REVIEW OF THE YEAR

The market dynamics, trends

GLOBAL FLEET

ITCO's 2018 global fleet

EUROPE

Features on Mega-Inliner,

OPERATOR

Dr Bertschi muses on industry



A silver lining: Sidon van Laarhoven, founder of Mega-Inliner, on the company's innovative solution



The leading exhibition June 4-7, 2019 Messe München Visit us! Hall B4, Booth 221/322

YOUR TURNKEY TANK TELEMATICS PARTNER





IMT is a world leading independent telematics solution partner for the tank container and tank wagon industry.

We set the standard in smart sensor technology and offer generic as well as tailor-made telematics hardware and software solutions. IMT is by far the biggest supplier of telematics technology for the tank container sector.

IMT's sensors and platform:

- ✓ Improve operating efficiencies
- ✓ Secure quality of cargo
- ✓ Provide track history of all relevant data of each container *)

*) location, temperature, pressure, full/empty, heating, ...)









Intermodal Telematics BV

Korte Huifakkerstraat 8 • 4815 PS Breda • The Netherlands www.intermodaltelematics.com info@intermodaltelematics.com • +31 76 231 02 00

inside Volume 6 | Issue 1



NEWS



INEOS has announced that it planned a large-scale investment for further expansion of its chemical production facilities. Various European locations were considered, but ultimately the British chemical group opted for Antwerp (left)

5-21

Publisher Duvel Media www.tankcontainermedia.com

Editor

Leslie McCune leslie@tankcontainermedia.com

Advertising

Ed Andrews ed@tankcontainermedia.com

Production Editor

David Badger david@tankcontainermedia.com

ginko design hellostudio@ginkodesign.co.k

www.tankcontainermedia.com

Tank Container Magazine is published by Duvel Media. Copyright 2019 Duvel Media. All rights reserved. Any reproduction without permission is prohibited.

Registered office 53 Grove Hill, London E18 2JB, UK

Front Cover Interview

Tankcontainer Magazine talks with Sidon van Laarhoven, founder of Mega-Inliner, on the company's innovative solution



Review of 2018 27 | ITCO annual fleet survey 43 | GPCA review 60

EQUIPMENT



The depot investments by Stolt Tank Containers and its partner YBA Kanoo, joint owners of Kanoo Tank Services (Sahreej)

ITCO 2019



Preview of this year's ITCO Tank Container Village in Munich - part of the transport logistic exhibition

TECHNOLOGY



Felicity Landon discusses Ovinto's mission to automate and reduce data input with its founder and CEO 37

EQUIPMENT



New developments in Germany: James Graham reports on the new THIELMANN WEW

OPERATOR



On our 5th anniversary, we asked influential players for their views on the sector's progress in that time, and for the next five years

EQUIPMENT



Pelican Worldwide and the high-speed delivery of its high-end consumable and specialised products

TECHNOLOGY



The collaboration between TWS and evodion IT in developing the Container Organisation and Rental Application

TECHNOLOGY



Jan van de Nes reports on **DEPOT Software's** approach to IT implementation

INSPECTION

40



Bureau Veritas offers guidance to companies to help them understand the industry's rules and regulations

53





Professional manufacturer of Tank Containers



Your best partner in logistic!

- ·20' ISO Tank T1-T23
- ·Swap Body Tank
- ·Single or Multi-compartment Tank
- ·Baffle Tank
- ·Electrical/glycol Heated Tank
- ·Reefer Tank
- ·Food Grade Tank
- ·T50 Gas Tank

- ·Super Insulated Tank
- ·SBC Tank
- ·Offshore Tank to DNV2.7-1/EN12079
- ·Lining Tank (PE, Rubber, Saekaphen, FRP, Chemline, PTFE etc.)
- ·AHF Tank
- ·Liquid Sodium Tank
- ·Bitumen tank

NANTONG TANK CONTAINER CO., LTD

Add: 3888 Jintong Highway, Xingren, Tongzhou, Nantong, Jiangsu, China

Tel: +86-513-81601166 Fax: +86-513-86221280 Ext. 8018

E-mail:info@nttank.com





Let the good times roll

It's *Tankcontainer Magazine's* five-year anniversary and we're still the only trade journal in the world to focus exclusively on the tank container sector. We remain committed to our guiding principles: being independent, accurate and informative.

For those minded to read them, our feature articles held a wealth of valuable market detail and competitive insights, not all of which have been conventional. And in a minor triumph, one of our articles ("How attractive is the global tank container leasing market?") was recognised in a TankContainerFinder.com survey as being the second best-read article among all the magazines and websites covering the sector in the past year.

This issue focuses on Europe but, to celebrate our anniversary, we've included a number of articles with a more global perspective. Our much-anticipated Review Of The Year looks back on the key trends in 2018, identifies the drivers of market growth in the tank container sector and reviews the global tank container fleet. It also considers the financial performance of some major tank container operators, reflects on the dynamics of the global leasing market and explains why some tank manufacturers had disappointing financial results, despite producing record numbers.

Elsewhere, we look behind the numbers of ITCO's latest fleet survey. The global fleet hit a record high of 604,700 units in 2018, jumping nearly 11%, following on from 8.7% in 2017.

Production boomed to another record high, increasing 23% to 59,700 units. The top six tank container manufacturers now account for 91% of global production. China accounted for 86% of global production with Welfit Oddy in South Africa being the only other significant manufacturer.

Tank container manufacturers in China sought to fill lines, despite raw material increases and low tank container prices. Profit warnings from manufacturers were therefore inevitable in 2018, as were profit boosts for larger tank container operators and lessors. European tank container operators with global deepsea networks enjoyed a particularly successful 2018 while leasing sector returns approached 10%.

Taking advantage of historically low prices - and seeking to reduce their fleet's average age - market leader Stolt added the most tank containers (3,761). NewPort/Sinochem was the only large operator to have a year-on-year fleet size reduction.

Noteworthy trends included a widening in the product portfolio being shipped in tank containers, but previously shipped only in drums or transported in chemical tankers. This contributed to swing ships being moved out of chemicals into Clean Petroleum Products. As tank containers are increasingly preferred, bulk chemical ship owners see an increasing proportion of their cargoes being commodity products, which generate lower per tonne revenues and lower margins compared with specialties.

As part of our five-year celebrations, we invited some of the tank container industry's most influential players to share their thoughts on how the industry has changed over the past five years and how it might change in the next five. In this issue, we hear the views of Dr Hans-Jőrg Bertschi, Executive Chairman of the Board of Directors of the Bertschi Group. Other industry leaders will share their opinions in this year's remaining issues.

In terms of trends, investments in supply chain transparency were prioritised in 2018. Asset management and cloud-based digital management systems were introduced, along with other Supply Chain 4.0 technologies, creating more automated, integrated supply chains.

The move away from drums, IBCs and poly totes to tank containers continues, driven by safety issues and operational efficiencies. Working capital considerations, and the convenience of door-to-door deliveries, favoured tank containers over chemical parcel tankers and pressure is increasing on the one-time use of plastic flexibags as their disposal via landfill or incineration becomes an increasingly liability.

Outsourcing benefits continued to be sought in 2018, as did the shift to intermodal, although further penetration in Europe depends on new and upgraded intermodal infrastructure and the development of multimodal terminals.

The T50/T75 gas markets grew strongly, especially in China and Russia, where there is inadequate gas distribution infrastructures and poor gas pipeline connections. In China, swapbody tanks also enjoyed strong demand.

All in all, the message is clear - market growth is assured, invest or partner with the larger tank container operators and lessors but steer well clear of manufacturing generic tank containers.

Leslie McCune, EDITOR

Tracking, continuous monitoring and fleet management of unpowered mobile transport units.







Temperature



Location



Shocks



Level



Leakage







- ✓ connect your fleet to the internet of things
- ✓ always be informed
- ✓ lower your costs
- √ improve your efficiency





Please contact us for more info www.ovinto.com info@ovinto.com

Largest investment in European chemical industry in 20 years

INEOS has announced that it planned a large-scale investment for further expansion of its chemical production facilities. Various European locations were considered, but ultimately the British chemical group opted for Antwerp (pictured).

INEOS plans to build a brandnew propane dehydrogenisation (PDH) plant and an ethane cracker unit in Antwerp. These will respectively convert propane into propylene and ethylene as the raw materials for chemical products that find their way into many industries including car manufacturing, building construction, clothing, cosmetics and personal grooming products, pharmaceuticals, electronics and packaging materials.

The plants will be built on the existing INEOS site in Lillo in the port area and on neighbouring grounds. For this purpose INEOS will take over unused parts of concessions held by neighbouring companies, thus ensuring maximum integration with the existing chemical industry. In this way the new plants will be connected by pipeline to various INEOS ethylene and propylene derivative units elsewhere in Europe.

It normally takes four or five years to complete a project of this magnitude, and the new production plants are expected to be operational by 2024. Once the plants are up and running they will provide 400 full-time jobs directly and five times that number indirectly. Some 3,000 people will be employed during the construction phase.

INEOS CEO and chairman Jim Ratcliffe explains: "Our investment in a world-class ethane cracker and PDH plant is the largest of its



kind in Europe in more than a generation. As such it is a major development for the European petrochemical industry. We believe that this investment can reverse the decline in the European chemical industry in recent years."

Hans Casier, CEO of INEOS
Phenol and chairman of essenscia
(chemical and life sciences
industry federation): "The fact that
Antwerp has been chosen as the
location for this investment is a
big new boost to the international
competitive position of the
existing chemical cluster. This is a
great success not only for the
chemical industry in the port, but
also for the economy of Flanders,
Belgium and indeed the whole of
Europe."

A key role in Flemish industry

Frank Beckx, managing director of essenscia Flanders: "After Borealis similarly opted for Antwerp a few months ago, this decision by INEOS puts the chemical sector in Flanders even more firmly on the world map. In particular the construction of a hyper-modern cracking plant based on the very latest technology is of great strategic

importance, as not since the 1990s has such an installation been built in western Europe. A cracker produces the essential simple molecules that form the basis of the entire chemical industry. And by creating at least 400 new jobs the project will be a significant boost to employment in this sector. This is undoubtedly the most important economic news in a long time. Such an investment - which in turn will probably attract others of its kind - further strengthens the position of the chemical industry as the key sector of the Flemish economy. This is a massive vote of confidence, inspiring us to maintain our collaboration with government in building up a strong competitive position internationally for this worldleading chemical cluster."

The right port

Jacques Vandermeiren, CEO of Antwerp Port Authority: "It is naturally very good news that INEOS has selected our port for this major new investment. It once more demonstrates that we as the largest integrated chemical cluster in Europe are very attractive to



Superior Tank Linings for AGGRESSIVE CHEMICALS

- ✓ Provides resistance to over 5,000 chemicals acids, alkalis, solvents
- ✓ High solids content (85%)
- Extremely low VOCs
- ✓ Versatility to change cargoes after cleaning and decontamination
- ✓ Professional Global Partner Applicators









www.adv-polymer.com/tc

international investors. Furthermore, propylene and ethylene are the starting points for many other processes, so production of these basic components will further strengthen our raw materials position in the chemical industry and indeed many other industries in our country. This megainvestment brings the total amount of new capital expenditure that we have attracted to Antwerp over the past year to more than €5bn euros. This will undoubtedly help to secure the presence of industry here in Antwerp, and will make an essential contribution towards creating a sustainable future for our port and for the Belgian economy."

Bart De Wever, Mayor of the City of Antwerp: "Today, we have the opportunity to announce the largest investment in the European chemical industry in 20 years. I have to admit that I am overcome by pride and humility. These are the moments you live and work for. Antwerp is thriving. A statement I will repeat again and again because we really have to stop doom-and-gloom scenarios once and for all. We can have every confidence in the future. The economic climate is healthy. Antwerp is open for business. This is an investment for an entire generation. It also demonstrates that even in times of Brexit uncertainty, investors still



INEOS CEO and chairman Jim Ratcliffe

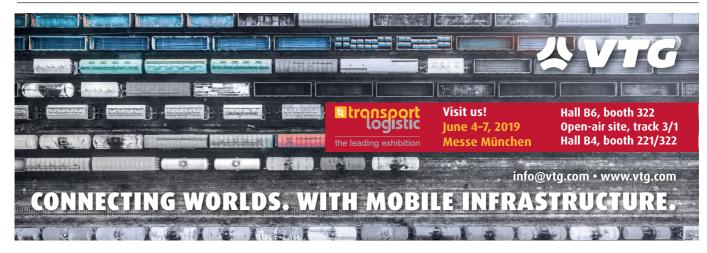
maintain belief in the process of economic growth, internationalisation and sustainable technology. There remains trust in progress."

