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Tankcontainer

MAGAZINE

Volume 3 | Issue 4 | December 2016



Thomas Hoyer, Chairman of the Advisory Board of Hoyer Group, talks market dynamics

HOYER

WHEN IT MATTERS ■



**We congratulate the HOYER family and all HOYER employees
with the 70th anniversary of your great company.**

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Klinge Corporation is reaping the rewards of 30 years of innovation in the refrigerated and tank container field

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BRIC-à-brac

There's a saying among the banking community in the City of London that an emerging market is one from which it is difficult to emerge. From a tank container perspective, today's business opportunities in emerging markets are flavoured by the prospect of strong growth but frustrated by the lack of the infrastructure on which intermodal logistics activity - not least tank containers - depends.

Nevertheless, there are rewarding opportunities for tank containers in emerging markets so *Tankcontainer Magazine* will be including these geographies as a regional focus in future issues.

Jim O'Neill coined the BRIC acronym while working as an economist at Goldman Sachs in 2001. As we all now know, it grouped Brazil, Russia, India and China as potential growth powerhouses of the future and the term 'BRIC' has since developed into a shorthand definition of emerging markets.

Since 2001, China's economic growth has of course set it apart from the rest of the BRICs to such an extent that it is now the second-largest economy in the world. However, in tank container terms, it can still be considered as an emerging market, given its potential.

Some exposure to the BRICs by tank container operators can help build a more stable global business as operating in BRIC countries helps complete global network coverage and density while offering pockets of relatively less contested, and therefore more profitable, business.

Santos in Brazil, for example, is Latin America's busiest container port, and recent research highlighted substantial movements into South America of isocyanates, trimethylhexanal, ethylenated benzene and epoxidised soya bean in tank containers.

Russian tank container trade often requires investment in additional security to protect equipment and India is very slowly developing its intermodal infrastructure, encouraged by strong recent economic growth.

As noted by investment management firm Psigma: "Many emerging markets are enjoying an improving economic backdrop, decent profit growth and a return of investment inflows after several barren years. By contrast, developed markets have the threat of persistently poor politics, low growth, high levels of debt and ageing populations with economic expectations that are unlikely to be fulfilled."

This might be too polarised a view, but Asia (outside Japan) is currently the fastest-growing economic region in the world, with GDP rising by over 6%, more than double the global average.

On the theme of growth, this issue features an

interview with Thomas Hoyer, Chairman of the Advisory Board of Hoyer Group. As the company celebrates its 70th anniversary, he discusses the benefits of family ownership, how large tank container operators compete against smaller ones and the current trends in the industry. The changes in the purchasing power of customers are discussed, as are the current challenges for tank container operators.

The key supply chain themes from the recent EPCA conference in Budapest are reviewed. The conference is the largest gathering of petrochemical producers and decision-makers in Europe and includes a substantial supply chain presence. 20% of delegates were chemical supply chain professionals, underlining the mutual dependency between chemical producers and their supply chain service providers.

The conference considered the impact of disruptive trends on tank containers and the impact of China on global supply chains. Some believe that within ten years China will own 20% of the global supply chain. There is no doubt that if it wants it, it will buy it. In the tank container sector, those working for Seaco, Cronos and NewPort are among those already enjoying the benefits of Chinese ownership.

Elsewhere in this issue, we catch up on progress at Zhongshan Zhonghua Tank Containers (ZZTC) in China since Suretank took full control of the company. Suretank had been the majority shareholder of the company since 2010 and bought the remaining 33% of the share capital from Chiling.

We also report on how advances in the satellite monitoring of tank containers can identify their location and operating status, wherever they are on earth, and in a centrepiece article, we discuss how it is not the meek that will inherit the earth but strong ambitious companies that have grown either organically or by merger and acquisition (M&A) activity.

We consider if there is scope in the tank container leasing sector for further consolidation after HNA/Bohai's land-grab of Seaco Global and Cronos, and the tie-up between Dong Feng and Florens.

We also explore a more unconventional M&A strategy, involving the acquisition of a smaller tank container lessor by a financial investor to act as a platform for a series of other lessor acquisitions. The resulting aggregation would create a much larger tank container leasing business that would benefit from economies of scale and offer a variety of attractive exit positions for the initial investors.

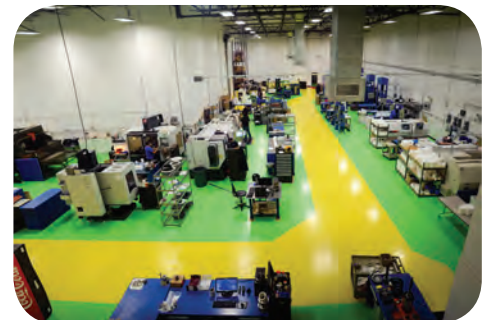
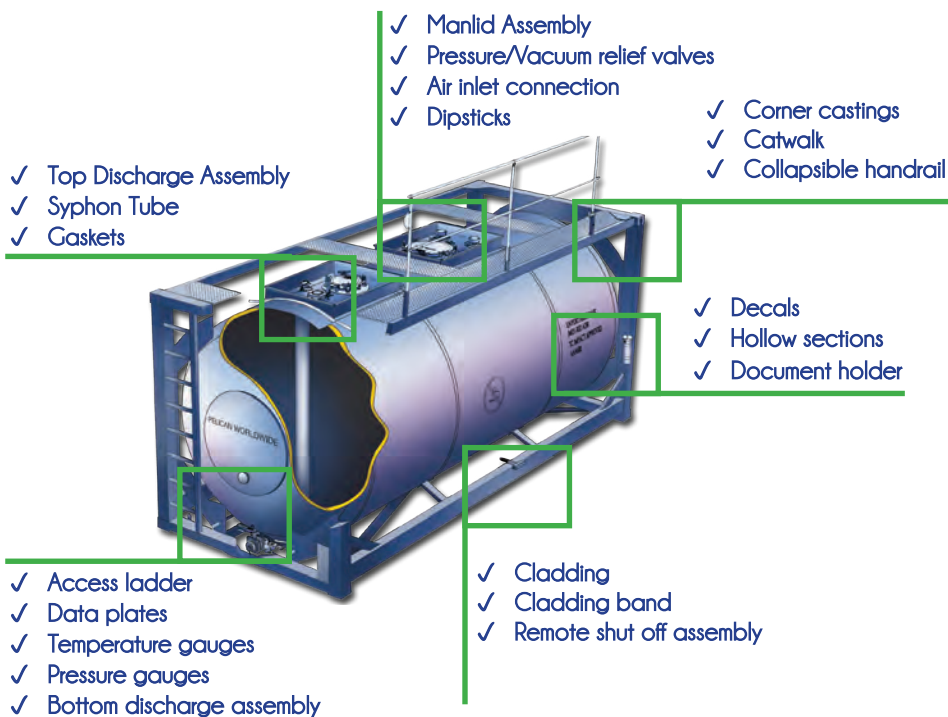
Leslie McCune, Editor

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Pivota unveils multi-year supply deal with Carib

Pivotal LNG recently announced a multi-year agreement to sell liquefied natural gas (LNG) to Carib Energy LLC, a Crowley Maritime Corp. subsidiary. Crowley will transport and deliver LNG from the U.S. mainland to its newest client, Molinos de Puerto Rico, a subsidiary of Ardent Mills LLC, the island's leading supplier of flour as well as wheat, corn and rice-based food ingredients.

"Crowley's partnership with Pivotal LNG continues to help our customers meet their energy needs with cleaner, efficient fuel sources," said Crowley Vice President Greg Buffington. "With Pivotal and Crowley's logistics team working together, Molinos will be able to expand environmental sustainability efforts and better manage weather-related power challenges that can affect Puerto Rico."

Pivotal will load LNG onto international shipping organization (ISO) containers, authorized by the U.S. Department of Transportation to carry approximately 10,000 gallons of LNG. Crowley's domestic logistics team will coordinate the over-the-road transport of the 40-foot ISO containers to the company's Jacksonville, Fla., shipping terminal, where they will be loaded onto company-owned vessels.

Upon arrival on the island, Crowley's Puerto Rico-based logistics team will deliver the LNG to Molinos. There, the LNG will be re-gasified and used for power consumption.

"We are proud to be working with Crowley and Molinos. This project provides an environmentally



friendly fuel to Molinos that will help reduce emissions in Puerto Rico and its dependency on other petroleum products," said Tim Delay, vice president of Pivotal LNG. "Liquefied natural gas is a clean, domestically produced, alternative fuel that can be used in multiple ways. This additional long-term sale of LNG to Crowley showcases the value of LNG as an alternative energy source."

Crowley's Carib Energy was the first company to receive a small scale, 25-year, LNG export license from the U.S. Department of Energy for LNG transportation from the U.S. into Free Trade Agreement (FTA) countries.

Shortly thereafter, a Crowley LNG services group was formed to begin offering supply, transportation and distribution of LNG services via 10,000-gallon ISO containers, and the company was additionally granted the first small-scale license for supply, transportation and distribution of LNG into Non-Free Trade Agreement (NTFA) countries in the Caribbean, Central and South America. Crowley is already supplying LNG to Coca-Cola Puerto Rico Bottlers in Cayey and Club Caribe in Cidra, both wholly owned

subsidiaries of CC1 Companies, and to a major pharmaceutical company on the island. The latest sales agreement continues a partnership between Carib Energy and Pivotal LNG that began in 2014 for the sale and delivery of LNG to the island.

Over the past two years, Crowley's LNG group has safely transported more than 250 LNG containers, comprising more than 2.6 million gallons, from Jacksonville to Puerto Rico.

Qualitank re-enters LPG tank market

Qualitank, a global supplier of ISO tank containers, has made the strategic decision to re-enter the LPG tank market. The Cheshire, UK-based firm, has been producing tank containers for the chemicals, food, powders and gases industries for more than 20 years and has recently begun a programme of investment in its LPG tank fleet, with refurbishment and re-certification a priority. The firm aims to be supply T50 tanks for LPG from stocks in UK & Antwerp.



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Fort Vale launches Hyper Maxi valve

In November 2015, Fort Vale launched a new generation 80mm Hyper Maxi safety relief valve aimed at the intermodal market. Continuous product development has led to further improvements and the release of its successor, the 82.5mm Hyper Maxi, which yields even higher flow rates.

Verified test results demonstrate an 8.4% increase in unimpeded flow for the 82.5mm Hyper Maxi relief valves at industry standard settings.

