bulk chemical trucking network in North America and provides our customers with an integrated rail-to-highway offering that will revolutionise the chemical transport industry," added Randy Strutz, president of Quality Carriers. "CSX is a pioneer in rail-based bulk chemical transport, and there is tremendous potential in this combination. We look forward to integrating our capabilities and to providing enhanced bulk chemical transportation solutions."

Goldman Sachs acted as financial advisor and Davis Polk & Wardwell acted as legal advisor to CSX in connection with the transaction.

www.csx.com

Just the right temperature

With consistently available temperature data, Bertschi's planners can send precise heating orders via a heating app

Digitalisation now influences Bertschi's isocyanate fleet planning

Bertschi's isocyanate container fleet is to be equipped with Nexxiot telematics boxes for tracking, and Quantum thermometers for product temperature monitoring.

Following an analysis of container flows (MDI/TDI) and the available capacity in in-house workshops, seven locations for the equipment were determined: Antwerp, Birsfeld, Delfzijl, Duisburg, Cologne, Schwarzheide, and Tarragona.

The isocyanate fleet comprises almost 2,100 containers. The devices were ordered and allocated to the sites on the basis of various aspects. After the first ones arrived on 6 February 2020, the set-up was successfully initiated at all locations. As of end March this year, 80 percent of the isocyanate fleet is already equipped with the new devices and in operational use.

Isocyanates are temperature-sensitive products that must be heated or cooled to a customer-specific unloading temperature in transit or at the latest before delivery. Thanks to the new telematics system, operational processes have been greatly optimised, says Bertschi. The shunting, handling and manual temperature checks that used to be necessary have thus been largely eliminated, transferred to the computer of the responsible planner and made more efficient. What used to be an enormously time-consuming and cost-intensive process has been replaced by just a few clicks, thanks to the advancement of digitalisation.

With the now consistently available temperature data, Bertschi's planners can send precise heating orders via a heating app. Moreover, the approximate heating requirement can be estimated and vehicles planned more efficiently, meaning long waiting times for drivers are reduced to a minimum. In addition, the heating progression can be conveniently tracked from the office, thus avoiding constant calls to the heating personnel. A truck is immediately scheduled when a tank is at the target temperature, resulting in much more efficient route planning.

Temperature-sensitive products can be monitored and controlled while in transit. In this way, any malfunctions in the equipment are quickly detected and, ideally, rectified directly. If a container is not accessible, the receiving terminal can be proactively informed of a malfunction. The necessary steps can be initiated and implemented immediately on arrival, thus preventing product degradation. The temperature evaluations enable easy analysis and processing of customer complaints due to quality deviations caused by temperature factors (too warm or too cold). The available data enables us both to protect ourselves and to document problems at loading and unloading stations, and has allowed the logistics company to disprove claims that could have been lodged against Bertschi in the past.

The advantages of the new technology are clearly visible, the company says. It is therefore important for Bertschi to be able to equip the remaining 20 percent of the isocyanate fleet as quickly as possible. The company hopes to achieve this goal by the end of 2021.

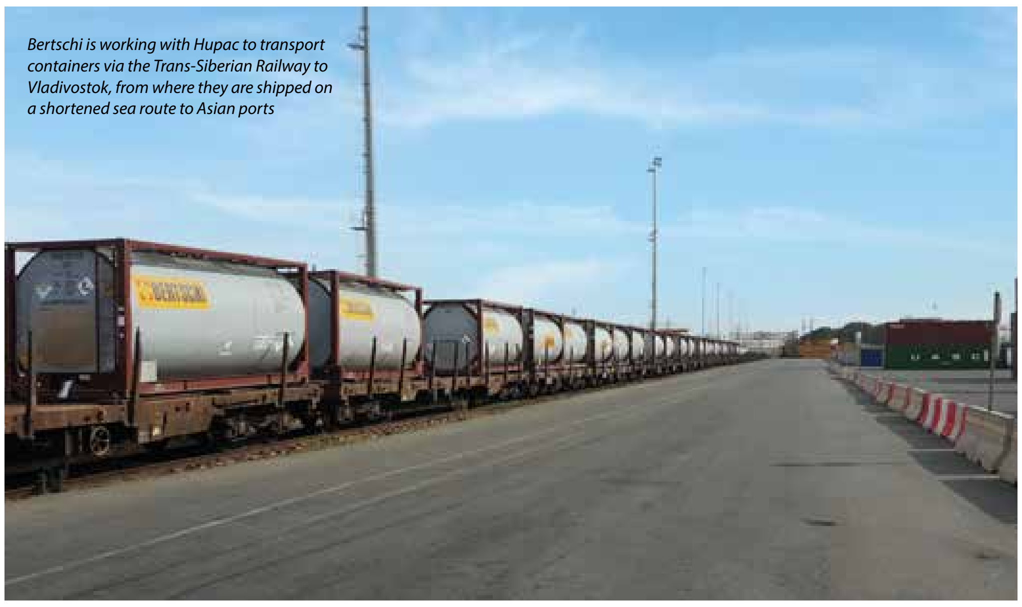
Europe-Asia

Bertschi is also responding to current container supply chain crunch.

Over the past few months, it has become increasingly expensive and difficult to ship containers by sea. Persistent capacity bottlenecks and high demand for goods are putting many supply chains to the test.

Producers and consumers alike are confronted with exorbitantly high sea freight rates and ships that are fully booked for months at a time. They are thus consistently exposed to the risk of having to shut down production lines due to a lack of material supplies. Air freight

Bertschi's isocyanate fleet comprises almost 2,100 containers



Bertschi is working with Hupac to transport containers via the Trans-Siberian Railway to Vladivostok, from where they are shipped on a shortened sea route to Asian ports

In Saudi Arabia Bertschi is managing empty containers for the world's largest chemical complex

is often considered as an alternative, but is only suitable for smaller quantities and is also much more expensive.

To counteract this, Bertschi is working with its partner Hupac to provide customers with a solution. In a combined rail and sea route, containers are transported via the Trans-Siberian Railway network to Vladivostok, from where they are shipped on a shortened sea route to Asian ports.