Welcome Team

The "Welcome Team for the Chemical Sector" was set up earlier this year by Flanders Investment & Trade (FIT) and essenscia Flanders (chemical industry association). This initiative brings together a team of experts offering intensive support to foreign chemical companies, helping them with investment projects and highlighting the advantages for the chemical industry in Flanders in terms of innovation, tax policy and investment support, among others. With some 300 investment projects since 2010 the chemicals and life sciences sector represents around half of all foreign investment in Flanders.

Minister-President Geert Bourgeois: "This is particularly good news, an exceptional event: the largest investment in Flanders in the past 20 years. The project is also a good illustration of long-term collaboration between various ministries and government departments, the industry associations, the port etc., all with a shared objective and coordinated by my agency, Flanders Investment & Trade."

Claire Tillekaerts, managing director of Flanders Investment & Trade (FIT): "An investment of €3bn in the port of Antwerp by INEOS is particularly good news not just for the Flemish economy, it also underlines the efficient collaboration between government, the business world, centres of knowledge and Antwerp Port Authority that enables our region to attract such large investments. The Welcome Team for the Chemical Sector - which is coordinated by FIT - offers the necessary expertise for finding the ideal location, selecting the right local partners, etc. To give this investment a kick-start in Flanders various government departments were intensively involved. All those who participated in this project reacted very promptly and professionally to queries from INEOS, providing in-depth responses. The package of tailormade services that was specially put together managed to brilliantly convince the British chemical company and landed the investment despite intense competition."





CIMC ENRIC

China International Marine Containers (Group) Ltd.

CIMC Enric Holding Limited

CIMC R&D Centre, NO.2 Gangwan Avenue, Shekou Industrial Zone Shenzhen, Guangzhou, P.R.C(518067) Tel: 86-755-26691130/26802076 Fax: 86-755-26862790 http://www.cimc.com F-mail: tanks@cimc.com



CIMC TANK

Nantong CIMC Tank Equipment CO.,Ltd. NO.159 Chenggang Road, Nantong, Jiangsu,

China 226003 Tel: 86-513-85066888 Fax: 86-513-85565155

CIMC Enric Tank Container Sales Europe B.V. Middenweg 6 (Harbour nr.397-399) 4782 PM

Middenweg 6 (Harbour nr.397-399) 4/82 F Moerdijk

Tel: +31 880 030 860

http://www.cimctankcontainers.nl E-mail: info@cimctankcontainers.nl



EBURG SERVICE

Service Depot in Europe BURG Service B.V.

Middenweg 6,4782 PM, Moerdijk The Netherlands

Tel: +31 88 00 30 800 Fax: +31 88 00 30 882 http://www.burgservice.nl E-mail: info@burgservice.nl



Petrolog targeting demand for US and Canada domestic ISO tank service

Steadily and strategically, American PetroLog LLC has expanded its dedicated ISO tank container service over the past year. Several hundred tank containers are now in operation and more are being added.

American PetroLog's ISO tank container service is offered throughout the United States and Canada with a primary focus on the chemical industry. The service offering is getting plenty of attention, from many chemical manufacturers.

"Typically, our ISO tanks move in a closed-loop model, which means each unit is exclusive to a customer and once the tank is empty, it is returned to the shipping point for reload," says Jeff Colonna, American PetroLog president and chief executive officer. "This approach has a huge benefit to the customer when the product can be top loaded and tank washes can be minimized. Our approach allows us to maintain product integrity without concerns for prior product contamination.

"We arrange for many of these shipments to move by rail since we have direct contracts with all of the Class 1 railroads, as well as many of the shortlines throughout the country. We can also provide ISO tanks on chassis to oilfield services customers. We'll position dedicated ISO tanks at well sites, and once the product is consumed we swap out the empty tank with a loaded one.

"Our ISO tanks are used as rolling inventory, which enables our customers to reduce their onsite storage needs, while being able to react to market needs with product that is in close proximity to the end user."

Supplied by TankSpan and built



by CIMC, the 20-ft full-frame ISO tank containers are fabricated from stainless steel and are jacketed and insulated. They have a 6,605-gallon capacity. The tanks have ground-level actuation for vapor recovery, which helps workers offload the tank. ISO tanks and chassis also have GPS tracking.

The ISO tank container services are part of a growing logistics portfolio at American PetroLog. Services include liquid and dry bulk trucking, warehousing, government fuel services, a transload and storage location in the greater Dallas-Fort Worth, Texas area, and they are developing a new transload facility in the New York City, New York area.

Robert Kellner, American PetroLog chief relationship officer, says: "Our facility in Venus, Texas, allows us to efficiently service the rapidly growing North Texas market, and we have found strong demand for our transloading and bulk storage services."

Esau Washington, American PetroLog director of sales and marketing, adds: "We are expanding our range of bulk liquid intermodal service because our goal is to always provide customers with a solution that results in an efficient and streamlined supply chain."

The company has offices in Philadelphia, Pennsylvania; Ashville, North Carolina; Lafayette, Louisiana; and Houston and Venus, Texas.

American PetroLog was established in 2015 with a small management and operations team that has decades of experience in bulk logistics. The American PetroLog team prides itself in building close partnerships with customers and transport providers.

Burlington Northern Santa Fe is one of the transport partners used by American PetroLog. The railroad recently awarded the company its coveted "Premier Transloader" status. This designation makes American PetroLog part of a few select companies that BNSF Railway recognizes due to their exceptional performance in supply chain management, customer service, and safety.

Inner tank cleaning for silo and tank vehicles











for even more hazardous substances

Carcinogens

Hazardous to reproduction

Genetically harmful

Volatile halogenated hydrocarbons

Substances containing free chlorine

Your Perfect Cleaning Service for the Rhineland.

Those who pass Cologne will not miss us. For one thing due to the ideal transport connection to the highway and the container terminal. For another because we offer many services that you will not get elsewhere: We are certified for special hazardous materials and clean according to the strictest hygienic, legal and environmental requirements. Whether you would like to have your food tanks, silo tanks or chemical tanks cleaned we do it all.



Security & trust

Services: cleaning,

heating & handling



ADR GMP **HACCP**

IBC

CONTAINER









Seaco accelerates growth with new office in Houston

Seaco America LLC is very pleased to announce the opening of its new Americas regional office in Houston, Texas.

Since the amalgamation of Seaco and Cronos, Seaco has strengthened its presence worldwide including the

Americas with the recent establishment of the regional management office in Houston, Texas, which includes the company's regional operations and customer service functions, retaining a satellite office in Miami, Florida to serve our important Florida and Caribbean customers and an office in Rio de Janeiro, Brazil.

The Seaco Americas team have been focusing on establishing the infrastructure required to provide our customers the service levels they deserve and to position the company to expand its key activities in this very important region.

Peter Folkard, Regional Vice President Sales and Marketing for the Americas commented, "The market in this region is the strongest example of Seaco's position as the most diversified container leasing company in the world and we continue to strive to ensure we have excellence and know-how in the region to serve our diversified market. The significant regional importance of Seaco's Tank container business and Container resale activities was one of the drivers behind relocation of the regional office to Texas with its central time zone and close proximity to customers, principal vendors and industry partners"

Peter continues.... "We now have an optimum balance of presence and support to our regional and global customer base as well as the more specialist tank and container sales activities".

Through our Americas team, we can provide our global and local customers an unparalleled portfolio of equipment including: General Purpose Containers, ISO Bulk Liquid, Powder & Gas Tanks, Refrigerated and temperature-eontrolled units and specialised container types (suitable for bulky and heavy items).

The global brand and local reach helps to strongly position Seaco America as a reliable company for local industries to turn to for the right container type to support a wide range of applications.

Seaco America is very proud to have established a dedicated team of talented individuals, each of whom are highly qualified and motivated to value our relationships with all business partners. Collectively, the careers of Americas' team demonstrate years of extensive experience across a wide range of industry sectors including logistics and materials supply chain management, mining, government, defense, shipping, leasing, engineering, manufacturing, and oil & chemical transportation. Customers can feel assured that Seaco in the Americas has the right people, as well as the right equipment, in the right place, at the right time.

Final test of Tankwell ISO tank container



Tankwell successfully completed the final test of its ISO tank container at the TÜV in Görlitz in January. With this step Tankwell will extend its portfolio with the lightest ISO tank container in the world, weighing just 2,300kg tare for 25 cbm. In addition to the 27 cbm to 36 cbm range swap body tank containers, the ISO tank will become available from 21 cbm to 26 cbm.









Van den Bosch celebrates a first in Asian market

The first tank containers of Van den Bosch DMCC have arrived in the port of Karachi, Pakistan. For Van den Bosch this event marks the start of business activities for the Asian market.

Together with a local partner, Van den Bosch arranged a number of foodgrade tanks at the depot of PTO (Pakistan Terminal Operators). The containers will be mainly used for the export of ethanol. Pakistan is one of the most important exporters of ethanol in the world and therefore forms an emerging market for Van den Bosch DMCC in Dubai, from where the deep sea activities of Van den Bosch are coordinated.

The expansion to Pakistan represents a new milestone in the further development of the deep



sea activities of Van den Bosch. Over the past years Van den Bosch has acquired a leading position in the EMEA region. Now initial steps have been taken to enter Asia.

Bart van de Vorst, General Manager of Van den Bosch DMCC in Dubai, is very excited: "We have received a lot of positive feedback about the expansion to Pakistan. The Asian continent offers great opportunities to develop our global network and will create new possibilities for our customers."

HOYER transforms 10,000 tank containers into Smart Tanks

HOYER Group delivers chemical products, foodstuffs, gas and mineral oil in tank containers, road tankers, flexitanks and IBCs safely and efficiently to destinations around the world.

Monitoring the parameters of products in transit, e.g. temperature, filling level, pressure and the tank container's location, are important factors in this operation based on which the safety, security, efficiency and consistent quality of transport movements are guaranteed. The Hamburg-based logistics specialist has reached another milestone by equipping more than 10,000 Smart Tank.

To design the tank container fleet's controls even more efficiently, HOYER already began initial tests of telematics solutions twenty years ago. With Smart Logistics, the company is today the innovation leader in the intelligently networked logistics field, and offers smart solutions to



monitor, analyse and optimise logistics processes. One of the central points here is systematically upgrading the fleet to so-called Smart Tanks.

According to Marlen
Blechschmidt, Head of
Digitalisation Business Unit Netlog
at HOYER: "By using this
technology, our Smart Tank will
report deviations in critical load
parameters, thus offering our
customers even more safety,

quality and efficiency for the product being transported." The ATEX certification of the HOYER technology is an additional seal of quality.

Heiko Rumfeld, Director Business Unit Netlog at HOYER, added: "Over 10,000 tanks equipped with smart technology strengthen our market position and innovation leadership. The demand and customer feedback confirm the success of our Smart Tanks."



Tank Depot Hamburg

(ISO9001 certified) Capacity > 10.000 TEU

Water, rail and road access

Storage: Empty, Laden (hazardous cargo)

Workshop:
PDA, Refurbishment, Modification,
Coating, Projects, Chassis Repair, Heating

Cleaning: Food, Chemical

Tank Inspection

Locations: China, South Africa, Indonesia, Brazil, India, Europe

Services
Full Inspection
On/offhire Survey
Cleaning Inspection
Lining Inspection

tankdepot@condaco.de - for depot inquiries

survey@condaco.de - for inspection inquiries



Ulrich Schnoor takes control at Liquid CONcept and eyes new lines of business

Ulrich Schnoor will now serve as the sole managing partner of Liquid CONcept GmbH & Co. KG, having acquired the holdings of his former partners Eycke-Christian Dörre and Ian Karan.

The Hamburg-based logistics company will continue to grow under his leadership. In this regard, Ulrich Schnoor is committed to new lines of business in the field of liquid containers and maximum quality in terms of transportation services. He will be focusing particularly closely on maintaining and intensifying relations with new and existing customers.

The company is also working to develop innovative transportation solutions for liquid foodstuffs that put sustainability first. Given the unwaveringly high demand for Liquid CONcept, Ulrich Schnoor assesses the course of business as overwhelmingly positive.

Liquid CONcept is a modern, young company, which has been operating since 2007 as a leading logistics provider for worldwide transport of liquids in intermediate bulk containers (IBC). Specialist Liquid CONcept makes



use of its in-depth know-how of complex services to offer customers out-of-the-box solutions.

In the foodstuffs and chemicals sectors particularly, it develops and realises tailor-made solutions for global liquids logistics. Its dynamic and flexible team supports industrial and commercial clients with smart logistics solutions, helping them to become even more successful in their respective markets.

Liquid CONcept's range of services covers rental, leasing, fleet management, transport, cleaning and maintenance of IBCs, as well as all logistical services connected with tank containers and tank trailers. The company has an IBC fleet of over 4,500 units at its disposal.

Richter in cooperation with Sodeco Valves for the Benelux region

Richter Chemie-Technik GmbH, a global leader in lined pump and valve solutions, proudly announces a strategic co-operation with Sodeco Valves for the Benelux region.