Fort Vale strongly believes that verifiable technical integrity is becoming increasingly important in a market that has seen a recent influx of 'copy' valves with an unknown performance history.

The company comments, "Safety Relief Valves are required to protect vessels from catastrophic failure, to preserve against loss of life and damage to the environment. As a market leader in our field, we take the associated responsibilities very seriously and want our customers to feel completely confident that they are buying the safest possible



valves that have been tested and are trusted to perform consistently, for the life of their tank container."

To date, Fort Vale believes it is the only intermodal valve manufacturer to have a purpose-built Flow Test Facility at its headquarters and manufacturing site.

Independently approved by Lloyds Register, this resource enables the company to challenge the performance of its range of equipment and continue to make a significant contribution to the safe and reliable operation of tank containers.

For example, close observation of relief valve behaviour during venting has enabled Fort Vale to refine certain key components and re-engineer the original Hyper Maxi

design to produce a relief valve with a more precisely controlled pressure plate lift. This has the effect of reducing turbulence within the valve and maximising flow.

The Hyper Maxi has a special composite style pressure plate, designed to improve O ring retention under pressure, a feature which enhances the long-term safety and performance of the valve and potentially reduces maintenance costs.

The new Hyper Maxi is interchangeable with the existing 80mm model and is available with a pressure setting of 2 PSI up to 204 PSI (0.14 Bar to 14.07 Bar) and a vacuum setting of 0.5"Hg to 24"Hg (0.02 Bar to 0.81 Bar).

There are 3 body styles: standard, short extended and long extended, each with a slotted flange to facilitate 4 common drilling patterns: DIN65 PN10, 3"BSTD, DIN80 PN6, 3" ASA 150.

Development of the Hyper Maxi range of relief valves is ongoing and the company is soon to release an additional valve, together with bespoke ancillary products, specifically designed for low pressure, high-capacity tanks.

Hoover Ferguson finalises merger

Hoover Container Solutions, Ferguson Group and CHEP Catalyst & Chemical Containers, three leading global providers of container solutions products in the energy, petrochemical and general industrial markets, have finalised their merger to form the independent joint venture company, Hoover Ferguson Group.

Global supply chain solutions company, Brambles Ltd, the owner of Ferguson and CCC, and First Reserve and Hoover management, the owners of Hoover, completed the transaction on October 21, 2016. The joint venture is 50% owned by Brambles and 50%

owned by Hoover shareholders.

The combined Hoover Ferguson business establishes one of the largest global fleets of rigid steel intermediate bulk containers and cargo container units, offering more than 110,000 rental units worldwide, across a vast global network of more than 70 service centers in 26 countries and supported by approximately 500 team members.

Hoover Ferguson will have a prominent market presence in every major energy basin and petrochemical manufacturing centre in the world. Chairman and CEO of Hoover, Donald W. Young, will lead the new company, supported by a management team comprised of senior executives from Ferguson,

CCC, Hoover and Brambles.

He said: "This strategic merger will add scale across our combined markets which will position Hoover Ferguson to bid on larger projects and help us maintain a footprint that better services customers globally."

Twente expands at Rotterdam Maasvlakte

Combi Terminal Twente has officially opened a major expansion of its intermodal terminal in Rotterdam's Maasvlakte area. The expansion added 4 ha of storage and transfer capacity and provided space to store 1,000 teu of tank containers; uniquely,

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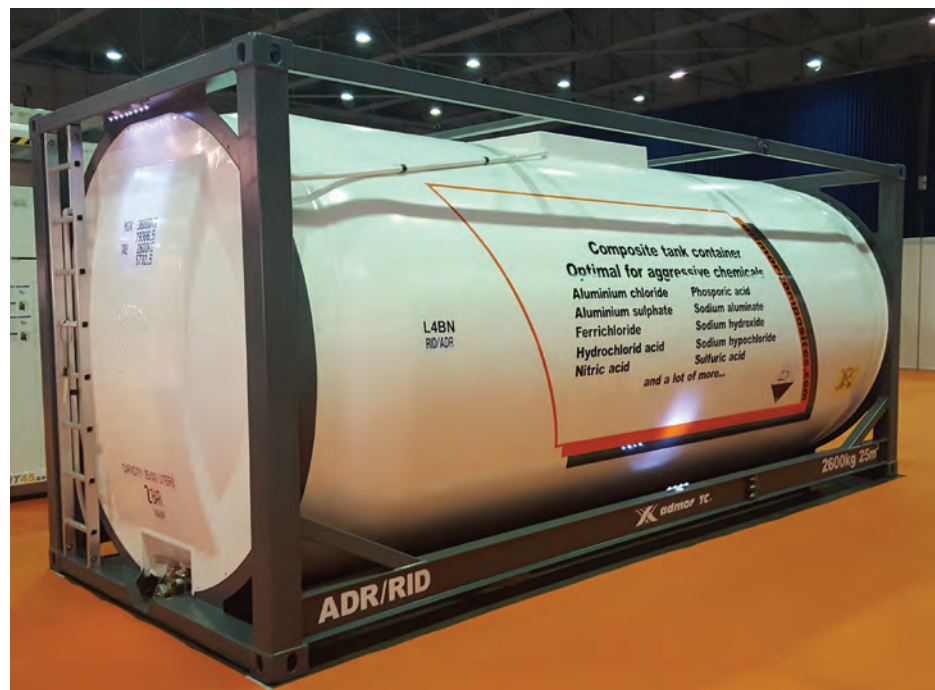
CTT Rotterdam is permitted to store dangerous goods for longer than two weeks. It also has the capability to undertake tank container inspection, testing and repair. The terminal now has five rail sidings and offers direct connections to Germany, Poland, Austria and Hungary.

Den Hartogh named Best Employer

Den Hartogh Logistics has been awarded Best Employer within the Netherlands in the category 'Transport & Logistics'. The Best Employer Survey 'Beste Werkgever' was conducted this year for the 16th time by Effectory and Intermediair in order to make an objective assessment of employment practices in the Netherlands. Annually more than 200,000 employees review more than 300 employers.

The Best Employer survey provides insight into the important HR themes such as enthusiasm, commitment and job satisfaction of employees. Den Hartogh has scored high on these themes.

Admore Composites unveils new tank



Finland's Admor Composites had a new tank container on show at the Intermodal event in Rotterdam in November.

The 25,000-litre tank, manufactured using glass-reinforced plastics materials, is the result of a collaboration

with ApATeCh in Russia and Lightweight Structures; the tank is currently being put through its paces by Russian Railways. The tank, which weighs only 2,600 kg, can carry a 33.4-tonne payload and it optimised for road and rail use in Europe.

Slow growth puts leased container fleet under pressure in 2016

Following slow growth of just 3.5% in 2015 due to decreased rental demand, the global leased container equipment operating fleet is forecast to increase by little more than 1% in 2016, according to Drewry's Container Leasing Industry Annual Report 2016.

By the end of 2015, leasing companies were again having to shift a sizeable factory stockpile, as well as contending with rental rates at an all-time low. New and used container prices had also fallen to their lowest in more than a decade because of weaker demand and a recent steep drop in the cost of steel and factory running costs.

Only in the more specialised

reefer and tank container sectors is fleet expansion expected to outrun that of dry freight, and the world average as a whole, with the leased reefer fleet continuing to grow at a significantly stronger rate than shipping line-owned equipment.

Long-term operating lease (LTL) rates suffered further erosion in 2015, as new dry freight pricing fell to a 15 year low. As rate levels and returns have fallen to a low, utilisation has also declined and the box leasing industry is facing its toughest financial challenge since the earlier downturn in 2009.

Several mergers concluded in 2015 and 2016 resulted in a total of 8.5 million teu being transferred

between major leasing firms, and the disappearance of three long-standing names from the top 10.

ITCO announces a new online course

A new online course is available from the International Tank Container Organisation (ITCO) on the safe and professional use of tank containers.

ITCO Tank Container e-learning is suitable for those with a direct responsibility in the operation or management of tank containers but intended for all personnel within a company, including those

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who may not be directly involved with tank containers but for whom general awareness training may benefit both the individual and the business. This includes those involved with tank containers, either directly or otherwise, such as tank operators, shippers, carriers, lessors, surveyors and depot service providers. The course provides a firm grounding in order to progress to further training to meet the specific functions of such roles.

The aim of the new ITCO initiative is to aid consistent and measurable training on the use of tank containers and promote professionalism and safe practice within industry through the advancement of knowledge.

The course content provides a background to the tank container industry, components of the tank and their use, regulations appertaining to the tank, operating the tank and finally depot services including inspection, cleaning, repairs and testing.

The ITCO was established in 1998, and represents the international tank container industry to the public and to governmental bodies. It has around 170 members worldwide, including operators, lessors, manufacturers, service providers, inspectors and surveyors, and represents around 90 percent of the global tank container industry fleet capacity. Its mission is to promote and represent tank containers as a safe, cost-efficient and flexible means of transport.

ITCO Tank Container e-learning will be available to purchase from December 2016.

New website for Advanced Polymer Coatings



Advanced Polymer Coatings has launched a new corporate website – www.adv-polymer.com. The firm offers two main brands – ChemLine and MarineLine – and has launched the site to better reflect the capabilities of the brands.

ChemLine coatings have been used on thousands of industrial applications protecting transport and processing equipment, and concrete flooring and containment areas from the rigors of hazardous chemicals.

MarineLine is the well-known cargo tank coating protecting maritime chemical and product tankers on the high seas transporting a wide range of chemicals.

The newly designed web format offers a number of new viewer-friendly features, including a responsive design presentation that delivers the optimal viewing experience, whether the website

is seen on a computer desktop, laptop, tablet/pad, or smartphone.

An easy to use navigation format allows a viewer to quickly access many pages within the website including all product information, chemical resistance guides for the various coatings, case studies, newsletters, technical reports, news articles, trade shows, and more information.

Advanced Polymer Coatings Chairman, Donald Keehan said: "One of the primary reasons we upgraded our website is to serve the many site visitors who are now searching and viewing www.adv-polymer.com with mobile devices.

"Mobile usage is increasing and the new responsive design format serves this application, wherever a viewer is located in the world.

"Now our coating brands and all related information is readily accessible to answer their needs."

Hoyer invests in modern truck technology

Logistics company HOYER has invested in its truck fleet by adding 91 new truck units and six at a cost of €8m. 60 of the truck units were ordered for the Chemilog business unit's German and Polish locations, while the remaining 31 truck units



and 6 chassis are destined for the Petrolog business unit's business in Norway and the Baltic states.