In contrast to direct rail transport via the new Silk Road, which still requires several months of preparation in order to obtain the necessary permits for tank containers, the route via the eastern Russian port of Vladivostok is both a proven option and one that is available at short notice. Despite the long transit time of approximately 35 to 40 days, rapidly available capacity enables delivery to the recipient several weeks earlier than if the containers were delivered by conventional sea transport. Since December, Bertschi has been able to transport a larger number of containers from Europe to Asia and vice versa in this way, thus expanding the company's knowledge and increasing the reliability of the route.

In the next, longer-term step, Bertschi is working on a viable solution for crossing the land border between Kazakhstan and China, since rail transport on the new Silk Road takes much less time than transport via Vladivostok – transit times of roughly 25 days are conceivable. Until this new route is established, however, the corridor via Vladivostok is suitable as a sensible, fast alternative to sea and air freight.

500k handlings in Saudi

Meanwhile, in the Middle East Bertschi was awarded a contract in January 2017 by the world's largest chemical complex in Saudi Arabia to manage its empty containers. The company had to make all the necessary preparations and get to work, as the project was set to start in March the same year.

Some 50,000 sqm of land had to be prepared; field divisions, lanes, offices, and much more. In addition, the administrative staff, container inspectors, and operational staff, who are responsible for all container handlings, had to be trained. The equipment and work processes were completely new for the employees, and learning the new tasks accordingly required some effort.

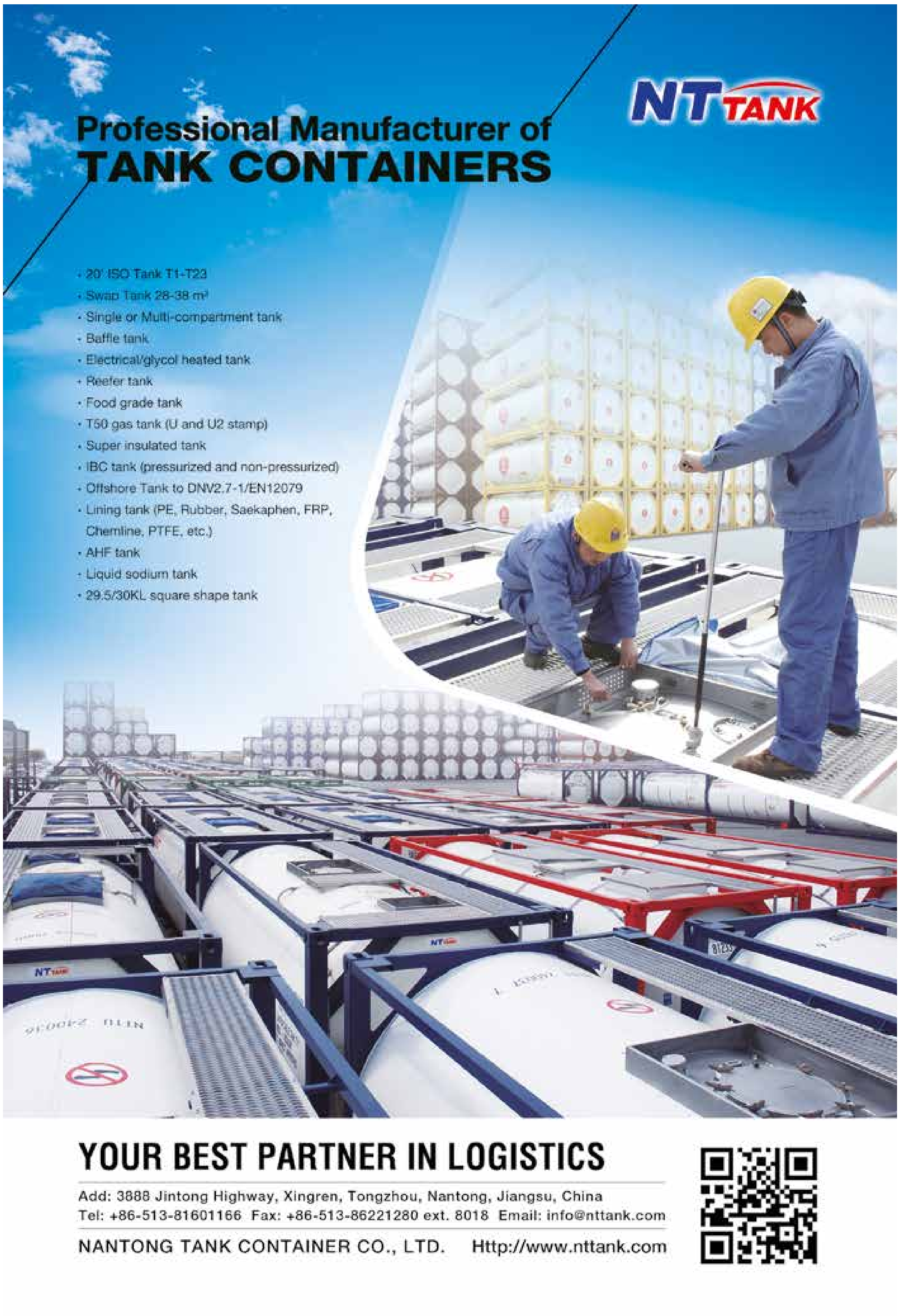
The operational staff learned to operate and control the large machines, initially without containers, on a specially-built course. At the beginning of March, the site received five 40 ft containers from the customer for training on the machines with containers. For days, the containers were moved from one field to another, stacked and loaded onto a truck. The whole process was repeated until all employees were well versed in this handling. On 17 March, the project finally got off the ground with the first 50 containers.

By early April, the number of containers had risen massively, and Bertschi shifted to 24-hour operations. The condition of every single container was inspected, photographed, and inventoried. The container inspections were made extremely difficult by the high summer temperatures and sandstorms in Saudi Arabia. At the end of every March, temperatures reach 40 degC, and rise to 50 degC by midsummer. At such high temperatures, employees who carry out the container inspections can only work outside for 20 minutes at a time.