The agreement applies to distribution of Richter pumps and valves for the Benelux region, which will be covered together with direct Richter personnel.

Barbara Wladarz, Richter's Managing Director, said: "Good quality, expert knowledge and reliable delivery times are our company characteristics, the cooperation with Sodeco as an experienced and well-known partner among our customers will be a multiplier of these values", she continued.

Sodeco will be able to provide a first-class consultancy and service with most products from stock.

"We are excited to add Richter's PFA lined products to our portfolio and serve our customer base with the best possible solutions", said Peter Wartel, Managing Director Sodeco

Tank cleaning manufacturer of:

Silo/bulk cleaning Chemicals cleaning Food cleaning Railway carriage cleaning IBC cleaning Container cleaning

Container heating CIP/latex cleaning







The reference in new tank cleaning projects & renovations!



A LONGER LIFE. AT NO EXTRA COST. WHAT'S NOT TO LIKE?

The new Fort Vale Superseat Footvalve is a radical alternative to an age-old problem.

Crevice corrosion is a common issue within the chemical and food-duty markets, particularly at the union of the sealing face and the main footvalve seal. Previously, the best solution was to use high nickel steels such as Hastelloy® in an effort to solve the issue - but this could be prohibitively expensive.

That's why Fort Vale is now using Inconel® as part of their manufacturing process. With a much higher pitting index than 316 stainless steel, greater resistance is available to a wider range of chemical applications - ensuring long-life and trouble free use.

Not every company can do this. Not every company is Fort Vale.

FORT VALE.
MADE TO LAST.



New role for DeChant



Advanced Polymer Coatings (APC) has promoted James R. DeChant to Vice President, Sales & Marketing. APC is a world leader in engineering protective polymer coatings to safely transport and store chemicals in marine and industrial markets. Mr. DeChant was previously APC's ChemLine® Coatings Global Rail & Transport Sales Manager for the past several years.

In this new role, Mr. DeChant's primary efforts will be to drive sales efforts for the company's two leading and well-known coatings brands, MarineLINE® used for cargo tanks of chemical and product tankers, and ChemLINE® used for specialized industrial coating applications.

According to Mr. David J. Keehan, President, Advanced Polymer Coatings, "Jim DeChant is a veteran in our industry, and talks the language of our customers. He understands their specific needs and works closely with the APC sales and marketing team to deliver exceptional service, versatility and product performance for MarineLINE® and ChemLINE®".

Mr. DeChant worked for nearly 40 years in the paints and coatings industry in a range of business development, product management, marketing, and sales roles for leading companies.

Suttons gets behind the truckers who run

Suttons Group is lending its support to an online campaign to help truckers stay body and mind healthy, started by one of its drivers.

Truckers Who Run is a community-focused Facebook group which offers support, advice and ideas to any drivers who want to get out of the cab and get fitter.

The group was created by Lee Gibson, a driving trainer instructor based in Suttons' Stockton-On-Tees depot, who reckoned he couldn't be the only UK trucker who would benefit from a dedicated place to discuss lifestyle, diet tips and fitness advice.

The aim of the group is to create a network of friendly truck drivers who are able to offer support, lifestyle and fitness tips, while answering any queries members might have.

Lee Gibson, founder of Truckers Who Run, said: "It's great to see this idea I had one day sitting in a truck has blossomed and is now helping drivers all over the country.

"We can advise our members on good places to run near where they've parked up for the night, offer them motivation when they're finding it tough to exercise and provide a place to air worries and stresses, because mental health is just as important as physical fitness

"Our membership has grown to over 2,000, and we've even

launched our own Truckers Who Run clothing range, available to order through the group."

Steve Hassall, operations director for Suttons Tankers, said: "Suttons fully supports Lee with his campaign to assist drivers who are trying to improve and maintain their health and fitness.

"We encourage our drivers to join his online community and are backing this up with a series of well-being campaigns each month aimed at staff."

Join the Truckers Who Run community by logging into Facebook and searching for 'Truckers Who Run' and then joining the group.



Suttons Tankers operates in the UK with a fleet of more than 500 vehicles focused on the chemicals, gas and fuel sectors.

Suttons International operates globally with key business centres in New Jersey, Widnes, Antwerp, Ludwigshafen, Singapore, Shanghai, Tokyo and Khobar.



Visit TankContainerFinder.com and connect with more than 1000 cargo owners and suppliers worldwide



Pakistan ethanol exports hit record high

A record quantity of ethanol was exported last year at an average price of \$650 per tonne, fetching the country a hefty amount of around \$425m.

Analysts believe Pakistani ethanol exporters would continue to dominate Asian markets for years to come.

According to official figures, ethanol export up to December 31, 2018 stood at 653,443 tonnes against 572,056 tonnes a year earlier. This is the highest ever export of ethanol ever since Pakistan entered the world market in 2002-03.

Presently around 18 distilleries – either operating independently or attached with sugar mills – are engaged in producing three grades of ethanol including anhydrous, extra neutral alcohol (ENA) and industrial alcohol (B grade). Besides, a blend of ENA and B grade is also being produced.

These grades are produced at different refining stages.
Anhydrous, which is 99.97% pure, is mostly produced in the country and its demand is also much higher because it could also be blended in motor gasoline.

The other two grades – ENA which is 96.5% pure and industrial alcohol 92% pure – are used for making of perfumes and spirit, respectively.

Brazil is the biggest producer of ethanol in the world followed by India and Thailand. Whereas ethanol is being widely used as motor gasoline in Brazil, the Indian government has also made it compulsory upon the MNCs importing petroleum products to blend ethanol up to 5-10% in the motor gasoline (petrol). This has reduced their import bill of petroleum products.

Talking to Dawn, Terminal Association of Pakistan (TAP) Chairman Muhammed Kasim Hasham said the value-addition in molasses has made it possible for the country to earn higher foreign exchange through export of ethanol.

There was a time when the sugar industry used to throw away molasses in pits made outside their units but with introduction of technology and setting up of distilleries in the country today is earning million of dollars on export of ethanol, he said.

Giving an example, Mr Hasham said that out of 10 tonnes of molasses, two tonnes of ethanol is processed which fetches very high price in the world market.

He further said that ethanol being highly inflammable needs special safety measures for its haulage from distillery up to ports. For this many exporters are using state of the art ISO tanks which are directly loaded on vessels.

Logistics digitisation pioneer Nexiot poised for further growth

Nexiot AG, an enabler of logistics digitisation, is poised for further growth after securing a CHF15m (USD15.5 million) investment Round Series B-1.

SVC Ltd for Risk Capital for SMEs, an investment vehicle of Credit Suisse in Switzerland, is among the companies backing the Zürich-headquartered tech company, along with leading Swiss insurance company Mobiliar Versicherungen, which previously invested in Nexiot.

Nexiot will continue to develop new technology for the logistics industry, to further scale its team, and expand its commercial activities internationally.

"The additional investment from a range of companies in Nexiot AG is a vote of confidence in our mission to develop unique solutions to drive global logistics digitisation," said Marcel Scheurer,

The best of 2018

Tankcontainer Magazine is delighted that one of its articles, written by editor Leslie McCune, has been recognised as being the second best-read article from the magazines and websites covering the sector in the past year. The accolade relates to a question posed by TankContainerFinder.com: "What were industry leaders reading to stay on top of their business game in 2018?" TankContainerFinder.com adopted a data-driven approach to answer the question.

Most read was an article on UN modal regulations but, in second place, was Leslie McCune's December 2018 feature: "How attractive is the global tank container leasing market?"

The article continued his analysis of the global tank container leasing sector, using a well-known competitiveness model to determine the attractiveness and profitability of the sector

Chief Financial Officer (CFO), Nexiot AG.

"This development highlights our growing global success story and strengthens our leadership position in enabling the digital supply chain with true end-to-end solutions, in order to increase efficiency, as well as generate additional revenue streams and increase value for our clients and partners."

Nexiot was launched in 2015 as a spin-off company from ETH Zürich, one of the world's top technical universities, and is the result of over ten years of research in connectivity, complex systems, big data algorithms and ultra-low-power embedded technology.

TANK MANAGEMENT SOFTWARE



Improve the efficiency and visibility of your tank fleet to reduce costs and increase profits

Operating Software:

Asset Track & Trace · Quotations/Orders · Documentation · Fleet Control/Planning · Purchase Invoices · Sales Invoices · Financial/Profit Control · Maintenance & Repairs · Customer & Vendor Tariffs · EDI · Agent Access · Enquiries & Reports · KPI Dashboard Reporting

Leasing Software:

Asset Management & Budgeting • Work Orders • Billing • Contract Management • On-Hire & Off-Hire •

Investor Reporting · Web Portal · EDI ·

Maintenance & Repairs

Fleet Cost Management

Equipment Sales

KPI Dashboard Reporting



Find out more about our Tank Connect app Visit us at Transport Logistic Munich 4-7 June 2019 ITCO Tank Village, Hall B4, Stand 217/318



RAM INTERMODAL



@RAMINTERMODAL

INFO@RAMINTERMODAL.COM

WWW.RAMINTERMODAL.COM







Your tank container experts

TWS has more than 30 years of experience in renting out standard and special tank containers for liquid products to the chemical and food industries. TWS also provides various sizes of spill troughs. Customers rely on the outstanding quality of its fleet and value its flexibility in terms of volume and technical features.

For more information: E-mail: sales@tws-gmbh.de and web: www.tws-gmbh.de



Continued growth for Bertschi Group

Chemical logistics company Bertschi can look back on a positive 2018, having maintained its steady growth trajectory of recent years. The favourable economic climate paired with the company's globalisation strategy enabled it to generate record turnover of CHF 960m in 2018.

The current earnings situation will allow Bertschi to make substantial investments into the future development of the company in 2019. Over the past few years, the Swiss family company has made major progress in terms of the digital transformation of its business processes. Meanwhile, Jan Arnet took over as CEO of the Group in August.

Successful globalisation

After recording major growth in 2017, the Bertschi Group continued this trend in 2018 with turnover rising by 8 percent to CHF 960m. As in previous years, the company's global units achieved the highest growth figures, and now account for a third of the group's overall turnover.

The markets in Asia and South America provided the strongest momentum. Two other significant driving factors were the Chinese market and the doubling of storage and filling capacity at Bertschi's chemicals terminal in Singapore for distribution in south-east Asia.

In addition, Bertschi was able to integrate its subsidiary in São Paulo – founded the previous year – into its global network, which had a positive impact on growth of the group in 2018.

The earnings situation remained stable last year. Encouragingly, all five divisions contributed to the excellent results.

In 2018, quality issues in the

European rail freight transport segment had an adverse impact on the bottom line for European business.

Record investment In 2018, Bertschi invested significant sums in its future, with staffing capacities expanded for software development and the digital transformation continuing apace. The development and roll-out of the TruckTracer App was a milestone for the company.

With this app, which will also be used by all sub-contractors, each driver records all status messages of the transport on a central company platform using their smartphone.

Real-time data is used to optimise internal transport planning, while customers benefit from visibility and more planning security in their delivery chains

The company invested heavily in the expansion of its tank/silo container fleet in 2018 and now has 34,500 units, a 9% increase. Major investment was also made in terminal and warehouse capacities, in particular at the group's sites in Singapore, Antwerp and Schwarzheide (eastern Germany).

Positive outlook

"Our aim is to keep growing in 2019, which is why the Bertschi Group will be investing heavily once again in digitalisation, the container fleet and its terminal and warehouse infrastructure.

"Our plan is to continue to expand our presence in Asia and bolster our position in Europe," explained Hans-Jörg.

This will include a new transhipment centre for import, handling and storage of plastics from overseas entered into service at the port of Antwerp.

News In Brief

VTG Tanktainer recorded a 6.9% annual increase in revenue last year to €168.2m, although shifts in international flows increased costs by leaving equipment underutilised and raising demurrage and repositioning costs. VTG also says rising demand in Europe exacerbated existing infrastructure bottlenecks in both road and rail, further adding to demurrage and freight costs. As a result, EBITDA fell 42.3% to €6.5m. VTG has, meanwhile, reported full-year revenues of €1.07bn for 2018, a 5.7% increase on the previous year, and EBITDA up 1.7% at €349.3m, which included oneoff charges of €25.6m related to the Nacco acquisition and the voluntary public takeover bid by Warwick Holding.

Albatross Tank-Leasing has announced its ability to support growing markets with high quality Cryogenic T75 tank-containers. Based on the increasing challenges for the transport of Argon, CO₂, Ethane, Ethylene, Nitrogen, Oxygen, as well as LNG for the energy production, Albatross is ready to supply customers with T75 equipment.

After a thorough analysis of the available composite tank container manufacturers Eurotainer SA has placed an order and recently taken delivery of new 20ft composite barrel tank containers from Omni Tanker of Australia.