All the Chemilog trucks have full safety equipment as well as the components required by law

(emergency brake assistant and lane-keeping assistance system), they also have adaptive cruise control with collision warning, a lane change assistance system, a driver fatigue warning system and a semitrailer coupling fitted with sensor monitoring. The Petrolog business unit's truck units also have comprehensive safety equipment. The renewal of the truck fleet also means greater comfort and convenience as well as even more safety for HOYER's drivers.

HOYER's Procurement Manager, Alexander Radlowsky said: "We believe it is very important that our drivers feel comfortable in the truck units and can carry out their daily work in the best possible way and above all safely. The Volvo truck units enable this by, among other things, large driver's cabs and storage spaces, ergonomic seats and beds, and engine-independent air conditioning."

Wegner to lead logistics at BASF



Dr. Christoph Wegner, currently Senior Vice President, Regional Business Unit Amines Europe, will become President of BASF's Information Services and Supply Chain Operations division, effective December 1, 2016. He succeeds Dr. Robert Blackburn, who has decided to leave the company.

New MD to head up international at Suttons

International logistics and supply chain specialist Suttons Group has announced the appointment of Barry McNally as managing director of Suttons International Ltd.

Suttons International Ltd operates globally with operations in the Americas, Europe the Middle East and Asia.

Barry will oversee all activities that the Division provides to its clients in the chemical and petrochemical sectors including international Iso Tanks, fleet management, supply chain management, chemical packaging, warehousing and on-site logistics.

Barry will be based at Suttons' head office in Widnes, Cheshire.

Barry has spent the last 18 years working for Stolt-Nielsen, most recently as Director of Planning and Projects for Stolt Tankers. Prior to this, Barry held the positions of Regional Director Europe and Global Marketing for Stolt Tank Containers, leading teams of more than 120 employees in 6 countries.

John Sutton, Suttons Group CEO, said: "I am delighted to



welcome Barry to the Group.

"His appointment is key to the success of our International business and I'm confident that Barry will bring his extensive knowledge and sector experience to bear in driving forward our growth strategy. I am confident he will make a strong addition to our Board of Directors."

Suttons operates internationally with key business centres in New Jersey, Houston, Chicago, Widnes, Antwerp, Ludwigshafen, Paris, Kuantan, Singapore, Shanghai, Tokyo and Khobar.

Change at the top in Koppen transport division

On 1st of September Robert Schaefer (pictured right) took over the lead of the transport department from Marco Thahaeuser. Thereby he is going to be responsible for the proper operations of more than 20.000 tank container shipments per year, primarily with hazardous cargo within the Rhine-Ruhr region and the operation of the own 50 trucking units.

37-year aged Robert has passed his apprenticeship as logistics manager at HANSA-CHEMIE in Duisburg and joined Köppen



Van den Bosch and MTG open cleaning station in West Africa



Logistic services providers Van den Bosch and MTG have opened a tank cleaning station in the port of Tema, Ghana – the first of its kind in West Africa.

The Dutch ambassador in Ghana, Ron Strikker carried out the opening ceremony and said: “I would like to congratulate Van den Bosch and MTG with this achievement. The cleaning is a new example of the expanding number of Dutch investments in Ghana.”

A member of the Team of Directors at Van den Bosch, Paul van de Vorle said: “A growing number of companies chooses to ship their liquids to Africa as bulk freight instead of small packaging. With the start of the tank cleaning

station, we are able to link inbound and outbound cargo flows more easily and to support companies in making the switch to bulk transport. This will provide many advantages in terms of handling, heating and savings in packaging costs.

“Tank containers cannot be cleaned professionally anywhere in West Africa yet. Through this tank cleaning station, it is now possible to have tank containers cleaned in Ghana, which leads to new possibilities for shipping and transport companies. The cleaning station will create a better balance between inbound and outbound cargo flows and reduces the number of empty transport movements. In short: a

sustainable logistic solution.”

The station will be operated by MTG, a subsidiary of logistic services provider Portside. Last year Van den Bosch started a partnership with Portside that acts as the appointed agent for the Ghanaian market. MTG also owns the container depot in Tema, where the cleaning station is located.

Managing Director Bas de Vaal said: “We can now provide a full logistics concept to all importing and exporting companies of liquid bulk goods.

“Moreover, tank containers can also be used to transport liquid bulk goods to various land locked countries, such as Burkina Faso and Niger.”

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GmbH in 2003. From then on he participated significantly in the development of the department. Since 2008 he is the deputy leader and responsible for the planning of the trucking recourses.

After eight years in operations Marco Thalhaeuser will join the executive department in the position of Manager Business Development. Parts of his jobs will be the centralized marketing for all company services, logistic projects and IT-development.

Marco is 41 years old and passed his apprentice ship as logistics manager at CENTRANS SPEZIALLOGISTIK respectively HOYER GmbH and was the Manager of the Duisburg branch before it was relocated to Dormagen. In 2008 he took over the management of the transport department of the Köppen GmbH, whose turnover nearly doubled since then.

Both colleagues are most skilled professionals in the transportation of liquid chemicals in road tankers and tank containers.

Exsif is building for the future

Anticipating changes in the dangerous goods regulations restricting certain hazardous products from being transported in standard tank containers, EXSIF Worldwide, Inc. has invested in a high-specification fleet of T20 and T22 UN Portable Tanks to meet the demand of its global customer base.

On January 1st 2017, the second step of the transitional provision in accordance with the ADR / RID special provision TP37 ends. As a result, thirty additional products will be added to the list of chemicals that can no longer be stored or transported in standard UN Portable Tanks. The stricter rules will require these products to be shipped in Portable Tanks

meeting the technical requirements of T20 or T22 classification.

With its commitment to continuous investment in the tank industry, EXSIF Worldwide, Inc. is making new T20 and T22 tank containers available for lease in several key locations. In order to integrate our service with customers' requirements and to maximize supply chain efficiencies, several specifications of T20/

T22 tank types will be offered: 20,500, 22,500, and 25,000 litre capacities. Tanks will be available with or without baffles.

Stefan Heesen, EXSIF's new European Chemical Division Manager, commented that "adding these highly specialized tanks to our already extensive fleet mix enables EXSIF to demonstrate its unique supply capabilities and ongoing support to the chemical industry".

Tank design secures sodium cyanide contract



Suttons' North American team has won a significant contract with Cyanco, the world's leading manufacturer of sodium cyanide.

Due to the toxic nature of sodium cyanide and strict regulations surrounding its storage and transportation, Cyanco was looking for a logistics partner with significant experience in hazardous materials.

Suttons' technical department worked closely with Cyanco's technical team to update an existing tank container solution which features a sparger system designed to dissolve solid sodium cyanide briquettes into a liquid sodium cyanide solution, used at multiple gold mining sites across the world.

George Easterling, Cyanco's supply chain director, said: "We have a strong working relationship with Suttons and are highly impressed by their flexible and innovative approach.

"We are committed to safety of not just employees and customers,

but the environment as well.

"We maintain strict controls that manage risk and are pleased to have a responsible and solution driven partner in Suttons to work with us to continuously develop our processes and procedures."

Steve Lonsdale, business unit director, Suttons Americas, said:

"This is another important contract win for Suttons.

"The client was looking for a company with world class safety, security and compliance credentials, plus a proven track record in managing technically challenging solutions on their behalf.

"Suttons had the right blend of knowledge, experience and infrastructure to meet their specific brief."

Suttons operates internationally with key business centres in New Jersey, Houston, Chicago, Widnes, Antwerp, Ludwigshafen, Paris, Kuantan, Singapore, Shanghai, Tokyo and Khobar.

Tankcontainer Directory

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Liquid in motion: Huktra celebrates 40 years



Huktra NV, an international intermodal tank container operator, is celebrating its 40th anniversary this month. 4 decades of experience and development have transformed the Zeebrugge start-up into a successful European Logistics provider, with offices in Belgium, Italy, Spain and the United Kingdom.

In 1976, Roland Van Poucke started the company in Zeebrugge, with business to and from the United Kingdom. Now, 40 years later, his two sons Gerd & Tim Van Poucke are running the business. Working for the chemical and edible industry, Huktra offers intermodal solutions across Europe, combining rail, ship and truck.

Quality, safety and security have always been at the heart of Huktra's business: close attention to detail, structured and controlled working methods. Specialised in hazardous cargo, but any cargo is treated with care. Huktra was the first intermodal operator in Belgium, in obtaining GMP-certification. Earlier this year, it was also one of the first companies in Belgium to obtain the renewed ISO 9001:2015 certification.

40 years of business is a major milestone, and Huktra didn't want to just let that pass. On Friday 25 November an event was organized for customers,

partners, staff and longtime friends. Location: Huktra's own Maintenance Center. The event was called 'Liquid In Motion'. Managing Director Gerd Van Poucke explains: 'We wanted to make sure the event reflected our core values, and allowed people to step into our world. We placed a brand new tank container at the heart of the venue, and constructed a reflection of that tank container around it'. A white box with red details was constructed, and at the heart a brand new Huktra tank container. The evening turned out highly entertaining, with a surprising speech, and a very popular gin-bar inside the tank container.

Managing Director Tim Van Poucke is already looking ahead: 'We have managed to grow year by year and we want to continue to do so in the next years. Another 30 new tank containers have been added to the fleet to support that. We aim for solid growth: that is what is key to us. Transport & logistics is a complex world, with high pressure. Every year we see new challenges, but that's what we love. We have a team of dedicated staff, so yes, Huktra is ready for the next 40 years. And who knows, in 40 years time, we celebrate Liquid In Motion part 2, this time with a self-driving tankcontainer at the centre of action.'

Hoyer – 70 years and counting



Editor Leslie McCune explores market dynamics with Thomas Hoyer, Chairman of the Advisory Board of Hoyer Group

LM: This year is Hoyer's 70th anniversary as an independent family business. What benefits does a private family business have over a public company?

TH: Family and public limited companies are two fundamentally different models and both have their advantages and disadvantages. However, as a family entrepreneur, I believe in longer-term strategy and think in generational terms rather than just delivering quarterly results (which, of course, we also do).

The family culture makes access to executive management very easy and decision-making is fast as there is less bureaucracy - just a simple 'Yes' or 'No'. The family values are transparent, enduring, clear to all and always practised.

LM: What are the tank container highlights of Hoyer's first 70 years?

TH: The first highlight was naturally our first HOYER-tainer in 1971. From the first to the almost 40,000 tank containers that we have today, has been a very positive journey, and is one which is continuing.