After working in the heat, a short break in an air-conditioned lounge is needed; although, even there the temperature is still over 30 degC. In October 2018, the customer conducted a week-long stress test in which production was ramped up to 110 percent, and all suppliers were tested for delivery and transport capacity. With an output of 796 containers in 24 hours, Bertschi passed the test without any problems. In 2020, the contract was extended for another year.

www.bertschi.com

Lockdowns in European countries impacted the overall business heavily



Den Hartogh looks back on 2020

Den Hartogh achieved turnover of €487 million in 2020, a decline of 1.9 percent on the previous year.

The decline originated in the first half of the year. Especially in Europe, Den Hartogh experienced a substantial fall in volumes due to the pandemic which took hold in the second quarter. From June 2020, volumes recovered step by step back to 2019 levels.

In general there was also substantial pressure on margins, which the operator says it was largely able to offset by increased focus on procurement and reductions in overhead cost. The operating result compared to turnover fell back slightly from 3.9 percent in 2019 to 3.5 percent in 2020.

Net income before tax was 2.2 percent of net turnover, a reduction of 0.5 percent compared to 2019. Bottom-line the net result in 2020 was €5.7 million (1.2 percent of turnover) compared to €7.1 million (1.4 percent of turnover) in 2019.

Lockdowns in European countries in Q2 impacted the overall business heavily, with an extreme negative impact on all volumes that go into the automotive industry, which closed completely for weeks.

The drop in volumes in Q2 led to a cost focus programme, where Den Hartogh was able to adapt the cost base to the lower freight revenues. This resulted in a stable EBITDA recovery in Q3/Q4. At year end closing, another very impactful event was the actual Brexit causing extreme operational pressure from November 2020 which continues to this day.

Investments during the year totalled €32.7 million, of which €29.8 million was in the fleet, the vast part being in new equipment, including baffled tank containers for global operations, 30ft T50 units and cryogenic for gas logistics, and new dry bulk containers.

www.denhartogh.com

New Crossover office

Having established a foothold in Europe last year, Crossover Logistics has now moved to new offices in Bergschenhoek, Netherlands.

Founded in 2014, Crossover started as a logistics and freight forwarding provider in China. Today, the group has a global logistics alliance with a number of main line operators.

The establishment of the European office came about from what the company said has been "remarkable" growth in liquid cargo shipments. Now the Netherlands site joins permanent offices in Singapore, Suzhou (China), Jakarta (Indonesia), and Houston (USA), that jointly oversee an international agency network.

The new address in Europe is: Crossover Logistics Europe BV, Oosteindseweg 22A – Loft 7B, 2661 ED Bergschenhoek, The Netherlands.

www.crossovertank.com

ECTA dates set

The European Chemical Transport Association (ECTA) intends to stage its annual meeting in Düsseldorf, Germany on 18 November 2021.

The agenda will be uploaded soon to the event page on ECTA's website. Furthermore, detailed information regarding COVID rules and protocols will follow in advance of the event.

www.ecta.com

Microlise gives Suttons performance boost

Suttons Tankers has invested in a telematics and technology solution from transport management software provider Microlise.

The logistics firm deployed the Microlise solution across its fleet of 500 tractor units and over 850 road tankers and trailers.

Microlise's technology will help Suttons manage its fleet through vehicle tracking and utilisation reporting, as well as driver performance to reduce fuel costs.

The software firm's Journey Management product will help Suttons deliver an enhanced customer experience by proactively managing issues and changes. The schedule execution board has a detailed picture of which vehicles are running early, on time or late, highlighting which jobs have been completed or remain pending.

Suttons is also using Microlise's Proof of Delivery technology to help driver communication and digitise receipt through sign-on-glass and image capture, with exceptions identified and managed by the Suttons team.

The solution will also help to strengthen Suttons' existing focus on safety. The Safety Module, which includes the ClearVision multi-camera solution, helps protect drivers, support driver training and provide access to in-depth information relating to any incidents. It combines granular telematics data with actual footage. The ClearVision camera solution also has blind-spot visibility for drivers through the in-cab DriveTab unit (an Android tablet device).

The customisable vehicle check feature ensures that drivers carry out checks in line with legislation and company policy, with the system flagging when vehicles require maintenance.

"Investing in Microlise's fleet technology supports our drive towards continuous improvement and service excellence and provides us with the intelligence we need to improve processes and increase customer value," said Michael Cundy, managing director of Suttons Tankers. "The multi-camera solution, which integrates with Microlise's vehicle telematics system, is helping us to reduce our risk profile and better protect our drivers."

Suttons has also taken delivery of 14 new Volvo FMXs, the first rigids to join its fleet, after being impressed by the performance of a demonstrator supplied by local dealer Thomas Hardie Commercials.

The order comprises a mix of seven 6x4 rigids and seven 8x4 tridems for use exclusively on the company's contract transporting sludge for Yorkshire Water.

Mark Scott, Suttons' fleet engineer, said: "We've run Volvo for many years, but this is the first time we've opted for FMX rigids. Our contract work is very particular, so the team road-tested the truck over two days through the rolling Yorkshire Dales to see if they could handle the job.

"We were able to assess a variety of factors that impact on each job, including access, turning circles, manoeuvrability and traction, and to say we were impressed would be an understatement. The demonstrator performed exceptionally and ticked all the boxes. The fact Volvo allowed us to field-test the truck in our more challenging locations sealed the deal."

The larger 8x4s have been specified with a 9-tonne front axle, tridem bogie rear suspension and a lifting and hydraulically steered tag axle for manoeuvrability and a small turning circle, despite their larger size. All the FMX Globetrotter tankers benefit from the Drive+ pack, for added driver comfort.

The trucks, which are mounted with bodywork by Crossland Tankers, will operate on shift work, clocking up roughly 50,000km a year and are all covered by a Volvo Gold Contract, with servicing and maintenance to be carried out by Crossroads Truck and Bus, which is closest to the truck's Bradford home base.

Finally, Suttons Tankers has a new as human resources director. Karoline Campbell is a member of the Chartered Institute of Personnel and Development (CIPD) and has extensive senior level HR experience, most recently with KCOM.

Campbell will focus on HR strategy to support business performance, employee engagement, training and development, as well as talent management.