Hoover Ferguson, a global leader in tank & container solutions with more than 40 locations in 25 countries, has appointed Kevin Friar as President.





OWN OFFICES AND AGENCY NETWORK AROUND THE GLOBE

www.goodrich.co

BLAZING THE TRAIL RELENTLESSLY



GLOBAL ISO TANKS

of ISO tanks with capacities ranging from 24000 liters to 26000 liters for carriage of hazardous & non-hazardous products globally.

- Services available on door-to-door basis.
- Dedicated technical team to handle all kinds of emergencies.
- CDI-MPC compliant.
- Also available various specialized & lined tanks for carriage of highly corrosive products.
- Other services include Tank Chartering, Chemical Storage & Distribution, SOC Tank Management & leasing activities.

FOR ENQUIRIES: tankt@goodrichemirates.com

Going Dutch for a silver lining

Tankcontainer Magazine talks with Sidon van Laarhoven, founder of Mega-Inliner, on the company's innovative solution

TCM: What is a Mega-Inliner®? **SvL:** A Mega-Inliner® is a patented, removable, one use, high-grade plastic liner that can be installed in a Mega-Inliner® tank container for use with non-hazardous liquids only (the patent is Dutch registration 2018765). The liquids can be transported within the range of -8°C to 70°C.

TCM: What advantages does a Mega-Inliner® bring?

SvL: It makes the cleaning and rinsing process for tank containers completely obsolete and eliminates any restrictions on previous loads.

A Mega-Inliner® tank container can be used for every non-hazardous liquid - shipping beer, juices, nutrition oils, latex, egg yolk, dairy after each other is no problem. It guarantees protection from cross-contamination, oxidation, saturation and desaturation of the cargo. It also makes logistics more efficient by avoiding the need to make empty return journeys due to prior cargo restrictions.

TCM: What is Mega-Inliner Systems B.V.'s company background and what is the background of the people involved?

SvL: Mega-Inliner Systems B.V. is an innovative company founded



by experienced specialists in the bulk beverage, food distribution and international tank container business. I am a former banker and the previous owner of Duotank International Group, a specialist company focused on beer and beverage transport.

I founded Mega-Inliner International Group and, together with Willie van Barschot, we have over 50 years of international business experience.

For tank container knowledge, we draw on an experienced, well-established organisation which has multidiscipline resources and capabilities.

We are not a transport and logistics company and we do not

intend to be one. Instead, we are in the business of providing shippers and carriers with the world's best mega-sized packaging solution for shipping non-hazardous liquids all over the globe.

TCM: What led to the development of the Mega-Inliner®?

SvL:In 2006 we were challenged by the beer and beverage industry, specifically from Anheuser-Bush InBev, to provide an alternative solution for the intercontinental shipping of packaged product in cans, bottles and kegs.

The intention was to significantly reduce the capital expenditure

Cover Interview

(CAPEX), logistics expenditure (LOGEX) and operational cost (OPEX) per hectolitre of product, while reducing the associated carbon footprint (CFP).

A technological breakthrough in 2016 allowed the development of a large volume Inliner.

TCM: Why use a Mega-Inliner® instead of a straightforward tank container?

SvL: The Mega-Inliner® System, which combines a Mega-Inliner® and Mega-Inliner® tank container, can reduce the OPEX, LOGEX, CAPEX costs and CFP by at least 25%.

By eliminating the contact between the product and the inner surface of the Mega-Inliner® tank container, the need for highly specialised cleaning and preparation is eliminated. This service is often not locally available when discharge or loading.

Using a Mega-Inliner® reduces the amount of empty tank container shunting and offers a possible 30-minute turnaround from discharge to the loading of the next cargo. This increases operational efficiency and utilisation. Reducing the number of cleans lowers the environmental impact, reduces the demand on utilities and lowers energy consumption. Use of the Mega-Inliner® also reduces the life cycle costs for repair and maintenance.

TCM: How is a Mega-Inliner® different to flexibags?

SvL: The Mega-Inliner®, combined with a Mega-Inliner® tank container, has proven safety features - it has the safety track record associated with tank containers while offering significantly increased payloads due to the higher maximum gross weight of tank containers. The Mega-Inliner® has only one waste stream compared to a minimum of 5-7 per hectolitre. Only one person is required to install it and



installation takes less than five minutes. Removal before the next load takes under 15 minutes.

TCM: What environmental impact do Mega-Inliners® have? SvL: There are a number of benefits resulting from the operational simplification enabled by a Mega-Inliner® - the number of movements is reduced, carbon dioxide can be used to preserve product, and there is a reduction in cleaning and rinsing. Together, this equates to a reduction of up to 80% in carbon emissions per tonne of product transported (compared to the existing method of transportation of the same product in tank containers).

TCM: What are the key technical facts of a Mega-Inliner®? **SvL:** They are suitable for a wide range of non-hazardous liquids and available in a variety of capacities from 115-300 hectolitres. The material used in the manufacture of the Mega-

Inliner® is FDA and EU food regulation compliant, allowing halal, kosher and aseptic liquids to be transported.

The low oxygen transmission rate of 0.75 CM³/M²/day (at 23°C and 75%RH) allows pressurised discharge without the risk of potential saturation, desaturation or contamination.

TCM: To use the Mega-Inliner® are any adjustments needed to a standard tank container?

SvL: The optimised Mega-Inliner® Systems tank container differs from a standard tank container in two ways - by allowing all operations to be performed from ground level with safer working conditions and by a reduction in the tare weight.

TCM: Is breathing apparatus needed to position the Mega-Inliner® instead a tank container? SvL:No. It only needs an operator to stand outside on the ground behind the tank container for

insertion and removal of the Mega-Inliner®.

TCM: How long does it take to install and remove?

SvL: Installation by one person less than five minutes. Removal takes less than 15 minutes.

TCM: Isn't there enough plastic in the world, without more from Mega-Inliners®?

SvL: The Mega-Inliner® System actually helps to reduce the plastic that would be used for shipping small packaged products (in cans, bottles, kegs, IBC, flexibags and drums) in box containers by over 95%.

The Mega-Inliner® System also reduces the global shipping by over 50% by moving 250 hectolitres of liquid per TEU instead of an average of 100 hectolitre per TEU. As we say: "Bulk globally, pack locally".

The foil we use is recyclable for second-life plastic products, which is still not enough for us. That's why we are developing a Mega-Inliner® BIO version, which will be fully compostable to fertiliser which will be used to enhance agricultural growth.

TCM: Is it reusable?

SvL: No. It is for single use only.

TCM: Is it recyclable? If so, how? **SvL:** Yes, it can be recycled as polyethylene recyclable into various products. This is possible because the Mega-Inliner® is only used for non-hazardous liquids.

TCM: What happens to the liner after use?

SvL: It will be recycled in the same waste stream customers already have. No extra waste stream needs to be set-up or managed. In fact, we reduce the waste stream by 95% by using significantly less plastic compared with the small packaged shipments and flexibags that shippers currently use.

TCM: Is it suitable for hazardous products? **SvL:** No.

TCM: Can a Mega-Inliner® be used if the previous tank container cargo was hazardous?

SvL: No, the Mega-Inliner® can only be used in a tank container for non-hazardous liquids.

TCM: Are there any other products for which it is not suitable?

SvL: Within the non-hazardous liquids range, not that we are currently aware of.

TCM: Would it not be better to simply place the liner in a standard dry freight container rather than a tank container?

SvL: This would not be an optimised solution. Shipping small packaged products or flexibags in box containers doesn't offer the payload benefits of a Megalnliner® combination with a tank container. There are also higher incident rates with pre-packaged goods in box containers.

TCM: What are the key trends in the tank container sector? SvL: Tank container use is forecast to double in the next 10 years within certain well-established regions.

A greater need for efficiency will focus shippers' attention on increasing the use of tank containers for intercontinental movements. Therefore, shipping up to 250 hectolitres/36 tonne per TEU with a Mega-Inliner® System, instead of an average of 100 hectolitres/24 tonnes in a box container, makes economic sense. Furthermore, tank containers are the safest, most efficient and most effective way of moving small lot sizes.

Future tax increases, such as the sulphur tax of 5-10% per TEU and the strong push on carbon foot print reduction, makes a tank container with the patented

Sidon van Laarhoven



Sidon van Laarhoven has an MSc in Business Administration and Management. He started his career with ING and became manager private banking within the Rabobank group before moving into automotive. He then became a freelance turnaround manager in the beer and beverages industry, working with Anheuser Busch Inbev, Heineken, Carlsberg etc. He sold Duotank International in 2010 after an MBO and started a consultancy firm which he sold after 3 years to focus on Mega-Inliner International Group.

Mega-Inliner® System a very attractive proposition and should contribute to the increase use of tank containers.

TCM: Which tank container operators or lessors use Mega-Inliners at the moment?

SvL:The concept is currently being rolled out to a number of breweries and their logistics service providers and partners. Their assistance in proving the concept has convinced them of its long-term benefits.



Refrigeration Unit for Tank Containers



Dual Refrigeration System for Tank Containers



Refrigeration Unit for Tank Containers (ATEX-certified model available)

KLINGE CORP OFFERS TRANSPORT **SOLUTIONS FOR YOUR EVERY NEED**

Other equipment includes:

- Dual Refrigerated Container & Back-up Generator Set for Hazardous Goods
- Offshore Refrigerated Container (complies with ATEX Directive)

KLINGE

- Explosion-Proof Refrigerated Container for Operation in Hazardous Zone I & 2
- Satellite Monitoring & Tracking of temperature, alarms, and running condition

CORPORATION





Review of the year

Tank container market expert Leslie McCune summarises a booming 2018 for some, but not for all

Looking at the public financial statements of tank container players, and having knowledge of several private ones, it's clear that 2018 was an excellent year for most in the industry, with one or two painful exceptions.

The winners were the large global lessors - whose returns approached 10% - and the global tank container operators, some of whom achieved record sales revenue and/or profitability. The losers were smaller scale, more regionally-focused lessors without the capital depth, economies of scale and IT systems of their larger competitors. Tank container manufacturers also had a tough year, despite record production levels.

Underlying demand for tank containers was fuelled by global economic growth of 3.7%.
Unusually, chemical production - which typically increases at 1-2% above GDP - increased at only 3.1% in 2018 although this masked significant regional differences. European chemical output, for instance, is likely to grow a meagre 0.5% in 2019.
German chemical production - Europe's largest - is forecast to rise 1.5%.

Of more significance to the tank container sector is specialty chemical production, which grew at a healthy 3.7% in 2018.

Market growth

The Chinese domestic market continued to be the leading growth market for tank containers in 2018, not least because of the relaxation of a short-lived period of government-controlled



consumption constraint in 2017. Chemical sales in China exceeded the combined total of those in the US, the EU, Japan and South Korea. China Railway Tielong Container Logistics, a diversified private company with a fleet of 20,879 tank containers, is among those that are well-placed to capture the growth.

Global fleet

ITCO's global fleet study showed an increase of 10.8% to a record high of 604,700 tank containers by the end of 2018. Production increased by a record 23% to 59,700 units as manufacturers sought to fill lines, despite raw material increases and low tank container prices. Profit warnings from tank container manufacturers were inevitable, as were profit boosts for operators and lessors.

Tank container operators represented 63% of the global fleet. The operator market is more fragmented than the leasing sector with the top 10 operators accounting for 225,849 tank containers (59% of the global operator fleet). The top five operators - Stolt, Hoyer, NewPort/Sinochem, Bertschi and Bulkhaul - represented 40% of the global operator fleet.

In absolute terms, market leader Stolt led the way in terms of fleet growth among the top ten operators. Taking advantage of close-to-historically low prices - and reducing the average age of its fleet - Stolt added 3,761 tank containers to its fleet. Bertschi (2,700 units), ITT (2,500 units) and Hoyer (923 units) followed. NewPort/Sinochem was the only large operator with a year-on-year

fleet reduction.

The top 10 lessors accounted for 227,500 tank containers (82% of the total leasing fleet of 285,000 units). In a consolidated market, the top three lessors (Exsif, Eurotainer and Seaco) accounted for 150,000 tanks, 54% of the total fleet.

Operators

Several operators prospered in 2018. The performance of privately-owned Bulkhaul, the fourth largest operator in terms of fleet, remains a mystery but its low cost, low profile business model combined with its fleet size should have generated good financials. It is a pure-play operator, differentiated by having its own tank container manufacturing plant, and keeps overheads low by having only nine global offices. Its Middle East business, for example, is managed by an agency network controlled by Bulkhaul's UK office.

Although Bulkhaul's industry participation is the lowest among the leading operators, its strong and long-standing presence in Asia, the Middle East and Europe make it a respected competitor.

Market leader Stolt differentiates itself by being the only operator with its own network of 21 owned and joint-venture depots and, of course, has the potential synergy opportunities of its terminal and bulk chemical tanker businesses.