The development of our Deep Sea business unit, which started by shipping Würtzburger Hofbräu beer in 1978

from Germany to the Anheuser-Busch brewery in Newark, New Jersey, is also a highlight. Since then, the business unit's fleet has grown to 20,000 tank containers. It now has a truly global presence and has a well-earned reputation for high-quality service and reliability.

I would like to stress that our gas fleet includes ultra-light aluminium tank containers for air gases – these have a tare weight below 6 tonnes, operate at a pressure of 4 bar and have a holding time of up to 20 days.

The fleet also includes high-pressure, high-payload carbon dioxide (IMO8) tank containers and multiple-element gas containers (MEGCs) for the transport of high-pressure gases up to 200 bar. MEGC is a multimodal assembly of cylinders, tubes and bundles of cylinders which are interconnected by a manifold and assembled within the tank container's framework.

Our Supply Chain Solutions (SCS) business is among the world's leading providers of value-added services to the chemical industry and has a special focus on contract logistics. Services include on-site logistics, filling and blending services, intermodal terminal operations, dangerous goods terminal operations, dry bulk logistics and project development.

SCS's highlights include its role in

the start of operations, in 2000, of the dry bulk logistics plant for plastic ABS granules in Dormagen, Germany. In 2016, the first SCS overseas on-site logistics activities were provided for Covestro in Shanghai, China.

LM: What are Hoyer's assets (tank containers, depots, staff, etc)?

TH: Our 2015 annual report reported that we employed 5,663 staff worldwide, had a fleet of 36,369 tank containers, 24,857 IBCs, 2,979 semi-trailers and 2,684 trucks. We now have around 6,000 employees in 115 countries.

LM: Does Hoyer lease tank containers?

TH: The Deep Sea business unit has leased tanks, but we have not done so in the last few years. Instead, we have invested in our own equipment because this reduces our operating costs. However, the Gaslog business leases tank containers if there is a shortage within its own fleet, and has good relationships with other tank container operators and lessors.

LM: What is Hoyer's position in the tank container operator market?

TH: Hoyer is a European and global tank container leader in the chemicals, food, gas and mineral oil sectors. We are also the world leader in the air

gases and carbon dioxide segment of the tank container market and are among the top five players in the industrial gases segment.

LM: How is Hoyer positioned in the US?

TH: Hoyer has been operating in the US since 1978 and has its own office in Houston with commercial offices in New Jersey and Toronto. We also operate our own depot and repair facility in Houston.

LM: What is the company's strategy?

TH: To continue our growth, with an emphasis on profitability. This will be achieved by strategic acquisitions, organic growth or joint-ventures. In the process, we will strive to ensure we remain environmentally optimal and will be placing added emphasis on SHEQ.

We intend to continue to focus on state-of-the-art containers, innovation, co-invention with customers and being able to predict customer needs.

LM: How do larger operators like Hoyer compete against small, locally focused new operators, which have increased industry fragmentation?

TH: Although Hoyer is a large group we operate on a local level. As a result, Hoyer is able to successfully compete against smaller local companies. For example, in Turkey we are recognised as a domestic service provider due to our high level of quality and our competitive costs. In addition Hoyer has the ability to adapt to last minute changes and larger projects at short notice.

In the EU food market, more eastern European road operators have entered the market in recent years and several have become established on the tendering shortlists of our customers. They have some cost advantages due to their lower-cost drivers so, in this respect, there is more fragmentation.

It makes no sense to compete with small local operators in their niche areas, as they operate with short-term thinking.

LM: Will growth be organic or, like Den Hartogh, through acquisitions?

TH: Both, assuming suitable M&A targets are available.

LM: The tank operator market is highly fragmented. How does Hoyer hold its ground?

TH: By constantly working on our cost base to ensure it remains competitive, as customers often view our services as simply a commodity. We also remain focused on our core values: long term commitment, quality, family values and safety.

We also hold our ground by maintaining high service levels and living up to our customer guarantees. Our commercial group maintains close relationships, which are even more necessary in today's fragmented market.

LM: Hoyer operates in different markets. To what extent do the customers overlap?

TH: To some extent there is an overlap between chemical and food customers, but the advantage is that we can offer the same customer a "package solution".

Large, globally-operating companies based on the oil business are often also involved in the chemical and gas markets. Chemical gases are regularly used in consumer goods such as aerosols for deodorants and are produced by many chemical companies. There tends to be no overlap in 'pure food' businesses such as wine and edible oils.

The challenge is to have a good key account management system which leverages the strengths of all Hoyer business units.

LM: What are the main trends in the tank container market?

TH: There are several: the weight reduction of equipment to gain additional payload; having more bottom-operated equipment to avoid working at heights (especially

for European customers); and higher requirements on safety and security, such as having tank containers and road barrel tankers that can be completely sealed.

Many European players are now targeting the global tank container market and more customers are asking 4PL companies to act in between Hoyer and our customers.

Overcapacity is the main issue that has driven prices to an all-time low, which are becoming unsustainable. The low prices for newbuild tank containers are good for the buyers but not necessarily for the industry. Historically low oil prices also pose a long-term threat.

Corporate customers are concentrating more and more on collaboration with specialists.

LM: Do you expect more consolidation in the market?

TH: We do not see it on a large scale, but there is some logic behind it. Overcapacity is increasing and only strong companies will survive in the currently difficult environment. The large number of players will make it hard for consolidation to make a difference in the short term.

LM: Is the purchasing power of customers increasing or decreasing?

TH: Increasing – it is at its highest level ever, due to tank container overcapacity. We also see consolidation within our customer base. In the past, procurement was more decentralised within a single customer. Today, it is increasingly centralised.

Large customers are also 'professionalising' their tender management processes with new pricing models and other structures to keep the competition level high. We have seen a tendency to pool purchase volumes across several business segments within the same company.

In the gas market, purchasing power is also increasing. Years ago, procurement departments were relatively small but they have become

Thomas Hoyer C.V.

Born	1950
1972–76	University St. Gallen (Switzerland)
1977	Apprenticeship at Kühne & Nagel, Hamburg
1978–79	Work stay in the US and Australia with Mason and Dixon Tank Lines Kingsport, TN and Brambles Bulk Haulage Sydney
1980	Start at Hoyer
1986	MD Hoyer Group
1991	Company spokesman of Hoyer Group
2007	Chairman of the Advisory Board
Company Director and Board member of several national and international companies and organisations.	

much more influential.

It's a buyer's market and has been for a number of years.

LM: What are the main regional differences in the global tank operator market?

TH: There are two levels of operators: pure global companies, such as Hoyer; and regional players, such as those operating in Asia, the Middle East and India. Freight forwarders are also in the mix.

LM: What are the current challenges for tank container operators?

TH: Fierce competition and price pressure due to overcapacity. Until global volumes increase to absorb the greater numbers of tank containers in the market there will be difficult times ahead. A noticeable shift from parcel tankers to tank containers might help.

There are also increasing last cargo restrictions and a reduction in the operating hours allowed for loading and discharge.

In the gas business, a challenge is the kind of container that can be used. For the European market, we have invested in a large number of specialised containers that are uniquely suitable for that market. These may be non-ISO standard or may be payload or volume 'optimised'. For the US market, we obviously provide DOT-approved tank containers and in Asia, we provide tank containers with lower payloads but a higher holding time, due to longer distances.

LM: How is Hoyer managing these challenges?

TH: We are focusing on our IT system, our processes and our purchasing. This will generate cost benefits that will strengthen the reduced margins of today. Network optimisation will be important and we will reinforce our differentiated offerings with innovative technical solutions, such as composite tank containers. We are also working on the 'smart tankcontainer', which is our response to digitisation. We will also leverage our decades of experience in certain key segments.

LM: How are the technical specifications of tank containers changing?

TH: Globally, there is a trend to use fewer smaller tank types - such as 21m³ - and increased numbers of large tank containers, such as 26m³. More baffle tanks are being used as these increase operational flexibility and reduce global imbalances.

More is being invested in specifications to increase safe working on the tank.

Customers want to know on a continuous basis where their product is. However, for gases, it is usually more important to know the cargo's pressure, temperature and condition. Proactive safety is far better than reaction.

LM: How important is the current trend in logistics of 'digitisation' and 'Industry 4.0'?

TH: These are important to retaining competitive advantage, as they make our operations smarter and more efficient. Our telematics data, for instance, is directly integrated into the transport management system.

The aim of the industry is get the best container for the cheapest price. This means that we are always forced to invest in new and innovative equipment but have to balance this against purchasing and development costs. Payload is everything.

LM: How has the use of Tankwell-manufactured, low-weight plastic composite tanks developed at BASF and other chemical producers?

TH: This has been a success story and the number of tank containers is increasing. All the current tank containers are deployed and several customers are now being served with this special kind of tank container.

LM: Hoyer developed Netlog as a new business unit to manage the group-wide equipment pool. How has the concept worked?

TH: Netlog started on 1 January 2016 and is still in its implementation phase. Several measures are being developed to significantly reduce fleet costs and increase utilisation. The concept of offering more service lease packages to our customers is well-received and the first 1,000 tank containers have been leased out.

LM: Hoyer owns tank container depots in Europe and the US, but not in the Middle East. Will this change?

TH: We regard the Middle East as an important market and there is a small gas container depot. The SCS business expects to penetrate the Middle East market in 2017 and there will be further developments, such as drumming, filling, blending and on-site logistics activities.

There's much to learn about this 'dark art'

Wendy Pascoe explores how telematics can be leveraged to improve asset management

The Institute of Asset Management (IAM) defines asset management (AM) as the "coordinated activity of an organisation to realise value from assets". But the tank container industry, it appears, may have much to learn about this dark art and could be significantly more profitable if it was better at it.

To many, asset management hardly sounds exciting but it is increasingly recognised as a key driver of running a profitable business by ensuring its assets are managed as efficiently as possible. For the tank container industry, that means knowing where tank containers are geographically positioned – minute by minute – to ensure that there are no impediments or delays, thereby leaving as little standing time as possible.

Long gone are the days when asset management meant keeping the shelves of your shop tidy and doing a bit of stock taking. The IAM, a not-for-profit membership organisation based in the UK, says asset management is the art and science of making the right decisions and optimising the delivery of value.

A common objective is to minimise the whole life cost of assets. This involves the balancing of costs,

opportunities and risks against the desired performance of assets. Given the multiple timeframes, the whole process becomes a complex three dimensional jigsaw. To keep on top of it, most successful companies employ a complex suite of tools.