"Karoline's appointment will strengthen our ability to have a high performance culture with committed, driven individuals who are supported and given great development opportunities," said Michael Cundy.

www.microlise.com


Microlise's technology will help Suttons manage its fleet through vehicle tracking and utilisation reporting


The in-cab DriveTab unit is an Android tablet device with various functionalities


New Volvo FMXs are the first rigids to be added to Suttons' fleet

Abbey in UK-Spain partnership

Shipping customers' products between the UK and Spain is at the heart of a strategic partnership between Abbey Logistics and Cisternas Amarillo.

Amarillo is a large bulk powder road tanker company based in Seville, Spain and part of the full-service logistics company, Pantoja Grupo Logistico.

The partnership is designed to provide customers with a faster, more reliable and cost-effective transport solution through a joined-up approach that optimises the reach of the two businesses.

The partnership combines Abbey and Amarillo's knowledge and experience in bulk food road tanker transport and maximises their collective fleet capabilities to provide a reliable flow of feedstock ingredients between the two countries.

Using multimodal transport links, the tanks are reloaded for the return journeys, minimising empty miles and deploying both company's vehicles and drivers to ensure products move on a continuous basis.

Paul Laverick, head of Abbey's powder division, said: "This new partnership demonstrates Abbey's ability to support road tanker companies in Europe thanks to our scale and network capability in the UK. Amarillo is highly regarded for its skills and experience in bulk dry food grade products and we are delighted to begin working together as we maximise the vast experience our combined businesses have for the benefit of our customers."

Lars Stendahl, Amarillo's operations director added: "Abbey Logistics is well known to us and its reputation for customer service and flexibility together with specialist knowledge of the products we carry, made the company a natural fit for our operations and customers."

Back in the UK, Abbey has bought liquid tanker specialist Welch Hire.

The partnership between Abbey Logistics and Cisternas Amarillo is designed to provide customers with a faster, more reliable and cost-effective transport solution

The transaction extends Abbey's network coverage with the addition of 48 bulk liquid road tankers and 13 tractor units. The deal also gives Abbey an operating site in the South West of England and a larger customer footprint in Europe, which Abbey says will open further commercial opportunities.

Welch is well known in the bulk liquid food and animal feed markets in both the UK and Europe, and the company shares several customers with Abbey. Together, the combined business will strengthen Abbey's position in bulk liquid food as the deal adds further scale, capability, and flexibility into its operations.

Founded in 1998, Welch Hire has a large and modern liquid bulk road tanker fleet, and in addition to the tank hire business, the company provides both fully managed logistics solutions and single 'spot' product movements of bulk liquid food grade products throughout the UK and Europe.

www.abbeylogisticsgroup.com

African promise behind DPW Imperial bid

Dubai-based port operator DP World is looking to buy South Africa headquartered logistics group Imperial for ZAR66 per share.

The offer is equivalent to ZAR12.7 billion for the company and represents a 34 percent premium to Imperial's 30-day average share price.

DP World is interested in buying Imperial to expand its logistics footprint in Africa and Europe. Imperial's Logistics International business is within the scope of the offer and as such will not be sold separately under the proposed offer.

The South African firm includes a chemicals logistics division which it inherited with the integration of Germany-based Lerhnkering.

"This transaction will be value-enhancing for Imperial as our business will benefit from DP World's leading technology, global networks and key trade-lane volumes, while enabling us to build on our 'Gateway to Africa' ambitions," explained Mohammed Akoojee, group CEO of Imperial.

"Our Logistics International business and operations are also aligned with DP World's expansion plans on the European continent. Combining DP World's infrastructure, specifically its investment and expertise in ports in Africa and Europe, with Imperial's logistics and market access platforms will enable us to offer integrated end-to-end solutions along key trade lanes into and out of Africa and accelerate our position in Europe, driving greater supply chain efficiencies and ultimately enhancing value for all stakeholders."

Sultan Ahmed Bin Sulayem, group chairman and CEO of DP World, commented: "We are excited to announce the proposed acquisition of Imperial, which will add significant strategic value to DP World given its attractive footprint and strong logistics solutions capability. Imperial has a significant presence in Africa, a market where trade is expected to grow at more than twice GDP driven by population growth, accelerated urbanisation and rising middle classes."

www.dpworld.com
www.imperiallogistics.com

DP World is interested in buying Imperial to expand its logistics footprint in Africa and Europe

Full circle

Packaging solutions company IPI Global outlines the principles of the circular economy and why these are highly relevant to industrial packaging

In its most simple form 'circular economy' describes a regenerative economic system, where efficient use of raw materials is maximised, energy is harnessed from renewable sources and the reuse and recycling of materials at the end of their useful life are prioritised.

The EU Commission has adopted this term as the name of its ambitious directive 2018/852, which outlines a number of targets to reduce the amount of waste sent to landfill over the coming years, not least that a minimum of 70 percent by weight of all packaging must be recycled by 2030.

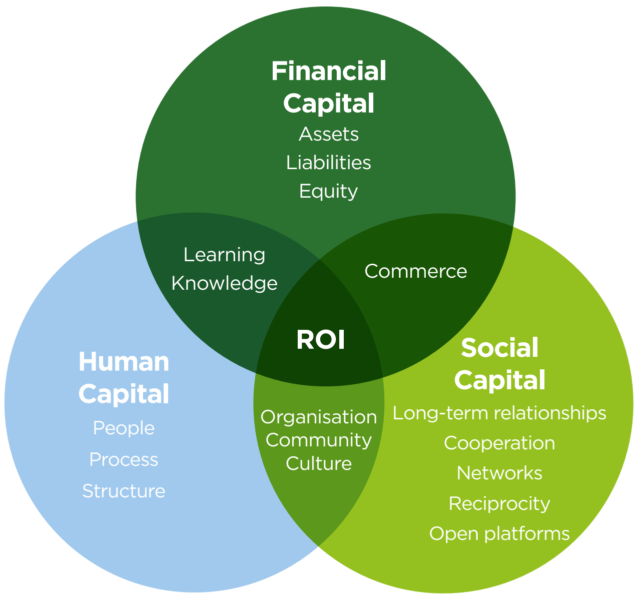
To achieve these targets, the EU Circular Economy strives to "close the loop" of product lifecycles through greater recycling and re-use for the benefit of both the environment and the economy. The aim is to extract the maximum value and use from all raw materials, products and waste, thereby generating energy savings and reducing greenhouse gas emissions.