Its apparent strategy for tank containers is one of finesse i.e. to maintain its margin by organic growth while generating operational efficiencies through scale and digital technology platforms such as mySTCtanks.com. This relatively contained strategy allows Stolt to focus on the business that is closest to its heart - chemical parcel tankers.

To its credit, the tank container business consistently delivers solid financials. In 2018, net profit was



up 30% to \$70.9m on revenues of \$541.1m. Shipments of 129,127 were up 1.8% on 2017, which were up 5.5% on 2016. Over the past eight years, shipments increased by an average of 2.2% a year.

Hoyer, the second largest tank container operator in terms of fleet size, had record revenues of €1,203m in 2017 and the second-highest EBT (€40.6m) in its history. It had a successful 2018 and is doubling its investment budget to a record €173m in 2019. One third of investment will go into modernising and enlarging the tank container fleet.

Unlike market-leader Stolt, which also focuses on terminals, chemical parcel tankers, tank container depots (and fish), Hoyer concentrates on smaller scale chemical logistics oriented around tank containers, road tankers, flexitanks, IBCs and blending. It avoids leased tank containers, preferring to maintain its own fleet

Its depot ownership strategy is simple: "Why keep a cow when milk is plentifully available".

Hoyer is the most active in digitalising its business and is pioneering new concepts, including equipping its fleet with telematics systems - over 10,000 units are now 'Smart Tanks'.

Among other asset developments, Hoyer will soon be opening a new filling, drumming and drumming site in Jubail, Saudi Arabia. The fourth largest global operator, Bertschi, had record revenues of \$963m in 2018 and is also developing the 'smart tank container concept' as part of its digitalisation programme.

Bertschi's business outside Europe focuses primarily on standardised tank containers. In Europe the portfolio of speciality shipments requiring more specialised tank containers is larger. Its growth areas are China, Southeast Asia (where drumming and warehousing facilities opened), the US and the Middle East. There will be a 'significant' fleet expansion in 2019.

Lessors

Lessors enjoyed returns approaching 10% in 2018 and *Tankcontainer Magazine* ran a multi-issue Porter 5-Forces analysis of the sector.

The year's biggest news was that Chinese conglomerate HNA had put Seaco up for sale. The sale of Seaco, controlled by HNA's Shenzhen-listed Bohai Capital Holding, will help HNA increase liquidity and reduce one of China's biggest corporate debts (\$79bn).

Interest could come from COSCO/Florens, Textainer, Triton, Japanese financial firm Orix or Ontario Teachers' Pension Fund (which owns rival lessor SeaCube). The likely sale price could be \$1-1.5bn.

Three trends were evident in the leasing sector in 2018 - continuing

consolidation, greater fleet diversity in terms of equipment types and buyout interest from investment funds. Ermewa's acquisition of TML was evidence of consolidation, resulting in TML's tank container fleet of over 5,000 owned and managed tank containers - including the company's contractual leasing activities - being transferred into Ermewa's Eurotainer business.

Consolidation activity has increased the share of more specialised tank containers in lessor fleets and gained access to the high growth T50 gas and T75 cryogenic markets.

Regional activity

A major operational problem was evident in the US, where inventory built up on the East Coast. Some depots are at maximum capacity and can only accept tank container on a one-out, one-in basis. Boasso and Linden in New Jersey operated on this basis 12 months ago.

Europe, especially Eastern
Europe, grew strongly in 2018, as
did India, where local demand
reduced the pool of stand-by tank
containers on India's west coast.
Operators position empty tanks
here to serve new business
opportunities coming out of India
or the Middle East. Historically,
India provides the safety stock for
the Middle East but Indian
imports and exports were more
balanced in 2018, leaving less
scope for empty positioning into
Saudi Arabia or the UAE.

In the Middle East, trades have switched - traditionally, imported tank container shipments made the profit with exports used to reposition into other global trade flows. However, in 2018, imports continued to reduce due to local production substituting imports. Tank container availability was a major problem, helping operators to increase margins.

Middle Eastern oil companies are prioritising chemicals on an

unprecedented scale to compensate for maturing transportation fuel markets and to boost employment. Saudi Aramco views chemicals as one of its best markets, pledging \$100bn towards petrochemical projects, including an oil-to-chemicals complex and the acquisition of a majority stake in state-controlled petrochemicals giant SABIC (with the expectation of managing the commercial operations and logistics of both SABIC and Sadara).

The US shale-based petrochemical transformation generated major opportunities for multimodal players, despite some recent softness in tank container shipments, but is straining the port, rail, trucking and tank container infrastructure.

Trends

Investments in supply chain transparency were prioritised in 2018 due to increasing demand for dashboard analytics, track-and-trace and remote operability. Many replaced outdated legacy billing systems, invested in asset management and cloud-based digital management systems, and developed other Supply Chain 4.0 technologies to create more automated, integrated supply chains.

The trend away from drums, IBCs and poly totes to tank containers continued in 2018 due to safety considerations and the operational efficiencies of tank containers.

Working capital considerations, and the convenience of door-to-door deliveries, moved small-to-medium sized parcels from chemical tankers to the smaller lots offered by tank containers with the product portfolio carried in tank containers broadening. Larger container ships favoured tank containers economics over chemical parcel tankers.

Pressure on one-time use plastic









flexibags increased as their disposal via landfill or incineration becomes an increasingly liability. Leakage problems still continue.

Outsourcing benefits continued to be sought in 2018, as did the shift to intermodal, although European chemical companies have already captured most intermodal opportunities. Further penetration depends on new and upgraded intermodal infrastructure and the development of multimodal terminals.

The gas market grew, especially in China and Russia. The Chinese government has acceelerated construction of the natural gas production, supply and storage system to alleviate natural gas shortages. No longer used just for peak load periods, LNG is now a mainstream fuel, but the LNG infrastructure is in south China while the heating demand is in the north. The south-to-north movement of natural gas is a key strategic priority. CIMC shipped 130 LNG tank containers from Yangpu to Jinzhou in the north China in a trial approved by China's NDRC, National Energy Administration and Ministry of Transport.

Elsewhere, Singapore-based SSB Cryogenic Services collaborated with Global Petro Storage Singapore to develop small-scale LNG supply chains in Southeast Asia for places with inadequate gas distribution infrastructures and poor gas pipeline connections.

Responding to the market growth for LNG (and other cryogenic gases), Trifleet announced it would build up a significant cryogenic fleet with several other players also expanding. Albatross also began offering T75 cryogenic tank containers for LNG, CO₂, nitrogen, ethane, ethylene, oxygen and argon.

The percentage growth in swapbody tanks is outpacing



standard units with, for example, Exsif offering them in China through its China-based company Haite.

Practically all operators benefited from increased demurrage revenues, indicating greater use of tank containers for storage.

Corporate activity

VTG were easy prey for Warwick Holding, a Morgan Stanley Infrastructure subsidiary, which will offer a public delisting tender for all outstanding shares.

Peacock bought Altermij in a minor acquisition as part of its expansion and repositioning strategy.

In the transport and depot sector, Boasso Global, a subsidiary of US-based Quality Distribution, expanded into Germany by acquiring Kobler. This follows Boasso's acquisition of Den Hartogh's European deport and tank cleaning business in 2017.

Manufacturers

Global tank container production leapt by 23% to a record high of 59,700. Production was boosted by a new Chinese manufacturer, Jingjiang Asian-Pacific Logistics Equipment Co. Ltd. in 2018. JJAP's existing capacity of 6,000 will be increased to 15,000 on completion of its three production lines.

The top six manufacturers now account for 91% of global production. China accounted for 86% with Welfit Oddy in South Africa being the only other significant manufacturer.

Unsurprisingly, Chinese tank container manufacturers suffered financially in 2018 as overcapacity continued and prices remained low. Singamas issued a profit warning, blaming its performance decline on cost increases (especially corten steel). With intense competition from the likes of CIMC, Singamas could not pass on its higher costs. The rapid appreciation of the Renminbi against the US dollar in early 2018 further depressed profit margins, leading to a H1 loss of \$2.1m (despite a 63% revenue jump to \$969m).

In the same period, CIMC's segment net profit fell 69% to \$32m due to rising steel prices and the high cost of the water-based paints used on coating lines.

Sahreej opens new depot in Saudi Arabia

Tankcontainer Magazine reviews the depot investments by Stolt Tank Containers and its Saudi Arabian partner

Stolt Tank Containers and YBA Kanoo, the joint owners of Kanoo Tank Services (Sahreej), opened their new tank container cleaning, inspection and repair facility in Jubail, Saudi Arabia in March.

Sahreej purchased the assets of the tank cleaning division of Kanoo Terminal Services (KTS) in 2015, which had been running tank cleaning operations for 24 years. Sahreej has since upgraded the facilities to the world class standards of the joint venture partners. The key targets were to improve the volume, service quality and scope of the work provided and to 'cater for the enormous opportunities that will arise as Sadara comes on line'.

In December 2015, Sahreej was awarded 100,000 sq m of land in the Royal Commission Logistics Area in Jubail, opposite SATORP refinery and the giant Sadara petrochemical complex. The Sahreej plot is adjacent to the new Saudi Arabian Railway Co rail line, presenting an opportunity for a rail siding into Sahreej.

The new Jubail depot replaces Sahreej's previous depot in Jubail and complements the company's other tank container depots in Dammam and Jeddah.

The Dammam depot, close to King Abdul Aziz port, was totally redeveloped in 2018 and can clean 450 tank containers a month. The full repair facility includes two rotators, testing facilities, storage for 832 empty

tank containers, European/USstandard environmental controls and a waste water treatment plant which includes air scrubber. Water recycling gives many savings.

According to Mike Tunstall, Sahreej's General Manager, "On taking over the tank cleaning facilities (in 2015), Sahreej had an eight-day average cleaning time but this has been brought down to two days at the new Dammam facility, with the same turnaround expected at Jubail."

He continues: "A recent article in Arab News stated that Saudi Arabia's chemical industry will double in size by 2030, so we will be in a strong position to cater to that growth. In terms of demand, 2018 was our best year."

The new Jubail cleaning facility has 24 cleaning slots with a monthly cleaning capacity for 1,000 tank containers. It has 36 inspection slots, 12 dedicated test bays for statutory testing and steam heating for eight tank containers. There is a full shell and frame repair capability, six rotators, a laden storage area for 500 tank containers and storage for 1,000 tank containers.

As in Dammam, the water treatment plant and scrubber in the Jubail depot meets European/ US standards.

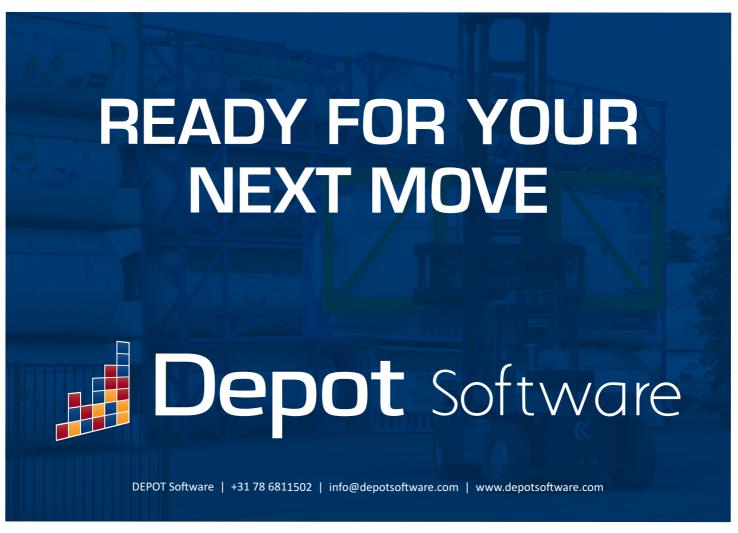
Does, then, the new Jubail depot offer a full-service for off-hired leased tank containers (including, for example, polishing)? "Yes", says Tunstall, "We include all services including frame and shell repair (including inserts) and offhire for leased tanks".

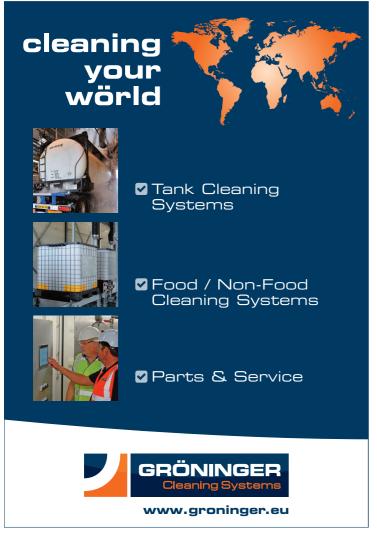
The cleaning technology uses a system developed by Stolt's Global Project Team. It can handle the most difficult-to-clean products, including MDI and TDI isocyanates and latex. MDI, for example, is Class 6.1 toxic, is not miscible in water and polymerises with water to form a hard crust in the tank. MDI tank cleaning therefore usually requires 800 bar high-pressure cleaning units with their own generator and specialised cleaning head (although Stolt uses a contained circulated heated monoethanolamine system instead of hydro for MDI/TDI cleaning).