To state the obvious, tank containers sitting idle and empty don't earn money. Operators need to see a swift turnover of contracts and clients want to see their cargoes arrive at destination points as soon as possible. The principal way to do this is to gather the raw data of where those containers are at every second of the day, and to monitor the conditions surrounding each tank container, whether climatic, shock or temperature. Each link in the chain is then monitored and micro-managed.

Increasingly companies like Switzerland-based Savvy Telematics sells the customer the whole package, from gathering the raw data reliably, putting it into a format that is clear and easy to read, and then providing analysis. In its own words, its intelligent evaluations transform raw data into highly-useful information such as performance

indicators or meaningful presentation documents.

A typical Savvy customer could be an operator or leasing company which may have a strategic relationship with a manufacturer. Customers range from operators with 200 tank containers to those with 40,000 tank containers. Paul Kaeser, Savvy's CEO, says: "A chemical company comes to us and says – we are not in control of inbounds and outbounds. We sometimes have to pay the penalty for late arrival and that is what we want to change."

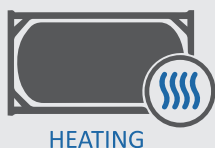
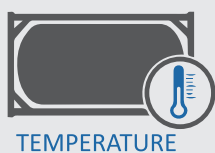
Kaeser says the data and the key performance indicators can be integrated into the customer's own IT environment. "The business intelligence component of software is used to process the raw data. For example, take the cache point, a trip from A to B. The average trip is taking far too long. The customer can identify the maximum amount of time the trip has taken and maybe the shortest. It can drill down, see exactly at which point delays or stoppages occur. Is it the same pinch point on every journey?"

"Asset management requires that both the tank container and its contents arrive at the scheduled time and in the shipped condition. Take shock detection. You know your cargo has been dropped from half a



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metre. With analysis of the data, you can identify where the heavy shock occurred, at which port or at which location."

Idle containers: bad for business

However, Kaeser says the typical tank container customer looks back, is reactive and not pro-active. Customers only think about it when their cargo arrives a fortnight late. The customer thinks – 'Why has this happened?', not "How could I have prevented it?".

Kaeser says: "This is not a clear strategy. Customers want to know where the containers are, full or empty, plus the utilisation rate/standing time, which may suggest they are just being used for storage".

"With telematics, you can understand it. It provides a wake-up call. Know the exact mileage or distance your product or tank has covered, and how long it has taken, and that's how to make money."

Industry-wide, said Kaeser, there is a growing realisation how important telematics is. He added that rail has strong steering groups to support the industry and to take a lead on best practice but there is nothing like that for the tank container

Companies like Savvy sell the customer a package, from gathering raw data putting it into a format that is easy to read, and then providing analysis

sector. Rail is 90% focused on asset management, he said, but the tank container industry is, perhaps, only 30-40% focused.

He finds it easy to quantify the benefits. Kaeser said one customer told him it paid off after three months. Another claimed: "If heating isn't right, you could lose a cargo worth half a million euros".

"However, timing is the principal focus in asset management, not shock or heat. One customer claims that, if your platform can show how many tank containers are standing idle for more than five days, he would be happy. The customer had just rented 100 more tank containers than he needed just 'to be on the safe side'.

"Trucks are different. Everybody knows where they are. Rail and tank containers, he claims, are running blind through the trees."

Kaeser said: "Once upon a time, customers just accepted not knowing

where their cargo was or when it would arrive. They ordered 900 tanks instead of the 500 they really needed, just in case. They had no clue, there was no transparency and there was no utilisation indication. Before this, everyone relied on phone calls, emails and spreadsheets. Now, interfaces with other systems are routine and tank container manufacturers, for example, know when their units go into the workshop.

Kaeser said that 20 years ago there was not so much logistics traffic. The telematics industry has grown dramatically as technology has been developed, improved and become more stable and better able to control the process.

Telematics

Telematics - the branch of information technology which deals with the long-distance transmission of computerised information - is the definitely the mot du jour at Intermodal Telematics, based in Breda in the Netherlands. Its technical director is Dethmer Drenth.

"We are supplying practically all the big tank container operators with telematics devices and sensors, and are the only telematics supplier that has its own in-house developed tank container sensors."

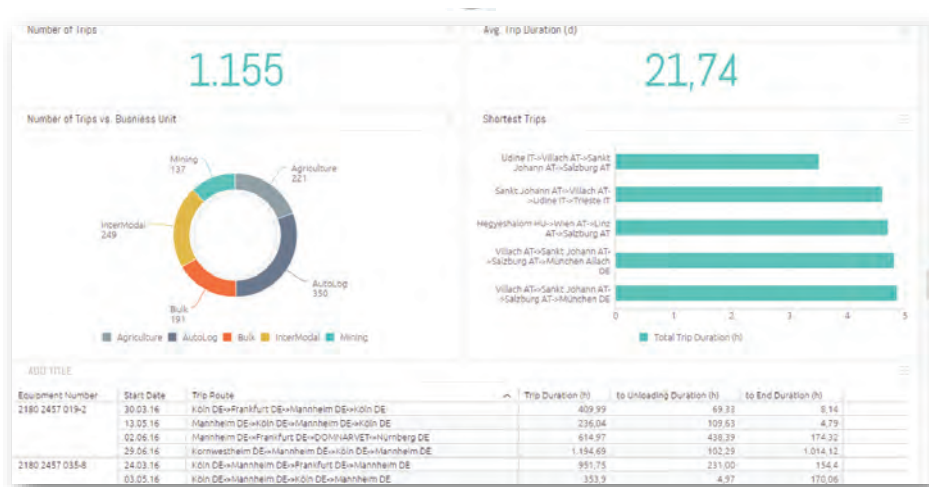
"Generally, interest in telematics devices and sensors has risen during the last three years but it is

mostly customer-driven. A top management vision and strategy to initiate a high quantity roll-out of telematics on the tank container fleet is still a rarity.

"This is strange as the cost of the telematics devices, sensors and service fees have dropped dramatically in the last few years. On the other side, the tank status information that one gets from these devices and sensors is immense and increasingly valuable for operator and customer alike.

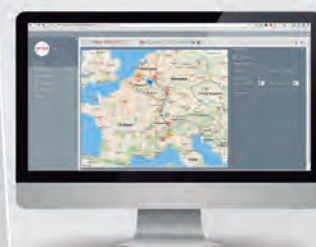
"Not only can the whereabouts of the tank container be monitored but also the ambient temperature, cargo temperature and pressure. Heating systems on tank containers can be monitored and sent over-the-air. Automated alerts inform operators and customers when a tank has entered or left a certain location, when a temperature and/or pressure has gone beyond a certain threshold and when a tank is loaded or unloaded. The tank specification documents and photos of tank damage and repair can also be easily uploaded via a smartphone and stored online.

"On a management level, one can see the activity and idle time of all the tank containers as an aggregate or per (customer) group during any time interval, enabling a higher efficiency rate and a more correct consideration of new



Screen showing the statistics for a round-trip

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Tracking and maintaining temperature control of a reefer container

investments. All tank container data can be connected to the internal applications of the tank container operator, mixing the data from the tank container with that of their own logistical and operational systems to have the best possible view on the status of their tanks.

"In the coming few years, lots will happen in the tank operator industry and only those who embrace tank container telematics on a large scale and in full speed will make the difference."

The odd thing is that there is very little reason why businesses should not asset manage their operations far more proactively. The basic tools needed are relatively low cost, there is a lot of choice in terms of systems and tools, and they are easily deployed.

Smart phone data

Florida-based Specops Group says its Intelceptor is the smallest GPS tracking device in the world. It can track anything, anyone, anytime, anywhere in the world where GSM signal is available. This small device, no larger than 4 cm square, can also create a geo-fence zone which, if breached, will send instant alerting messages to a smartphone, tablet or PC.

In an increasingly busy market sector, Specops Group says it is

hoping to capture the attention of the huge merchandise transport market and address the growing European container business, including constructors, ports, logistics centres, fleets and warehousing.

Its ease of use is stressed. According to the group, the Intelceptor leverages user-friendly and intuitive software that runs on every modern smartphone. It can also be customised to meet the needs of each individual owner. An unlimited number of objects can be tracked with it and many users can trace at the same time. The tracking history is kept safely and can be consulted up to one year later.

Google Earth or street maps can be selected within Intelceptor's software to view in real time the position of objects and the unit displays an SOS button which can be activated to alert the personal network.

Kaeser of Savvy says: "Educator? I feel like an apostle. Some can scarcely believe it at first. They want to see it tested. They have seen so many tools but were told they were not very reliable. We test and we say our systems are reliable. Our failure rate is close to zero and our portals are stable."

If you're not there already, then asset management has to be the future.

It's the real thing???

There seems little reason to worry about counterfeit parts and spares for ISO tank containers, discovers James Graham

It is a truism that what can be made, can be counterfeited. However, the few who will talk about it suggest that the tank container industry seems to be fairly safe from the efforts of the criminal to pass counterfeit and forged parts and spares to the sector.

As most ISO tank containers at some time are moved on commercial shipping, it is to be expected that the International Maritime Organization (IMO) has taken serious interest in the matter.

The issue of counterfeiting is complex and far-reaching. The attraction is far more straightforward. Fake parts in the short-term can be up to 40 per cent cheaper than genuine OEM (original equipment manufacturer) components. In the long-term, of course, counterfeits can cost far more than the immediate savings made in what is often a fraudulent transaction. Cargo damage and invalidated warranties can be just some of the costs of a counterfeit container part.

The complexity in the market comes from the difficulty in identifying what a 'counterfeit' actually is. An obviously counterfeited item is one that is copied from an OEM item by unscrupulous individuals, which is subsequently passed off as an original. While the mis-named 'Rollex' watch is a comical example, many such items can pass close inspection.

There is anecdotal evidence, however, that there can be 'unofficial' production runs of components. These can take place in OEMs' offshore facilities. The products then can be passed off in the grey market, often at substantial savings.

While some in the tank industry may knowingly seek out parts



that have doubtful provenance, others can be duped. The shift to on-line purchasing, even for B2B commerce, means that buyers can be tricked into visiting cloned websites of reputable dealers.

Inherent dangers

While not directly addressing counterfeit spares or parts for ISO tank containers, the general observations made by IMO identify key areas of concern for container OEMs, lessors, users or transport operators.

A spokesman says: "IMO has worked with government and NGOs to raise awareness of the issues relating to counterfeit products and their inherent dangers."