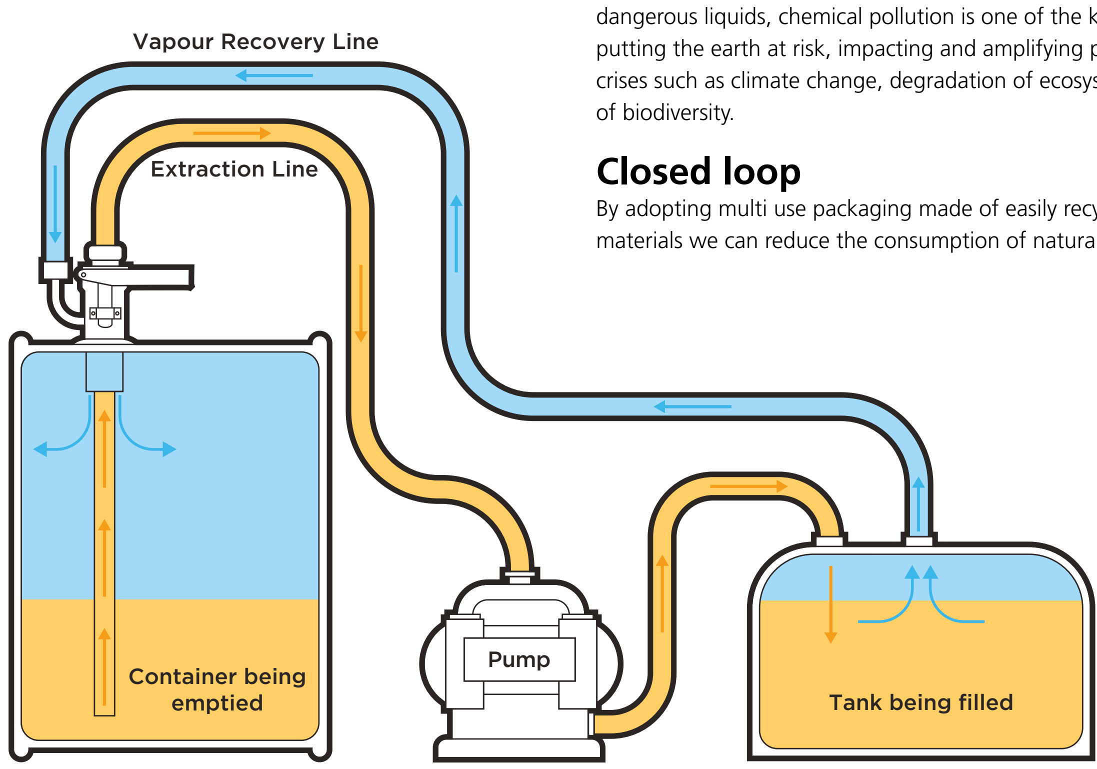
This is relevant to the industrial chemicals market, because a very

high proportion of companies in the worldwide chemical industry, from manufacturers to end users, handle chemicals in single trip metal or plastic packaging. This packaging not only creates massive amounts of unnecessary waste, but the closures are often inadequate from a health and safety perspective where dangerous liquids are handled.

At the current rate, by 2050 the world will be consuming three Planet Earth's worth of natural resources, such as biomass, fossil fuels, metals and minerals. Furthermore the annual waste generation is projected to increase by 70 percent in the same time period. Half of total greenhouse gas emissions and more than 90 percent of biodiversity loss and water stress come from resource extraction and processing.

The circular economy drive to increase dramatically the adoption of reuse and recycling will have an equally dramatic effect on both the amount of natural resources consumed as well as the waste generated by the chemicals industry. While stainless steel containers





are an obvious choice for long lasting, multi trip packaging, this material is not suitable for all chemicals and plastic options are vital. The good news is that leading manufacturers of plastic containers have invested heavily in developing highly effective multi-trip products, so even chemicals which need to be stored in plastic packaging can be handled with the principles of circular economy at the forefront.

It is essential to note that it is not only physical waste which is targeted by the principles of the circular economy. It also includes the rebuilding of all types of capital, including financial, human, social and natural.

A 2016 report by the Netherlands National Institute for Public Health and the Environment found that annually hundreds of thousands of people in the EU are injured or killed through exposure to chemicals at work and the cost to the EU economy of work-related cancer, in terms of healthcare and productivity loss, runs to billions of euros each year.

In addition to the human cost of the sub-standard handling of dangerous liquids, chemical pollution is one of the key drivers putting the earth at risk, impacting and amplifying planetary crises such as climate change, degradation of ecosystems and loss of biodiversity.

Closed loop

By adopting multi use packaging made of easily recyclable materials we can reduce the consumption of natural materials and waste. But, how can we ensure we handle our chemicals in such a way to protect our workers and the environment from pollution? The answer is by using closed loop transfer systems.

Closed loop transfer systems connect two containers and allow the chemical to be transferred from one to the other in a completely sealed process. Neither liquid nor gas can escape to endanger the workforce or environment.

Furthermore, when the liquids are being stored or transported the container closure, which is part of the closed loop transfer system, provides a robust and tight seal for the container. From initial filling through transport, storage and transfer, using the closed loop transfer system in conjunction with multi-trip packaging provides a chemical pack which is second to none in terms of safety.

Where the principles of the circular economy are concerned, a closed loop container pack is unsurpassed in its suitability by encompassing the need for reduction in use of natural resources, reuse and recycling, worker and environmental safety as well as economic benefits.

IPI's involvement

IPI Global works with industry leaders in the manufacture of containers and closed loop transfer systems to provide safe, robust, multi-trip and economic packaging for chemicals which is second to none. The company's systems are used by global brands and have been enthusiastically endorsed.