When estimating cleaning demand, operators need to be aware that MDI tank containers do not need to be cleaned after every discharge. It is usual for more than six consecutive movements of MDI to be made before the tank container is cleaned.

Stolt's in-house cleaning system in the new Jubail facility replaces a Gröninger system, which will be re-located to Sahreej's Jeddah depot. This will have a capacity of 450 tank containers a month based on standard shifts and a 5-day working week.

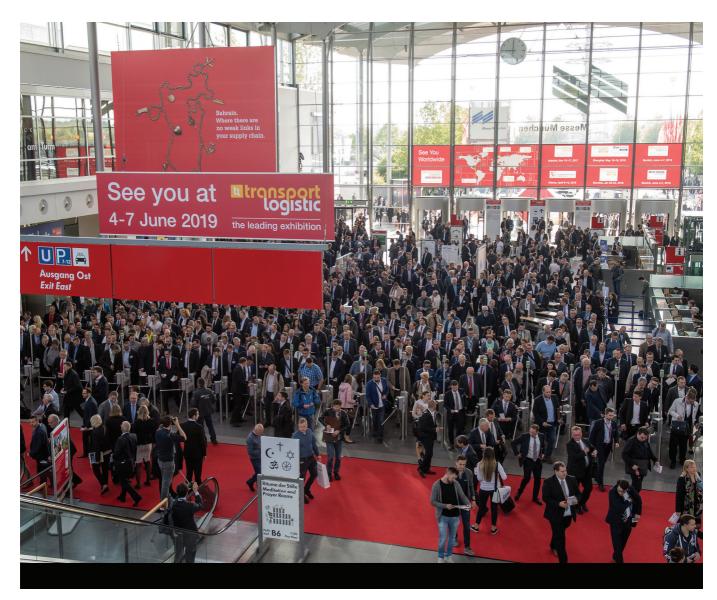
These investments have raised the combined monthly cleaning capacity of Sahreej's three depots in Saudi Arabia from 900 cleans to close to 2,000.







The biggest Tank Container Village for ITCO so far



Every two years, the tank container world gathers at the ITCO Tank Container Village in Munich – part of the transport logistic exhibition. Any company involved in the tank

container business, who wants to meet their industry colleagues and partners, should plan to attend the Event.

ITCO Members will be displaying a wide range of equipment and services, with the majority of the world's leading tank container operators, leasing companies, manufacturers and component suppliers taking part. In addition, there will be tank container surveyors and inspection companies, together with a number of leading tank cleaning and repair facilities.

With over 70 Members exhibiting, this will be the biggest Tank Container Village that ITCO has so far organised

The ITCO Tank Container Village will be in Hall B4 of the transport logistic 2019 Exhibition.

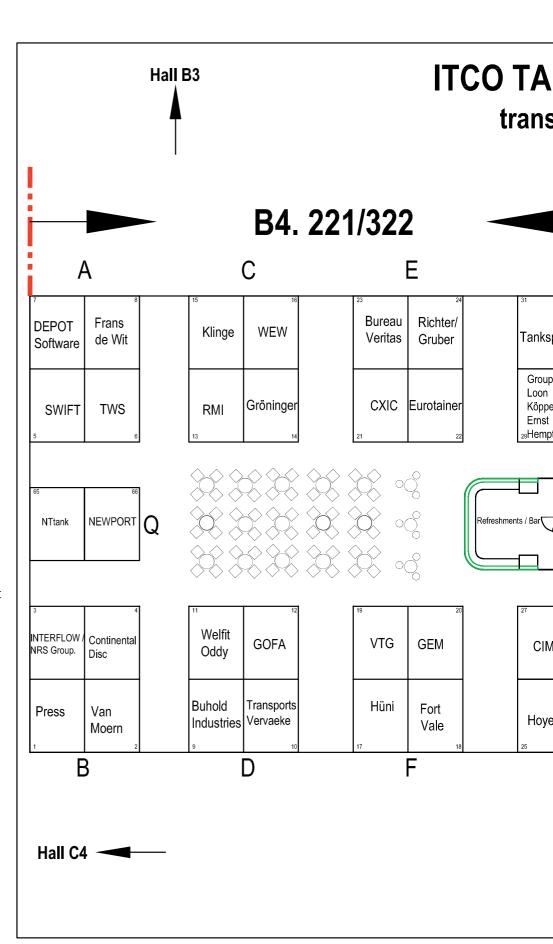
To access the Tank Container Village, you will need an entry ticket to the Exhibition

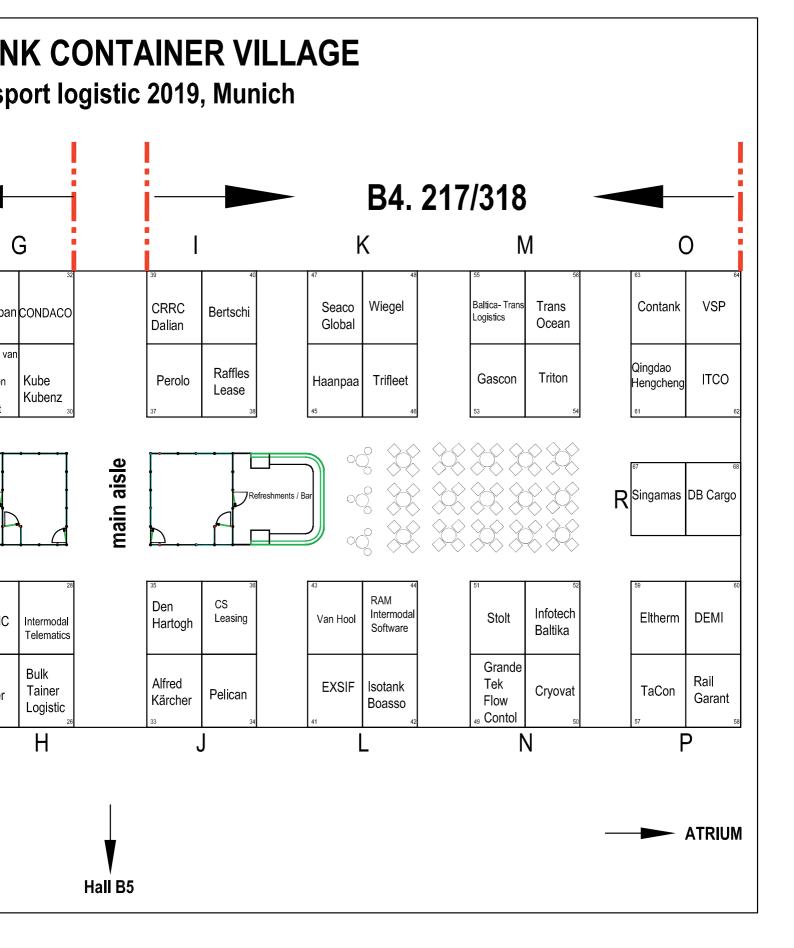
All relevant information about transport logistic 2019 can be found on the event website: https://www.transportlogistic.de/index-2.html

You will find details of: Visitor tickets, exhibition opening times, Visas for Germany, Munich travel and recommended hotels.

Evening Receptions

ITCO will be organising its Welcome Reception on Tuesday 4 June, from 18:00 to 20:00, sponsored by CIMC. All Members and Visitors are warmly invited to attend.







Exhibitors at ITCO Tank Container Village

Alfred Kaercher

Baltica-Trans Logistics

Bertschi

Buhold Industries

BulkTainer Logistics

Bureau Veritas

CIMC

CONDACO

Contank

Continenatl Disc

CRRC Dalian

Cryovat

CS Leasing

CXIC

DB Cargo

DEMI

Den Hartogh

DEPOT Software

Eltherm

Eurotainer

EXSIF

Fort Vale

Frans de Wit

Gascon

GEM

GOFA

Grande tek Flow Control

Groninger

Group Van Loon/

Koeppen/Ernst Hempt

Haanpaa

Hoyer

Hueni

Infotech Baltika

INTERFLOW/NRS Group

Intermodal telematics

Isotank Boasso

ITCO Tank Conatiner Village

Klinge

Kube Kubenz

Newport

Nttank

Pelican

Perolo

Qingdao Hengcheng

Raffles Lease

Rail Garant

RAM Intermodal Software

Richter/Gruber

Seaco Global

Singamas

Stolt

SWIFT

TaCon

Tankspan

Trans Ocean

Transport Vervaeke

trifleet

Triton

TWS

Van Hool

Van Moern

VSP

VTG

Welfit Oddy

WEW

Wiegel

Ovinto: moving beyond track-and-trace

Felicity Landon discusses Ovinto's mission to automate and reduce data input with its founder and CEO

Think not of the IoT (Internet of Things) device but of the 'value-added' possibilities it brings, says Frederick Ronse, CEO and founder of Ovinto.

"These days everyone talks about IoT and sensors. But a sensor doesn't bring you value. It is the data you collect and what you do with the data that matters. It's fine to talk about Industry 4.0 but if you don't do anything intelligent with it, there is no added value."

The Ovinto Sat Monitoring device was launched when Ovinto was founded in 2010; the company initially focused on tracking and tracing but the product has evolved since then to do much more.

Ovinto's origins were in the waste sector and a company that was created in 2005 to track and trace vehicles. The focus shifted to include yachts, trailers, containers and wagons, and in parallel came a stronger emphasis on telemetry to measure much more than position.

Today, Ovinto's system can flag up if a customer is holding onto a tank container too long; it can monitor the temperature of a tank container holding hazardous product and sound an alarm if there is any variation; it can flag up an overfill; and it can monitor usage, cleaning, and wear and tear.

"Our system gives you information you can use in every



single cycle in your supply chain," says Ronse. "Our core mission and focus has always been on collecting and sending data, processing it and giving the results back to the software package you already have in place."

A key difference, he says, is that Ovinto's device can be integrated into customers' existing systems. "More and more containers are being equipped with track-and-trace devices," he says, but usually the customer has to log on to the service provider's website to find the location of a tracked tank container.

"If you are a big industry player and working in your own software packages - SAP or Oracle, for example - and I try to sell you a web page, you wouldn't like it when it forces you to stop working in the software you are working in. You will likely have to surf to a web page that will probably be blocked by your IT people.

"You will see a beautiful geographical map with a dot



where your asset is, probably download something, and then go back to your software. That is time and money lost."

Systems run in this way may be fine for small-to-medium sized enterprises but are counterproductive for big industry players working in their own software packages, says Ronse. "You will still be manually putting in cleaning documents, confirming if an asset is available, and so on. We want to position ourselves in between."

Ovinto has built a collaborative big data platform, the Ovinto Control Tower, which can be fully integrated into customers' existing software and hardware platforms. Its mission is to take away repetitive, inefficient manual actions and accelerate business processes.

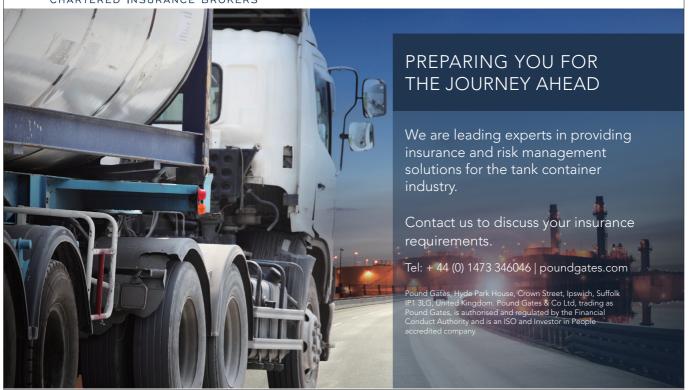
We often hear IT-speak descriptions of what benefits are achievable from 4.0 or IoT but Ronse is happy to be specific.

"Suppliers have data, customers and operators have data, and you



POUND GATES





have data in different divisions of your company. Our system gives you the possibility to connect the data sources that are already all around you, and do the analysis."

Typically, he says, a big corporate's software is 'waiting' for humans to put information in – for example, the PDF of a cleaning document. Someone opens the PDF, inputs the information into an XL file, and passes on information for someone else to do manual invoicing. Often, as information is input, not input or left languishing in someone's email inbox, several different versions of the same XL file can emerge, with no clarity as to which is correct or up to date.

"Our mission is to automate and reduce manual input," he says.

A great example

A great example is when a customer keeps hold of a tank container as a convenient and cheap option for temporary storage.