Two major areas of interest identified by IMO are the dangers from counterfeit refrigerants and non-declared and mis-declared dangerous goods. A further area of concern is bootlegged

or counterfeit software.

In July 2016, IMO's Sub-Committee on Carriage Of Cargoes and Containers looked at the topic, addressing a report on preventing the use of counterfeit refrigerants, submitted by the Institute of International Container Lessors (IICL).

Five years ago, this issue was brought into sharp focus with reports that refrigerated containers had started to explode on the dockside. After widespread investigations, it became clear that the problem stemmed from maintenance that had taken place in Vietnam, earlier in the year, using counterfeited gases.

The villain of the piece was counterfeit R134a refrigerant, which had been re-gassed into reefers in Ho Chi Minh City in Vietnam. After this, more fake refrigerant was found in containers in other countries.

As well as its use in reefer containers, a report produced by the Environmental Investigation

Agency (EIA) in 2014 suggested that increased global demand for refrigerants and improvements in the linings of tank containers means that an estimated 50-70 per cent of all refrigerants are shipped in large tank containers such as ISO tanks.

In its EIA briefing to the 26th Meeting of the Montreal Protocol, the charity says that refrigerant shipping is now the most commonly reported use of gas tanks.

"Despite the significant market share of international trade carried in larger tanks, it appears that Customs checking of ISO tanks and other gas tanks containing refrigerants is inadequate."

"National ozone units and Customs officers have been encouraged to use hand-held identifiers to check contents of 13.6 kg disposable cylinders. However, there seems to be limited awareness that it is possible to use these hand-held identifiers to check larger tanks with the use of an adapter to reduce the valve size," says the report.

A danger from counterfeit cargos has also been identified as an instance of counterfeiting by the IMO.

The organisation says: "There is danger from non-declared and mis-declared dangerous goods. Some shipping companies have implemented measures such as the development of internal databases and compiled lists of products and counterfeit product names that have been found to be a problem in an attempt to identify potentially suspect cargoes before they are presented for loading.

"One safety initiative by a number of maritime carriers has resulted in the development of an internet platform to collate information on poorly or mistakenly packed cargoes, incorrect cargo declarations, etc."

Fake IT

The move towards greater automation and modern equipment, especially in container handling, is leading

the industry to a greater risk of wittingly or unwittingly acquiring bootleg software or programmes.

Counterfeit software can include the illegal copying and distribution of commercial software on CD or DVD. This is accompanied by counterfeit versions of the manuals that the original legitimate software was sold with. Counterfeit software is commonly produced using a CD burner to copy the software and photocopies are made of the manual. Counterfeit software, like other forged products, is usually sold at prices well below that of the retail price of the legitimate software.

The scale of counterfeiting worldwide is illustrated by the US Trade Representative (USTR) 2015 Notorious Markets List. US trade representative Michael Froman says: "Our Notorious Markets List is a unique tool that highlights key examples of markets all over the world - increasingly digital markets - that are linked to significant infringement of American businesses' intellectual property rights. The 2015 list has a special emphasis on emerging marketing and distribution tactics in internet-based counterfeiting, which reportedly not only harms legitimate trade but poses risks to consumer health and safety."

The sale of counterfeit goods online is estimated by the USTR to have grown by 15 per cent last year.

'Too good'

In an extraordinary interview with western media this year, Jack Ma, founder and chairman of Chinese online empire Alibaba, shared his opinion that Chinese-made counterfeit goods can be better than the genuine OEM article.

In order to challenge this attitude and to protect the public, the City of London police issued a range of suggestions on how businesses can avoid buying counterfeit goods.

Trust instincts – if an offer looks too good to be true, then it probably

is. Legitimate spares and parts are rarely drastically discounted.

Check the spelling and grammar on the website and of the URL – often the people behind these sites do not pay a lot of attention or care to this detail. Fraudsters may also try to deceive by slightly changing the spelling of a well-known brand or shop in the website address.

Look to see where the trader is based and whether they provide a postal address – just because the web address has 'uk' do not assume the seller is based in the UK. If there is no address supplied or there is just a PO Box or email, be wary.

Do your research

Only deal with reputable sellers - only use sites you know or ones that have been recommended to you. If you have not bought from the seller before, do research and check online reviews. People will often turn to forums and blogs to warn others of fake sites. If you are buying an item online you can check to see if the website is a legitimate stockist by visiting www.brand-i.org

Ensure the website address begins 'https' at the payment stage – this indicates a secure payment.

Keep security software and firewalls up-to-date. Regularly update the internet browser when a new patch-security update is released.

Don't access links in unsolicited emails, always type in the website address or use a search engine to find a site.

Ask the trader if there is a returns policy or guarantee. Most rogue traders will not offer this.

If there are questions as to whether the items are genuine, do not enter payment details – it is not worth the risk.

Watch out for pop-ups appearing asking for confirmation of company payment card details before you are on the payment stage.

Never enter the card's PIN online.

More consolidation among tank container lessors?

Tankcontainer Magazine explores how a new Tier-2 lessor could appear

Conventional wisdom is that the meek are blessed and that they will inherit the earth. In business, it's different – strong, ambitious companies tend to win the prizes and meek ones end up melting away in the face of global competition.

One of the most leveraging tools that a strong company has at its disposal is the capability to increase its value, achieve cost efficiencies, gain market access and boost its market share by merger and acquisition (M&A) activity.

In the chemical sector – the main market served by the tank container industry – M&A activity has recently been high. This has been driven by the need to meet shareholder expectations in the current low-growth economic environment and by shareholder activism. Strong balance sheets, cheap debt and readily available cash have catalysed M&A initiatives.

China has led

M&A activity in the tank container leasing sector has also been high, with Chinese lessors Dong Feng and Florens merging this year and, most notably, with M&A initiatives by China-based HNA, a large diversified services and integrated operations company.

In August 2011, HNA and Bravia Capital of Hong Kong announced they were acquiring GE SeaCo, the fifth-largest player in the global marine container leasing industry, which owned and managed nearly 14,200 tank containers (and over 870,000

TEU). The equity purchase price was \$1.05bn.

In December 2013, SeaCo's corporate position within the HNA group of companies was adjusted to sit within Bohai Leasing Co, the equipment leasing division of HNA. Bohai itself is listed on the Shenzhen stock exchange.

Roll forward to 20 January 2015 and Bohai announced it was acquiring Cronos, the Bermuda-based container leasing group, from funds managed by Kelso & Co and the Transportation Capital Group. Cronos had a fleet of 20,100 tank containers in 2014.

Bohai's integration of the renamed Seaco Global and Cronos tank container fleets created a combined fleet of 43,000 tank containers in 2016, ranking it just behind the 44,300-strong fleet of Exsif Worldwide – the tank container leasing market leader – but well ahead of Eurotainer, whose fleet was 30,800 units in 2016 according to ITCO's authoritative global fleet survey

So far, so predictable – a conventional M&A strategy: the number two or three in an industry acquires another company – also highly ranked – and the two firms are then amalgamated. Benefits accrue from the economies of scale, cost synergies, financing benefits, a strengthening of the fleet and the increase in pricing power that can result from the elimination of a competitor.

The tank container leasing sector is now left with Exsif Worldwide, Seaco Global and Eurotainer in the top tier,

with a combined 58% share of the global fleet. Trifleet and TAL (now part of Bermuda-based Triton International) are in the second tier with 5-6% each, followed by small lessors such as NRS, Raffles, IEL, TWS and Multistar in the third tier.

Scope for consolidation?

There appears, then, to be little scope for further concentration in what looks like a well-consolidated market sector. But how true is that conclusion?

Firstly, consider the extent of consolidation in the tank container leasing market. The Herfindahl-Hirschman Index (HHI) is a commonly accepted measure of market concentration and is calculated by squaring the percentage market share of each company competing.

The formula can be expressed as $HHI = S_1^2 + S_2^2 + S_3^2 + \dots + S_n^2$ where S_n is the percentage market share of each company. A 100% monopoly would have the largest possible value ($100^2 = 10,000$) and the HHI for a very highly fragmented industry would be close to zero.

The US Justice Department generally considers an industry with an HHI of less than 1,500 to be a competitive marketplace, an HHI of 1,500-2,500 to be moderately concentrated and an HHI of 2,500 or greater to be a highly concentrated marketplace. US mergers that increase the HHI by more than 200 points in highly concentrated markets tend to raise antitrust concerns.

How does the tank container leasing sector fare? Based on the top ten tank container lessors, which together account for 85% of the global leased fleet, its HHI of 1,263 formally rates the industry as a 'competitive

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marketplace'. There is no dominance, although having a dominant position is, per se, acceptable to authorities (it is the abuse of a dominant position that is prohibited).

The law aside, the theory of contestable markets states that market concentration is not the most important determinant of economic performance in an industry (a market is said to be contestable if there is freedom of entry and exit into the industry, as there is in the tank container leasing sector). If the market is considered genuinely contestable, further consolidation will not necessarily decrease competition over time as new entrants can easily appear.

An HHI score of 1,263 therefore suggests that the tank container leasing market has scope for further consolidation.

But is the conventional M&A approach exhausted, with the likes of Exsif Worldwide, Seaco Global and Eurotainer perhaps attracted to each by the power of industrial economic logic, but then repelled by each other's company-specific constraints, like magnets having an initial attraction to each other but being repelled by each other when the distance between their similar poles becomes close?

And what of unconventional M&A strategies? Smaller tank container lessors are highly fragmented and too small to achieve comparable economies of scale with those in the top two tiers. On the basis that a combined group of tank container lessors can realise substantial cost savings and achieve higher revenues than a smaller-scale individual lessor, why not look to acquire a small lessor and use it as a platform to acquire and aggregate several other smaller tank container lessors?

The concept has been a public discussion that was stimulated by HNA/Bohai's tank container leasing land-grab and, after all, the combined fleet of the smaller lessors – Combipass (Fr), GRP Multilogistics (Switz), Matlack (US), MCM (Switz), Peacock (Netherlands), Tankspan

(UK), TML (UK), Tristar (Switz) and Unitas (Bermuda) – would represent nearly 10% of the global fleet, placing it in fourth place in the global ranking of lessors. Were only half of these companies be aggregated, the combined fleet of 8,500 tank containers would still be equivalent to a leading position among the second-tier players like Trifleet and TAL/Triton.

Roll-up or roll over?