Using an IPI closed loop pack for chemical handling ensures that a company is adhering to the ethos of the circular economy. The closed loop transfer system and the containers are manufactured from materials which allow multi-trip use; the nature of the pack ensures the safety of both workers and the environment by eliminating unsafe handling, spills and escaping gases; adopting the IPI closed loop pack also has the economic advantage of reducing or eliminating product loss through better handling, plus less packaging costs due to multi trip use.

The IPI closed loop pack can help achieve the circular economy goals – reuse and recycle of materials where possible, protecting the environment, and rebuilding the financial, human and social assets of the company – by providing safe, robust and cost effective chemical handling solutions.

www.ipi-global.com

Evaluation and avoidance of electrostatic charges

Marius Bloching, corporate senior engineer explosion safety, and Alexander Kemmling, sales executive explosion prevention, at REMBE examine the issues around electrostatic charges and explosion risk

Electrostatic charges can occur when two surfaces are rapidly separated, whereby at least one surface must be an insulator.

Critical processes, for example, are pneumatic conveyors, big bag (FIBC) filling stations, or even silos with the danger of a conical pile discharge. In order to avoid electrostatic discharges at such FIBC filling stations, it is necessary to assess the bulk material and to select the proper FIBC type.

How do electrostatic charges develop?

Electrostatic charges and the associated discharges are considered as one of the 13 possible ignition source types to be considered in a plant-related risk assessment. A distinction is made between the most varied types of discharge which, depending on the type, can be responsible for igniting gases or dusts (Fig 1).

Selection of suitable big bag

Big bags are divided into the types A, B, C, D, which can be categorised according to their protective characteristics as follows:

- Avoid brush discharges: Type C and D
- Avoid propagating brush discharges: Type B, C and D
- Avoid spark discharges: Type B, C and D

ELECTROSTATIC DISCHARGES AND THEIR IGNITION POTENTIAL

Energy Ascending	Discharge type	Hydrogen / Acetylene MIE ≤ 0.025 mJ	Solvent vapours MIE > 0.025 mJ	Dust > 1 mJ MIE > 1mJ
+++	Propagating brush discharges	+	+	+
+++	Conical pile discharge	+	+	+
++	Sparks	+	+	+
+	Brush discharge	+	+	-

Fig 1. Electrostatic discharges and their ignition potential. Source: www.bgrci.de

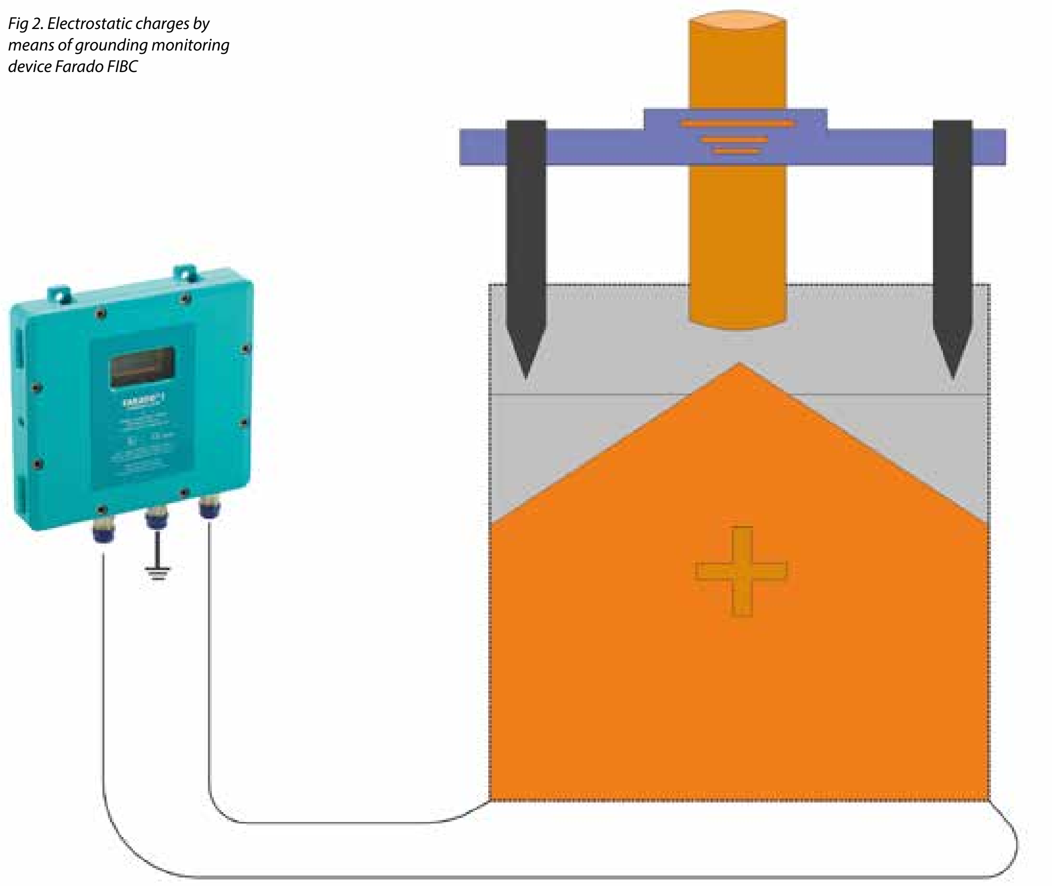


Fig 2. Electrostatic charges by means of grounding monitoring device Farado FIBC

USE OF THE DIFFERENT TYPES OF FIBC

Bulk Product in FIBC	Surroundings		
MIE of dust[a]	Non flammable atmosphere	Dust zones 21-22[b]	Gas zones 1-2[b] (Explosion Groups IIA/IIB)[c]
MIE > 1000 mJ	A, B, C, D	B, C, D	C, D[d]
3 mJ < MIE ≤ 1000 mJ	B, C, D	B, C, D	C, D[d]
MIE ≤ 3 mJ	C, D	C, D	C, D[d]