"After a while, of course, you will charge demurrage - but establishing how long the customer has had the container, and subsequent invoicing, are manual processes. We give the possibility to set up the dashboard to spot if a customer is holding on to a container. We might ask, do vou know that the customer is keeping your container for a year? You might say that the customer is a very important one but it's very unprofessional if you do nothing, or don't know. The customer has a negative image of your business and assumes you don't care."

His solution: trigger the system to send emails at certain key points. After two months, say, the system can generate an email noting that the customer still has the container, and confirming that they can keep it for longer if required.

This will be followed by another polite reminder at a set time.
"After three times, the container

generally comes back because the customer realises that you know exactly how long they have had the container," says Ronse. "It is a great result: you will improve your rotation, because the container comes back earlier. You have an image boost - the fact that you know exactly where your container is and that you keep track of everything shows that you are incredibly professional. By doing a simple series of emails to customers, you can have a massive impact without being repressive or negative."

Similarly, a hazardous product might require that the temperature on the upper and lower sides of the container are measured – if the temperature varies by more than a certain limit, there could be an explosion risk.

"We can monitor the temperature through our dashboard; the temperature can be checked on a phone or tablet, and the system raises an alarm if the temperature is not right. This replaces a system where people have to constantly go and manually check temperatures in the yard.

"In the same way, we can make maintenance easier or planning quicker. Our system can allow you to observe cleaning and information on wear and tear, and move over to conditioned-based maintenance. Sales people can constantly see how many containers they have at each site and available capacity, where at present they are doing that manually – calling each other, looking in the yard, sending emails. It is still a very old-fashioned business."

There are also opportunities to notify the depot of a container's estimated time of arrival, and a means to alert customers if a container is delayed.

Combining data from transport planning systems, maintenance and material management, and yard logistics, and applying machine learning, can be very powerful, says Ronse. "People should think – how can I connect data I have in-house to optimise my business, bringing better service and value for my customer? It isn't about input of data."

In short, he says, maintenance teams want to know when a container has been used a lot and needs refurbishment. Sales teams will always be asking if tank containers are available. Logistics teams want to move containers quickly and get them back more easily. Invoicing teams want to know when the container has arrived and if they can invoice. Customers want to know – where is it and is everything OK?

"In the whole supply chain, you are able to create new services and, importantly, reduce the enormous amount of dull, repetitive and manual work. The system provides accuracy and immediately spots errors."

More trips

In one case, he says, a customer achieved one-third more round trips with the same fleet. In another, containers spent 81% fewer days in the workshop – "a place where they are typically forgotten".

Ovinto works with many large European chemical companies, including INEOS Oxide in Antwerp, its first customer, Evonik Industries and SABIC Petrochemicals.

Early on, Ovinto learned that a focus on sensors was not enough. "For me, the most important message is that we are tired of always talking about track-and-trace developments, which are only a means to an end and don't bring real value. The value is when you start to analyse your business and see where it isn't really efficient and where you can speed up and automate manual work. That can have an enormous effect for your customers and for your business."

New developments James Graham reports on the new THIELMANN WEW THIELMANN WEW

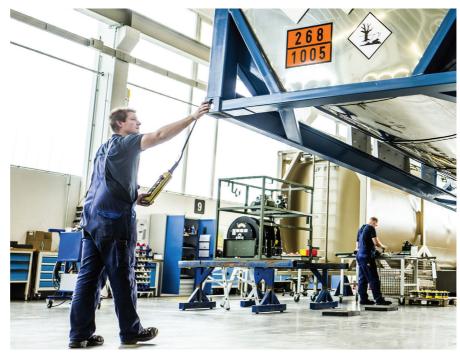
At the end of January 2019, a three-year progression to bring together two important players in the German tank container market came to a satisfactory conclusion. The successful acquisition of WEW Container Systems GmbH by THIELMANN in 2016 was cemented after a three-year process by becoming THIELMANN WEW GmbH, as of 25th January 2019.

THIELMANN was keen to promote this change of name, "we want to reflect the full incorporation of WEW and its unique product and service portfolio into THIELMANN," said Bernd Loeser, CEO of THIELMANN and Björn Stolz, managing director of THIELMANN WEW GmbH in a joint statement.

"Building on our already strong relationships with our customers around the globe, who have known and trusted the WEW brand for many decades, the full incorporation into THIELMANN will only strengthen these existing relationships.

"Over the past few years, THIELMANN has already strengthened the design and manufacturing hub in Weitefeld, Germany. We are now integrating these capabilities into THIELMANN whilst providing additional peace of mind in the knowledge that THIELMANN WEW GmbH is backed by the world leader in container solutions."

The company claims to be one of the world's leading manufacturers of stainless steel containers offering a unique one-



stop shop solution for containers. This includes container solutions ranging in capacity from 5-80,000 litres, as well as all services around the containers.

"We are proud to have served a multitude of industries, some for more than 275 years," they said.

Sebastian Bojarski, THIELMANN Product Line Director, says: "We worked hard to bring WEW into the THIELMANN company in a way that was seamless for our customers. In 2019, we are stronger than we have ever been before, having retained the engineering excellence WEW was known for and underpinned it with the strong financial footing and expertise of the world's leading container company."

"Since coming into the THIELMANN stable, our customer base has continued to grow, and we work with clients across the chemical, oil and gas, emergency services and nuclear sectors, helping them to operate in some of the toughest conditions around the world. From dispensing fuel in Antarctica to storing and transporting some of the most dangerous substances on earth, our customers know that they can rely on the THIELMANN brand."

German-speaking advantage

The company leverages its geographical and historical advantages in the DACH (Germany (D), Austria (A), and Switzerland (CH)) countries, as well as the rest of Europe. According to Bojarski, the company realises that there is growth for it in North and South America.

Bojarski believes that the logistics market is "an interesting

place at present". Topics such as climate change, the push toward 'green', environmentally-friendly operations, and a shifting market landscape are having an impact on all operators within the civil logistics sector, he considers.

He says: "With 275 years experience in this market THIELMANN has the depth of knowledge and the engineering expertise to deliver the solution that completely fits the demand. Whether our customers need basic containers for the safe and reliable transportation of fuel and water, or built-to-spec complex units capable of handling or processing toxic chemicals, our team is here to work with our customers to provide the solution they need."

Recent projects

In 2017, THIELMANN began delivering five fuel tank container systems to the Norwegian Polar Institute, destined for the Troll Station research facility in Antarctica. They have all now been delivered.

The FSD-10 and WSD-10 units - introduced in mid-2018 - have enjoyed positive market response. These particular units are designed to meet the needs of customers who need quick-deploy, flexible and cost-effective water and fuel solutions. As with all THIELMANN water and fuel capabilities, whatever is required by the customer can be designed in, whether that means heating, cooling, filtration or reverse-

The FSD-10 Fuel Storage and Dispensing Unit and the WSD-10 Water Storage and Dispensing Unit have been developed with affordability in mind. The units are fitted onto DIN 30722-1 PLS/DROPS compatible A-frames, creating low profile systems that retain the handling capabilities of the THIELMANN WEW full frame systems. The overall dimensions of the systems allow transport inside a standard ISO box container for

full intermodality.

Both systems serve forward area/general support fuel and water supply for military, peacekeeping and disaster relief applications in the toughest environments.

The FSD-10 delivers up to 10,000 litres of diesel, gasoline or aviation fuel for forward area or command-level fuel supply. The demountable system is compatible with forklift or crane handling systems and can be transported by 3, 4 and 5-axle logistics vehicles with/without onboard hook lift.

The system has a gross weight of 15 tonnes and an operating pressure of 0.45 bar. Capable of operating with temperature range of -40 to +49°C, the unit has an integrated 50-280 LPM pumping system and can be tailored to meet customer requirements with onboard power generator, fuel filtration and self-filling capability, 1-4 dispensing hose reels, mechanical or electronic flow metres, insulation or heating system. Telemetry options are available.

The WSD-10 delivers up to 10,000 litres of drinking and non-potable water for forward area or command-level water supply. With integrated 20-200 LPM pumping system, the system is transportable by 4x4 up to 8x8 logistics vehicles and is crane and forklift handling system-compatible.

A further variant, the WSD-10-FF has been specially designed for the firefighting and emergency services. This unit, incorporating German Feuerwehr-approved pumping and mixing equipment is intended to provide ready supplies of water where hydrant/river access may not be immediately available. Optional equipment includes foam and suppressant concentrate storage and mixing, together with a high-volume pump.

With a max gross weight of 15 tonne, the system has a number of available options to meet

customer requirements, including onboard power generator, insulation/heating options for subzero operations, self-filling capability, spigot stand, UV radiation and clean-in-place tank internal cleaning.

"THIELMANN WEW has leveraged the proven FSD design, many examples of which are seeing service in austere conditions in the Southern Arabian Gulf as the basis for this new family. We have developed this range to appeal to military and NGO customers whose logistics requirements may be primarily vehicle-mounted and where multimodal capabilities may not be required, while still demanding the quality engineering that THIELMANN WEW fuel and water systems are known for worldwide," Stolz commented. "The FSD-10 and WSD-10 fill a critical gap in the market in that respect."

Job market

The combination of the two companies at a time of full employment has not presented any issues for Bojarski. He says: "Since joining THIELMANN our team at Weitefeld has grown. We are currently seeking a number of specialists for roles in different areas across our site. All personnel who join our team are provided with on-the-job training, from apprentices to graduates, in order to give them the skills to produce our industry-leading solutions.

"There is tough competition for talented individuals in the market at present. We operate in a niche industry in Germany and are not located in a metropolitan area, which is why we take great care to train and develop the skills of the people we employ and offer them career progression paths catered to their strengths. We have very good staff retention rates and provide every opportunity for our employees to continue to learn and develop their skills throughout their careers," he says.

Singamas tank containers

Singamas offers a full range of tank containers, including U-stamp approved, designed and manufactured to your exacting requirements.
Our philosophy is Quality:
Quality of design, Quality of manufacturing, Quality of service.



I transport logistic

June 4-7, 2019 Messe München Visit us!



Corporate Office

19/F, Rykadan Capital Tower, 135 Hoi Bun Road, Kowloon, Hong Kong

Tel. : +852 2598 7831 Fax : +852 2598 7847 E-mail : enquiry@singamas.com

Shanghai Pacific International Container Co. Ltd.

2667 Jia Zhu Road, Jiading District, Shanghai, the PRC 201815

Tel. : +86 21 6902 1228
Fax : +86 21 6902 1231
E-mail : cntr.spic@cn.singamas.com

European Representative Office

(North / South America, EU and Japan) Moezelweg 173, Harbour No. 5612, 3198 LS Europoort RT, The Netherlands

Tel. : +31 (0) 181 233 588 Fax : +31 (0) 181 233 595 E-mail : sales@singamas.eu

AIR FLOW

Innovative Solutions for Gas Transportation & Process

Equipment Rental & Gas Logistics Services



Global fleet hits record as production booms

Tankcontainer Magazine reviews ITCO's 2018 global fleet survey

ITCO's latest global fleet survey revealed an increase of nearly 11% to a record high of 604,700 tank containers at the end of 2018. Production increased by a record 23% to 59,700 tank containers as manufacturers sought to fill lines, despite raw material increases and low tank container prices.

Profit warnings from tank container manufacturers were therefore inevitable in 2018, as were profit boosts for larger tank container operators and lessors.

The 10.8% increase in the global fleet followed an 8.7% rise in 2017. With no large new entrants, 2018's fleet increase was driven by tank container operators and lessors increasing their fleet numbers. The range of products shipped in tank containers - but previously shipped only in drums or transported in chemical tankers - has widened.

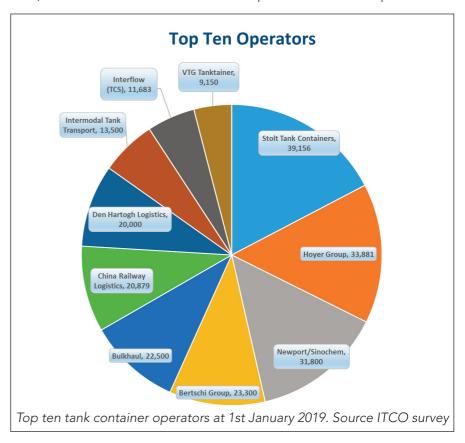
This has contributed to swing ships being moved out of chemicals into Clean Petroleum Products. As tank containers are increasingly preferred, bulk chemical ship owners are also noting an increasing proportion of their cargoes being commodity products, which generate lower per tonne revenues and lower margins compared with specialty chemicals.

Tank container use for transporting chemicals within China saw significant growth in 2018.

The grip on the industry continues to be held, at a global level, by a relatively small number of large tank container operators and leasing companies. The size and global reach of these players puts them at a competitive advantage to smaller companies as chemical producers - the tank container industry's largest customer segment - grow larger due to merger and acquisitions, driven by their need to grow earnings and fend off competition.