This so-called roll-up M&A strategy – using a smaller industry player as a vehicle to acquire and aggregate other smaller players – can lead to competitors focusing less on price competition (thereby improving return on invested capital) while achieving economies of scale through the increase in fleet size. Importantly, size per se is not what creates a successful roll-up strategy; what matters is the right kind of size; ie, the right type of tank containers in the fleet.

What then is the spark that could ignite a roll-up M&A programme in the tank container leasing sector? As always, it would come from the investment community.

Leased tank containers as an asset class have a number of desirable characteristics for long-term investors such as pension funds, who are attracted by long-dated income streams generated by tangible assets.

The tank container leasing sector offers stable long-term returns, not least because of a tank container's 15-20 year economic life, the long-term operating lease terms of typically five years or more and the relatively high utilisation rates over a tank container's economic life cycle.

By definition, tank container lease rates are linked to interest rates, simultaneously providing investors with interest rate leverage and useful protection against inflation.

Investment positions in leased tank containers also provide indirect exposure to commodities via the stainless steel required for their

manufacture. The stainless steel price is the single largest determinant of the terminal value of a leased tank container at the end of its economic life.

Other attractions for investors include the diverse customer base which has low purchasing power and covers multiple sectors (chemicals, food, gas, etc). In addition, there is a low risk of obsolescence with size being as likely to render a tank container obsolete as technical obsolescence.

Individual tank containers are low-cost and currently priced at historical lows – entering the sector at a low point in what is a cyclical market offers considerable growth potential and minimises downside risk. Lastly, there are appreciable barriers to entry that limit the possibility of new entrants. These include management expertise, technical knowledge and client relationships.

One approach would be for a financial investor to acquire a small tank container player and then use the company as a platform to build scale by acquiring and aggregating other smaller tank container lessors.

Once enough scale is developed in the new entity, the financial investor can crystallise the investment after, say, a five-year holding period by exiting the business via a trade sale, an IPO or by a structural refinancing programme. The latter could liberate substantial dividends, making the entity attractive to pension funds and institutions seeking stable, long-term cash generation, or to private equity players.

SeaCube Container Leasing is a proof-statement of the interest by pension funds in the container sector. What made SeaCube attractive to Ontario Teachers' Pension Fund, one of the world's leading pension plans? "Steady cash flow, growth potential over a long-term horizon and a low-to-moderate level of risk".

As always in M&A, the focus should be on what a company is worth, rather than what it costs.

Milestone for Tankwell

Delivered: the 100th tank container produced from composite materials by Composite Production Technology

The client for this tank container, marketed under the Tankwell brand, was Hoyer, a global market leader for the transport of liquids by road, rail and sea.

According to CPT MD Casper Willems, the company was established in 2010 with the purpose of investigating the automated production of large components from composite materials, including large format pressure tanks.

"The initial intention was to develop and then sell an automated production technique for these components. However, during the course of the process, we decided instead to take the next step in developing complete tank containers by producing them ourselves.

"Production was eventually started in March 2015, after our first prototypes had undergone thorough testing. Our launch customer was Hoyer, which had acted as observer and advisor. It is all the more special that we supplied our 100th composite tank container to that same company."

In attendance were Ulrich Graupe and Michael Ewert, who over the past few years supervised the entire process at CPT on behalf of Hoyer. As Michael Ewert explained: "We are particularly delighted with the performance achieved by CPT. We have seen massive growth in the bulk transport of liquids across Europe and our objective is to make sure that transport is carried more efficiently and more flexibly.

"By using composite tank containers, rather than their steel counterparts, we achieve huge weight reductions and massive savings in transport costs. In November 2015, we were presented



Ulrich Graupe, Casper Willems and Michael Ewert
(Photograph: Paul Schaap)

with the BASF Global Supplier Award for Sustainability thanks to this type of tank container." Hoyer is currently using about 80 tank containers from Tankwell.

The entire development process took just three years, says Mr Willems.

"After carrying out two initial studies into how we could best produce large, light-weight pressure tanks, it turned out we needed to develop a completely new technique. As a rule, composite tanks and silos are produced from several different parts and then assembled. We decided to focus on producing the tank as a single unit. Although it appeared almost impossible, we managed to make it a success.

"In 2012, we came into contact with Flax Field Trading, a company that has a long history in the tank container sector, and we founded a collaborative venture. We made a real start on the development process in mid-2012 and, by the start of 2013, had elaborated the principle for developing tanks as a single unit. The decision to produce tank containers ourselves, and to equip our own facility for that purpose, was taken in 2014.

"This led to the establishment of

our current production location in Wieringerwerf. By the start of 2014, the winding installation for the tanks became available and the first prototype was ready for testing in September of the same year. The test phase was successfully concluded in January 2015."

The test period included collision testing, lift tests and fire tests. As a result, the swapbody tank container is now ADR, RID, CSC and IMO4-certified and complies with the EU Food Contact Regulations.

"From the outside, our composite tank container looks just like its steel counterpart", says Casper Willems. "However, the composite tank weighs just 2,200 kg, representing a weight reduction of 40%. The same percentage applies for thermal insulation. As a result, our customers can carry more cargo and the need for additional heating during transport is either greatly reduced or eradicated entirely.

"We can produce composite tank containers with a capacity of between 28 and 37 cubic metres with a service temperature ranging from -40 to +70 degrees Celsius. The operating pressure is 2.67 bar and the maximum under pressure is -0.4 bar. Maximum payload is 39,000 kg."

At present, only three containers are produced each week at the Wieringerwerf but the plan is to upscale production. In the near future, production will be moved to a new and larger location on a nearby industrial estate.

The CPT director said: The next step is to develop composite tank containers for the transport of concentrated acids, lyes and highly flammable substances. There are also plans for the fitting baffles. Further into the future we are even hoping to develop high-pressure and cryogenic tank containers."



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EPCA hosts Europe's chemical producers and logistics firms

Tankcontainer Magazine assesses the key supply chain themes at Europe's largest petrochemical conference

The European Petrochemical Association (EPCA) celebrated its 50th anniversary at its Annual Meeting in Budapest at the beginning of October.

The conference is Europe's centrepiece chemical and logistics get-together and attracted over 2,500 delegates, 20% of whom were from the chemical supply chain sector (underlining the mutual dependency of the two sectors).

The conference was, as usual, punctuated by several business sessions covering the key issues of concern for the chemical industry, which employs 1.5 million people in Europe. This is 50% more than the much-trumpeted and politically-sensitive automotive sector.

This year's conference concluded with a closing lunch featuring Herman Van Rompuy, President of the European Council from 2009 to 2014, who outlined his views on Europe's future and the impact of globalisation on the world.

The opening session addressed the theme "50 Years of Global Chemical Industry Evolution: What's Next?". It featured Dr Martin Bruder Müller, Vice-Chairman of the Board of Executive Directors and Chief Technology Officer of BASF, the world's largest chemical company; Thierry Le Hénaff, Chairman and Chief Executive Officer (CEO) of Arkema, a specialty chemical producer, and Bob Patel, CEO

and Chairman of the Management Board of LyondellBasell, a leading commodity chemicals producer.

Neglect creaking IT systems at your peril

They highlighted the development of digitalisation as a key issue for the petrochemical and supply chain sectors, bringing with it opportunities for process optimisation and efficiency opportunities.

For tank container players, the message is clear: if your IT system is creaking now as a result of years of bolting-on endless new modules, bespoke 'tweaks' and short-lived upgrades, you'll soon be struggling to meet your customers' expectations in terms of end-to-end visibility and real-time reporting.

To stay in business with mainstream chemical customers, be prepared to standardise systems and procedures, decommission legacy software, standardise and enhance data, and improve reporting.

The theme of the session on the second day was "50 Years of Chemical Logistics and Supply Chain Evolution: What's Next?".

This brought together Essa Al-Saleh, President and CEO of Agility Global Integrated Logistics and Dr Hans-Jörg Bertschi, President and CEO of tank container operator,

Bertschi Group. (In June, Bertschi was awarded 'Haulier of the Year 2015' for dry bulk transportation by SABIC and received the award from Maurice Pelsers, Category Manager Sourcing & Contracting and Manfred Zulauf, Head of Dry Bulk at SABIC).

They were joined by Peter Marshall, Dow Chemical's logistics director for Europe, Middle East, Africa & India and Dirk Jan de With, Chief Procurement Officer for Covestro Deutschland AG (née Bayer MaterialScience).

Top disruptive trends in logistics?

Digital transformation, a change in customer expectations and so-called 'Uberisation' were highlighted in an audience poll as being the top three disruptive trends in the chemical supply chain and logistics sector in the next five years.

According to Patrick Dixon, a 'futurist', the uberisation of industrial supply chains has begun (you're already out of touch if you don't know the meaning of the term 'uberisation'). One optimisation opportunity that this is meant to address is driven by the fact that, in Europe, one in four trucks is driving around empty.

Essa Al-Saleh, CEO of Agility Global Integrated Logistics, said that the physical movement of goods is the easy part, but what customers want

is greater information. However, even the physical movement of goods in Europe can be a problem due to the shortage of drivers.

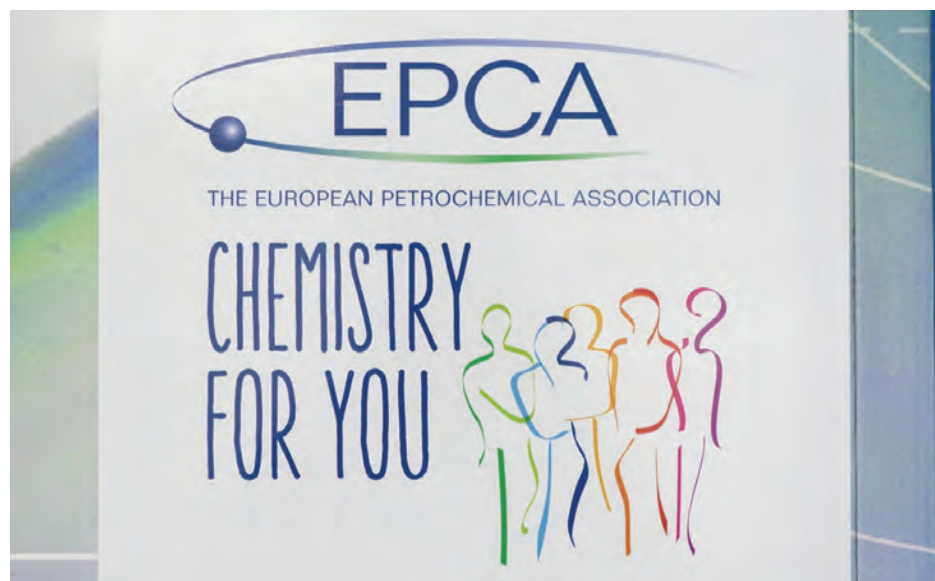
One solution is to use drivers for first and last legs, leaving the remainder of the supply chain to be served by intermodal solutions. This approach appears to be registering in Europe, where intermodal growth is up 10% this year. Another solution is an obvious one - pay drivers more for what is a responsible but fundamentally boring job, and one which often leads to ill-health and social isolation.