[a] Measured in accordance with IEC 61241-2-3, ASTM E2019 and EN 13821 with a capacitive discharge circuit (no added inductance)
[b] See D.2 for the definition of zones.
[c] See D.3 for an explanation of Explosion Groups.
[d] Use of Type D should be limited to Explosion Groups IIA/IIB with MIE ≥ 0.14 mJ.
NOTE 1: Additional precautions are usually necessary when a flammable gas or vapour atmosphere is present inside the FIBC, e.g. in the case of solvent wet powders.
NOTE 2: Non-flammable atmosphere includes dusts having a MIE > 1000 mJ.
NOTE 3: The MIE limit of 3 mJ is based on the incendivity of cone discharges. Cone discharges might have a much higher energy in a Type B FIBC than in a Type C oder D FIBC because the wall of a Type C oder D FIBC will be at close to zero potential. Based on this fact the internal field distribution will be such that in Type C oder D FIBC cone discharges will at most only jump across half the diameter of the FIBC. A calculation with the formula given in A.3.7 for the largest FIBC commonly used (diameter of 1,5 m) yields 3 mJ for powder with a median size of only 0.055 mm in a Type B FIBC, whereas in a Type C or D FIBC the 3 mJ limit is only reached with a coarse powder having a median size of 0.27 mm or higher. However, such coarse powders usually have a MIE higher than 3 mJ.

Fig. 3: Selection of suitable FIBC types depending on bulk material and operating conditions. Source: IEC TS 60079-32-1

Type C big bag has conductive filaments, which makes it necessary to ground. Such grounding can be carried out by means of a cable and clamp. Another option is grounding by means of a grounding monitoring system such as Farado FIBC. An approval function enables the big bag Type C to be filled only if the grounding is correctly established.

Type D FIBC transfers the resulting charges to the environment via dissipation. However, this requires grounding of all conductive equipment and objects located within reach of the bag. Likewise, personnel must wear conductive footwear, otherwise they will be charged up as well and act as an ignition source.

The FIBC must be selected strictly in accordance with the requirements of IEC TS 60079-32-1 'Explosive Atmospheres – Electrostatic hazards, Guidance', and depends on the minimum ignition energy (MIE) and the zone classification. However, the division also depends on the zone defined on the outside. If a gas zone is present at the same time, special measures must be considered.

Filling silos

Another source of electrostatic charges is in places where a pneumatic transport or pneumatic filling of silos by trucks is carried out. If an explosive atmosphere develops outside the truck, and the truck charges up electrostatically due to the conveyance, there will be an acute risk of explosion.

For this purpose, always ensure that the truck is properly grounded. Here, there are also systems on the market that are able to monitor the proper grounding of the truck and, via relays, provide an approval system that can be used to control valves or other equipment.

In addition to grounding the truck, care must also be taken to ensure that the conveying line is properly executed. Adequate means that this must be electrically conductive/conductive dissipating and grounded.

Insulating intermediate pieces, such as sight glasses or similar, should be avoided as these may lead to propagating brush discharging.

Conical pile discharge in silos

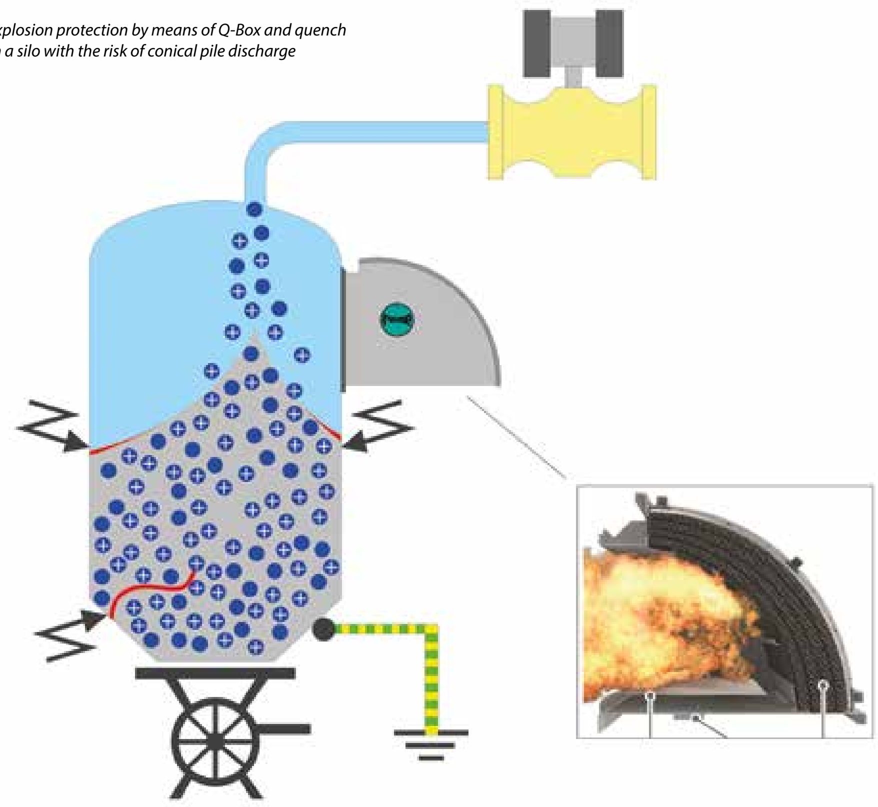
An often not considered circumstance is the possibility of so-called conical pile discharges in silos. Bulk solids are generally not to be regarded as conductive and are dangerously charged during the pneumatic conveying. If the silo is correspondingly large and the median of the bulk material is also larger in median, there is a risk that the cloud of dust above the bulk material will ignite due to a conical pile discharge.