The impact on tank containers

How, then, does all this impact the tank container sector? The good news is that there will be more chemical production facilities built as global chemical demand nudges forward - chemical consumption typically increases at a higher rate than global GDP. The bad news for European tank operators is that most of these new chemical production units won't be built in Europe - the last cracker to be built in the region was 22 years ago so if your horizons as a tank container operator don't extend beyond Europe, be prepared for even tougher times ahead.

More positively, the ability to create, manage and develop global supply chains is a genuine European talent. The large domestic market and low energy costs has resulted in the US becoming inherently wasteful and insular in terms of supply chain skills while Asia's global trading ambitions, and the development of the associated supply chain competences, is a relatively recent phenomenon.

The Swiss-based Bertschi Group, for example, has been one of the pioneers of the rail link between Europe and China and has moved 1,700 tank containers by rail on this route in the past 12 months.



This has cut the traditional 45 days to ship tank containers by sea between China and Europe to 12-15 days, resulting in reduced transit times and lower working capital requirements.

For Europe, the fact that only Rotterdam is in the 'Top 10' ports in the world matters less than its ability to be central to the development of global chemical supply chains. Successful chemical supply chains use intermodal capabilities to get local, followed by the use of appropriate lot-size transportation for 'final mile' local delivery. Well-honed supply chains will leverage intermodal throughout.

Collaboration essential

The need for chemical producers and supply chain partners to innovate and collaborate was a point made repeatedly by speakers at the conference. As in other sectors, the chemical industry is fundamentally driven by a few big companies and these set the pace for supply chain innovation - BASF, Dow Chemical, Covestro, Huntsman and ExxonMobil Chemical are said to be among the leaders in terms of supply chain innovation.

If the customers of chemical logistics service providers

are large-scale commodity chemical producers, they will more likely be based in the US, the Middle East and Asia.

These companies will typically use tank containers for the delivery of liquid raw materials. Europe, however, will offer good opportunities for those supply chain service providers - such as tank container players - who focus on specialty chemical producers. These producers tend to rely more on tank containers for the delivery of their products rather than for the delivery of raw materials.

China buying supply chain

Two final thoughts - some at the conference believe that, 10 years from now, China will own 20% of the global supply chain. There is no doubt that if it wants it, it will buy it and - in the tank container sector - those working for Seaco, Cronos and NewPort are among those already enjoying the benefits of Chinese ownership.

The second thought is that, in general, there are three kinds of service - good, cheap and fast. Good service that is cheap won't be fast; good service that is fast won't be cheap and fast service that is cheap won't be good. The choice is yours.



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Taking the temperature of the industry

Klinge Corporation is reaping the rewards of 30 years of innovation in the refrigerated and tank container field, reports Dan McCue

As a result of three decades of thinking ahead, Klinge Corporation is now riding the crest of two trends it anticipated long before others.

The first is the accelerated growth in demand for dual refrigeration and heating systems, now deemed essential fail-safes in the world of high-value and dangerous cargo; the other, tangentially related to the first, is a new-found market for explosion-proof equipment to transport certain flammable liquids.

"That's a really interesting market, though only a small fraction of the industry just like the other markets we serve" says Allan Klinge, president and sales manager, a day after returning from a recent industry conference in Rotterdam, Netherlands.

"We were coming up with a number of offerings in that space pretty much as the market started to develop ... and it's really come on in just the past two years."

Although established as a US-based company in 1984, Klinge Corporation traces its history back to post-World War II Denmark. Its forebear was Paul Klinge A/S, a trading company serving multinational corporations like Union Carbide, now known as Energizer, and York International, which got involved with the refrigerated side of container cargo shipment in the early 1970s.

"At the time, containerisation was really taking off and they were

looking for more efficient methods of transporting not only dry goods but also refrigerated goods. That led to York International producing a line of equipment to meet that need, primarily for the export market," says Klinge.

As it happens, Klinge's father and grandfather served as the primary agents in many of those sales, and when York decided to get out of that side of the business, the Klinges purchased its marine transport refrigeration equipment department and set up operations in Pennsylvania, while maintaining sales offices and production facilities in Denmark and a service company in Egypt.

The new entity's initial focus was on providing better transport solutions for food items, mostly in standard equipment. But as the years passed, the company diversified – often dramatically.

Now, in addition to its legacy activities, the company develops specialised equipment for the military market, explosion-proof equipment for use in hazardous gas environments, glycol-circulation systems for tank containers, -60 Celsius freezer containers and a host of offerings that are a mix of all of these and systems for extra backup for high-value and dangerous cargo.

"There were two things that happened," says Klinge of the

company's trajectory. "Obviously, more people got into the market for more standard reefers. You had other players coming on board, including Thermo King and later, Daikin.

"As that area became more competitive, it drove an interest in looking to other markets - especially as dangerous goods transport became more and more highly regulated. That opened an opportunity for us to start offering redundant systems for that type of transport. Those kinds of systems have evolved over the years to meet the changing demands of those who ship highly-reactive or readily self-combustible chemicals."

He explains that these specific solutions are primarily used in the chemical industry and that their initial development and continued evolution are largely driven by the requirements of the International Maritime Dangerous Goods Code.

"As regulations continue to be enforced, the needs of the industry provide for the development of niche markets," he says. "In the case of chemicals transport, the steamship lines have been vigilant in enforcing the code and, in light of some issues that have arisen, such as container fires aboard vessels, some have even imposed secondary requirements on certain shipments.

"Now, [on] the tank container side, what we've seen is a growth in the desire to control temperature to a higher degree than previously," continues Klinge. "There's also a narrower band of acceptable temperature during transport, as well as monitoring the temperature the whole time."

If regulations, the requirements of steamship lines and customer requests are all drivers of innovation, Klinge says one can't underestimate the power of a fourth consideration - the desire to continually offer a better solution to

customers than the competition.

"What we try to do, mostly through discussions with the customers and representatives from the dangerous goods groups of the various steamship lines, is work through what their desires are, what their concerns are, and how we - through the use of technology in most cases - can work to alleviate those concerns," he says. "And we're constantly in discussions to stay ahead of those desires and concerns."

Klinge stresses that technological solutions can mean a lot of different things.

"For instance, there's condenser coil design, where you can increase capacity within the same amount of space. That's a constant battle in the container industry: How do I minimise the amount of equipment I need on this container so that I can carry more cargo? And that's as true for the box industry as it is the tank container industry - where the tanks just keep getting bigger."

He adds: "On the digital side, that's certainly been a fairly rapid evolution as well over the last 10 years. We have, for roughly that amount of time, been using some form of GSM communication, including handshakes for remote diagnostics and things like that, but those were systems we developed on our own."

"Now you're seeing some pretty big players come into the market that are helping to drive down monthly monitoring costs, which is really helping to bring more data into the hands of the operators of these containers. So there's more data about things like shock, temperature, location -- and you can also filter through alarms and things like that as well."

Klinge says the digital revolution has not only made his customers' lives easier, but it has also provided his company with a much clearer picture of how its equipment performs in real-world conditions across the globe.

"It's information you can use to, perhaps, tweak some designs," he says. "For instance, if you see

that most of the time a piece of equipment is sitting in a port for four-to-six hours before it's plugged in again, or that it's sitting in port A for two hours before it's plugged in but it's sitting for four hours without being plugged in at another port, you can begin to weigh your options in an informed way. In this case, the question being, 'Do we need additional safety systems that will kick in after a certain amount of time to warn somebody that it has not been plugged in?' And if your conclusion is 'Yes,' you can put that technology in place."

Klinge says another example is the deployment of geo-sensing technology that tells customers when their shipments are arriving at the port, enabling them to make sure the temperature of the shipment is correct, and gives them the peace of mind to know it's being picked up when it is supposed to be.

But for all the connectivity, visibility and constant data reporting that customers can now have at their fingertips, Klinge adds that it means nothing if the solution the equipment manufacturer sells them is overly-complicated.

"We still want to design a software that's intuitive, that's easy to use ... that doesn't take a two-week course just to learn how to use it," he says. "What that means is that in each new step you take, you have to balance the availability of new functions and new features with the ability of a user in any port, at any time, to be able to properly interact with and in interpreting the system."

"That can certainly be difficult. I mean, just imagine travelling with a laptop and handing it to one person in every port and expecting the same result ... that's something we always have to remember: That at the end of the day, it may be the first time this person is seeing this particular piece of equipment or the fifth time, but it's not the one-thousandth time ... so keeping it straightforward is a big part of the design process," Klinge says.

While the Klinge Corporation is

primarily known for refrigeration, it recently rolled out a new line of heating equipment as well.

"All of it is glycol-based or fluid-transfer-based, where they are circulating around channels in the skin of the container, Klinge says, "We've also introduced some new Zone-Two reefers for flammable liquid transport, and, as I said, we're doing a growing number of dual systems for backup in both standard refrigeration units and those that comply with the ATEX Directive for equipment used in potentially explosive atmospheres, such as oil rigs and oil tankers. These give the shipping lines a little bit of a better feeling if they have a combustible cargo onboard, and it also provides the customer with a better feeling if they've got a high-value product in transport."

Klinge says that despite the slowdown on the leasing side and the use of operator assets in 2016, he's seen what he describes as "a pretty healthy uptick" in investment in temperature-controlled tanks.

"We will producing more units for the tank industry this year than last."

Asked how he sees the markets he's active in going forward, Klinge says: "It certainly seems that there are investors out there and, of course, globalisation continues; and there continues to be a need to move this type of cargo from point A to point B, and even from A to B to C to D and to point E. Because of that, I believe we'll continue to see an increase in demand for temperature-controlled tanks."

"I also think investors are looking at it as somewhere they can put their money and make something back, as opposed to putting their money in the bank, because of the low-interest rates," he adds. "Fortunately, this market seems to be an area that people are interested in making projects happen. As a result, we've expanded our production area by 40% over the last year, and that's definitely helped us stay competitive and enabled us to make our production lines and inventory management more efficient."



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