If the conical pile discharge cannot be excluded as an effective ignition source, a protection through protective systems must be established in case of doubt. Flameless explosion venting by means of a Q-Box or explosion suppression by means of the Q-Bic, offer options for indoor installation. The protection of adjoining plant components must also be taken into account during the protection design. Thus the supply line must be isolated against the pressure and flame of a possible explosion. This prevents the explosion from striking back, eg, into the conveying truck or into the big bag loading station. In addition, the silo discharge must be equipped with an appropriately certified rotary valve, eg, Ex II (1) 2 D, to prevent the explosion propagation in this direction.

www.rembe.de

Fig 4. Grounding monitoring of a truck by means of Farado

Fig. 5: Explosion protection by means of Q-Box and quench valve on a silo with the risk of conical pile discharge



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

Fachpack 2021
28-30 September 2021
Nuremburg, Germany
www.fachpack.de

ILTA Conference and Trade Show
4-6 October 2021
Houston, USA
www.ilta.org

Multimodal
19-21 October 2021
NEC, Birmingham, UK
www.multimodal.org.uk

Intermodal Europe
26-28 October 2021
Amsterdam, Netherlands
www.intermodal-events.com

World Bulk Wine Exhibition
22-23 November 2021
Amsterdam, Netherlands
www.worldbulkwine.com

StocExpo 2022
8-10 March 2022
Rotterdam, Netherlands
www.stocexpo.com

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Schütz licensee expands production

Schütz licensee Deren Ambalaj is planning extensive expansions in the greater Istanbul area, Turkey.

With a new state-of-the-art blow moulding machine and a modern hall construction, customers will benefit from an expanded product range and higher delivery security.

Deren Ambalaj in Tuzla, Istanbul has more than 30 years' experience in plastic packaging.

The company has been producing Ecobulk models in original Schütz quality since 2015. Through co-operation with Schütz, the facility was able to expand global the IBC production network in the Middle East and South-east Europe regions. Due to the rapidly growing demand and the increased quantities over the past few years, Deren Ambalaj is now investing in the new three-layer extrusion blow moulding machine and thus expanding its capacity for IBC production.

The production of the most modern IBCs for use in explosion-protected areas is also possible with the new machine. In addition to the already established, Ecobulk SX-EX, which has a special steel hull, the lighter MX-EX will also be available from Deren Ambalaj. With a conductive or antistatic outer layer, this type of container also offers complete protection in Ex-zones and has good handling properties, as well as lower operating weight.

The construction of a new production hall that meets all the requirements for the manufacture of Foodcert IBCs is already being planned.

In future, industries with the highest hygiene requirements – such as the food industry – in the Middle East and South-east Europe will be supplied by Deren Ambalaj. The Schütz partner will also produce Cleancert IBCs for use with sensitive products from the non-food sector, which require the highest level of safety and technical cleanliness, after the new hall has been completed.

www.schuetz.net

Keeping track of returnable industrial packaging

Businesses using pallets, cages, trolleys, stillages and other forms of returnable industrial packaging for customer deliveries or internal transport are often faced with significant, regular expenditure to replace items lost during the course of business.

The typical level of returnable industrial packages lost annually to the industry is on average 10 percent and the range in cost of an individual piece of equipment can be up to several thousand pounds.

The loss of one or two cages, stillages or trollies is easily written off. However, losing one or two assets a week, from multiple depots or sites quickly amounts to a significant operational cost often of tens of thousands of pounds each year in replacements.

In most cases these missing assets are rarely lost and are often attributable to an absence of an effective asset management tracking system.

Working in partnership with several logistics businesses, TracLogik has developed a suite of flexible solutions that can be tailored to overcome these challenges.

Businesses have generally been tackling these challenges with a combination of manual, labour intensive systems. Keeping track of thousands of assets with poorly developed, disparate systems that are rarely updated with data from manual counts, means that the data is always out-of-date – typically the assets have already moved in the time taken between counting the asset and entering the information into the system.

While a manual system may identify a significant operational cost these processes are rarely able to identify the reasons for the asset loss.

Cost-benefit analysis

Operators within these sectors are, of course, acutely aware of the scale of the problem and the ongoing costs associated with the continued loss of these assets.

Frustratingly, until now tracking solutions primarily relying on GPS-based devices have not offered a financially attractive proposition.

The TracLogik system enables users to visualise the delivery of assets to partner facilities in real time

Further, operational issues with battery life and the inability of a GPS-based tracking device to help locate packaging assets while within a depot, warehouse or other indoor facility have meant that GPS by itself is not a viable solution.

Other systems such as RFID or barcoding often rely on manual intervention, which can be subject to human error and process fatigue, especially when third parties are asked to contribute to the tracking procedure. They also often lack the ability to acquire location data once the asset is in transit.

The good news is that in addition to GPS tracking, there are other technologies used in the asset tracking sphere; namely WiFi, Bluetooth Low Energy (BLE) and Sigfox GPS. In a defined area, like a campus, manufacturing facility or hospital complex, these technologies are highly effective.

Tracking tags, attached to each tracked asset combine with an overlay network of receivers can give real-time location information and, where required, telemetry data.

TracLogik's low cost Sigfox GPS solution enables the tracking of assets outside the closed environment of a depot, warehouse or distribution facility where historically tracking devices could not communicate without the expense of cellular network connectivity extremely limiting battery life.

TracLogik combines GPS and BLE into an effective and versatile industrial packaging tracking solution to harness the strengths of both technologies.

By deploying TracLogik's integrated GPS-Bluetooth receivers in vehicles, the system can provide a live position for assets tracked by Bluetooth, almost anywhere in the world. This gives full visibility of transport assets through the production facility, to the distribution centre, onto vehicles and at delivered locations.

The TracLogik system enables users to visualise the delivery of assets to partner facilities in real time. If required, the system can be extended quickly and cost effectively to provide coverage at the partner facility using Bluetooth with optional 3G/4G cellular communication should other connectivity for the devices be unavailable.

The TracLogik solution combines a broad spectrum of tracking technologies, including GPS, WiFi, BLE, RFID and low power wide area networks such as Sigfox and Lora.

The ideal solution for a client may incorporate several different technologies. However, TracLogik's cloud-based software hides this complexity behind a concise intuitive user interface. Users are presented with a list of assets and a list of locations. The software is then tailored to enable users to answer the questions that are important such as: Which assets are present at which location? Which assets were scheduled to arrive at a location, but have not? How many assets are going to be present in this location at 2pm?

The result is that the packaging asset tracking system, which was installed based on a business case that predicted a payback period based around the reduction in the loss of assets is now also a go-to business tool for transport managers planning their next deliveries showing available capacity, throughput and being a source of asset-optimisation and rotation time reduction.

www.traclogik.co.uk