Consolidation is focusing on specialty chemicals, paints and coatings, petrochemicals and polymers. The breakup of DowDuPont, for example, into three new companies will create new M&A opportunities as they jettison noncore businesses.

The 212 tank container operators covered in the survey had a fleet of 381,750 tank containers (including owned and leased-in tank containers), accounting for 63% of the global fleet. The operator market is more fragmented than the leasing sector with the top 10 operators accounting for 225,849 tank containers (59% of the global operator fleet). The top five



operators - Stolt, Hoyer, NewPort/Sinochem, Bertschi and Bulkhaul - accounted for 40% of the global operator fleet.

In absolute terms, market leader Stolt added the most units among the top ten operators. Taking advantage of close to historically low prices - and seeking to reduce their fleet's average age - Stolt added 3,761 tank containers. Bertschi (2,700 units), ITT (2,500 units) and Hoyer (923 units) followed. In percentage terms, ITT had the biggest growth (27%), followed by Bertschi (13%) and Stolt (11%).

NewPort/Sinochem was the only large operator to have a year-on-year fleet size reduction while China Railway Logistics reported exactly the same fleet size as the previous year (20,879).

There were 36 worldwide lessors in the more consolidated leasing sector with the top 10 lessors accounting for 227,500 tank containers (82% of the total leasing fleet of 285,000 units). The top three lessors (Exsif, Eurotainer and HNA-owned Seaco) accounted for 150,000 tanks, 54% of the total fleet.

Exsif's fleet grew by 6,500 units (13%) while Eurotainer's fleet increased by 13,000 units (37%). Seaco's fleet only increased 1,000 units (1%), perhaps affected by owner HNA's capital constraints.

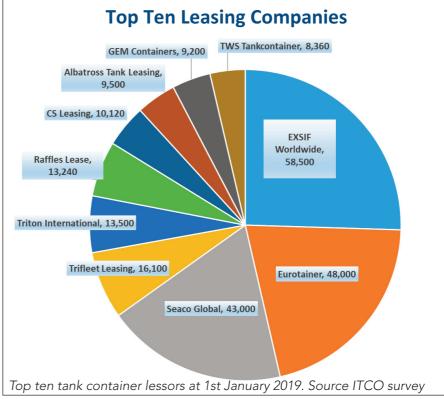
The number of idle tank containers in the leasing fleet is high and estimated to be 15-18%.

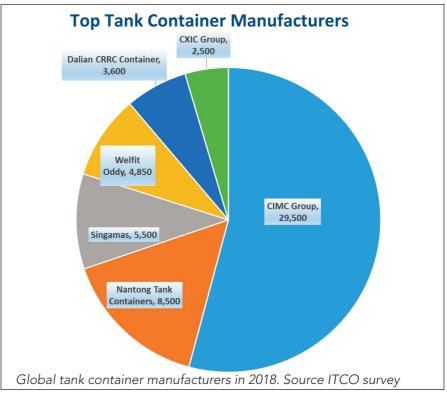
ITCO noted that the global growth in tank container demand stimulated new entrants offering niche products or a regional focus.

Global tank container production leapt by 23% to a record high of 59,700, boosted by the entry of a new Chinese manufacturer, Jingjiang Asian-Pacific Logistics Equipment Co. Ltd. (JJAP), which manufactured 1,500 units in 2018. Existing capacity of 6,000 units will be increased to 15,000 on completion of JJAP's three production lines.

The top six tank container manufacturers now account for 91% of global production.

China accounted for 86% of global production with Welfit Oddy in South Africa being the only other significant manufacturer. Welfit Oddy's production fell by 10% in 2018, although the company focuses on more specialised, higher value tank containers which in 2017 were sometimes priced about \$3,500 above Asian levels.





A bright future for an innovative industry

On the 5th anniversary of Tankcontainer Magazine, we invited some of the industry's most influential players to share their views on progress over the past five years, while looking forward to the next five years. This issue hears the views of Dr Hans-Jörg Bertschi, majority shareholder and Executive Chairman of the Bertschi Group

Over the past six years, the tank container has seen tremendous growth - the global fleet has grown by 79%, from the 338,000 tank containers reported in ITCO's May 2013 fleet survey to 604,700 units.

These years showed strong global economic growth, especially in Asia. The fast rampup was supported by a shift of transport from drums to safer Isotanks, the trend of the chemical industry to produce more for global markets and the move to global sourcing strategies by customers.

The industry also made significant efforts to promote Isotanks as the safest mode of transport for liquid chemicals. Isotanks are safer than drums in steel boxes or in trucks, much safer than flexibags and even safer than road tankers.

In developing countries, where

state controls of road transport equipment are typically very basic, international companies started to prescribe Isotanks for the land transport of dangerous liquids chemicals for road safety reasons.

Safe global tank container infrastructure will support growth



With the growth of the global tank container sector, the network of safe cleaning and maintenance depots also developed strongly, especially in emerging countries.





Thanks to the depot audit standards set by, for example, @tco and recently by ITCO, a more professional, safe and efficient support structure has developed for Isotanks. This will support its future growth.

High flexibility

Furthermore, the chemical parcel tanker market has gradually lost segments of the smaller lot size market to tank containers, which offer a much more flexible doordoor service - there is no need to rent storage tanks in ports, there are daily departures on all major trade lanes, there is a high flexibility to re-route shipments in transit and costs are lower due to the economies of scale of 20,000+ TEU container vessels.

For customers, these are compelling market realities.

The future

Will sustainability lead to singleuse flexibags being banned?

Where will the sector go in the next few years? Global economic growth is more in question today – it has flattened and nobody knows if recession is around the corner.

Will the "golden time" of the tank container soon be over?

I do not think so but the sector needs more innovation and creativity to seize further growth opportunities. The modal shift from drums and parcel tankers to Isotanks will contribute to a certain natural growth.

A major new factor supporting Isotank growth is the recent engagement of the plastics Industry to avoid the disposal of plastics waste in the oceans. Several countries have started to ban single-use plastics bags.

I believe the one-way single-use flexitank or flexibags, mostly used in emerging countries, will come under pressure for the transport of liquid chemicals because of their negative environmental impact. This could significantly boost the tank container industry in years to

Digitalisation will also play a major role - in five years, most tank containers will be 'smart'. The permanent real-time control of location, product temperature, pressure and other characteristics (by IoT devices) will make tank containers the preferred mode for

both chemical transport and storage.

New supply chain visibility will also take a lot of waste out of the end-to-end process, making the tank container more competitive compared with other modes.

In short, the future should be bright for the tank container industry but, unlike the past five years, growth will not simply be driven by high economic growth rates.

More innovative

The sector will have to be more innovative and creative than in the past. To achieve this, our industry has to attract the best talents and to invest more in personal development.

We have to be at the forefront of technological developments or new players will disrupt our markets in the same way as Uber has done.

Let us face these challenges and use the opportunities the tank container offers to make the chemical supply chain safer, more sustainable and more efficient. If we do, there will be bright future for all of us.

The Pelican brief

The Pelican Brief is a suspense-thriller by John Grisham. Janny Kok explores how Pelican Worldwide thrills customers by the high-speed delivery of its high-end consumable and specialised products to anywhere in the world

Pelican Worldwide is a global manufacturer and supplier of valves, gaskets and ancillary products for the liquid and dry bulk transportation industries.

Its CEO and owner, Cynthia van de Moosdijk, positions Pelican Worldwide as an enterprise with a 'can do' mentality at all times. She is a specialist in Dangerous Goods and learned the ropes from her father who owned several companies. The combined knowledge and know-how of all these enterprises form the base of Pelican Worldwide, which has grown into a leading player in the specialised tank container market.

It is quite a surprise to learn that the globally operating company Pelican Worldwide started in Heinenoord, a small Dutch village close to the port of Rotterdam, in 1985. Today, the small village is still the home base from which all of the 100%-owned manufacturing and distribution centres in Houston, Wuxi/China, Singapore, Istanbul, St. Petersburg and Moscow are managed.

The manufacturing facilities are situated close to newbuild tankcontainer manufacturing sites in China and tank truck newbuild sites in the US. The Pelican brand name in the US market needs no explaining. The enterprise is well-known in the US tank truck and tank trailer market segment. The driving force in doing the job is simply its motto, "Our strength is in speedy delivery" or, in other



words, "while others are still talking about parts, we're already out delivering". That is the way Pelican Worldwide globally supplies customers with certificated valves and ancillaries, and other spare parts.

Making the difference

Van de Moosdijk travels worldwide, convincing prospects that the many-sided Pelican Worldwide is the company to do business with. It strictly acts to its principles: "facilitate close to manufacturers", "innovate in close collaboration with the customers" and "we are never out of stock". These are all strategies to achieve Pelican Worldwide's goal of efficiency in the supply chain. This message from the CEO and her fellow workers really comes across. "She is welcome everywhere", says Director Sales & Marketing Stefan Scholten.

Her message and that of other

'Pelicans' is that Pelican Worldwide always aims to make the difference within the market. Research and development is undertaken at its headquarters in close collaboration with the industry, including tank container operators and lessors serving the chemical sector.

The multifunctional Dutch company has a vast clientele in the sectors of manufacturing, depots with maintenance & repair, cleaning stations, operations and lease of tank containers and tank trucks deployed for transportation of chemicals, food grade products, and powders and granules. All is done according to the one-stop-shop concept.

Expansion

Recently, expansion plans became reality, thereby meeting the customers' demand for manufacturing expansion and providing work for highly skilled

Equipment

workers in the Wuxi area in the process.

When asked about need for a new factory in China, CEO van de Moosdijk explained that it was a Pelican Worldwide solution to meet the customers' demand and comply to the stringent transportation regulations on chemical liquids at the same time. She was quoted saying that regulations stipulate that certified valves for tankcontainers are compulsory, because they prevent chemicals in vessels from leaking.

The efforts done to move production from the smaller Cixibased factory onto the larger factory in Wuxi has paid off. It has provided the required expansion of the manufacturing of certified valves on the new location. Its basis for a viable success at the new facility has been the existing good reputation abroad, being built up over tens of years. In the process, China became a big market for production for the Dutch through its strategy to become closely situated to tankcontainer manufacturers. The job has been done, knowing that there are just a few providers of certified valves based in China.

Worldwide growth

In addition, Pelican Worldwide Director Sales & Marketing Stefan Scholten mentioned just a few large tankcontainer factories in China to which the company can offer its services. Amongst them is Nantong-based tankcontainer factory CIMC tankcontainers for high purity ammonia with different heating devices and mirror finish. SINGAMAS and South-African based Welfit Oddy are other manufacturer of various types of maritime, reefer and tank containers.

China definitely is a big market for the Dutch company but there are further prospects in Europe, the Middle East, Asia and the US. At the time Tankcontainer



Magazine talked to Stefan Scholten he mentioned that the company's CEO was visiting the large branch enterprise in Houston to talk business about equipment management, sales, and distribution. "Pelican's affinity and know-how are developed closely to the customer's needs", he said, adding some background of the business that John van de Moosdijk started. He set up various enterprises, was active in tank container leasing, depots and in the supply of tank container spare parts.

"There were several enterprises", Scholten told. "Pelican Worldwide is busy growing by combining the various entities, ICT systems and production. Our target is not only to provide service but also to focus on thinking in customer segments, customer-centricity and customer experience when doing the business. It is self-evident that an operator requires different things to a company managing a tank container depot. In conclusion, we have developed our KPI's on the basis of the various customer segments. In our business it's all about the specific customer and the question: 'What do they need?' The answer of Pelican Worldwide to that is to have specific spare parts in stock for tank containers, tank trucks and more, such as value-added services to meet customers' needs.

The latest added-value service to launch is a Pelican

app4customers for use via the web, but also as an app available on Android and IOS/Apple devices. The app can be used for immediate support from the Pelican Worldwide engineering teams. With the help of it, customers can place orders, see stock availability, view historical data such as invoices, previous orders and order confirmations. Customers will receive a personal login and can order directly via the digital catalogue and spec.

In this day and age, awareness of environmental care and sustainability has to be incorporated in daily practice. At Pelican Worldwide it ranges from using LED illumination, allowing the entrepreneur to minimize waste and by-products, and investments in a fleet of electric cars

Scholten claims that Pelican Worldwide does more than the usual in business: "As a rule, the regular focus in the market is on product and price and - at best - availability. We actually go beyond when serving the customer by advising them and developing customised products. Our services involve the production of technical drawings together with the customer, drawing up customised installation manuals and consultancy work on existing regulations."

He concludes: "Our steps in doing our OEM specialised business is quality and availability while using the most advanced equipment. Pelican Worldwide does more than sales and after sales sitting behind a desk."

Cora! Cora! Cora!

Tankcontainer Magazine reports on what's behind the successful collaboration between TWS and evodion IT in developing the Container Organisation and Rental

Application (CORA)

TWS's core business is the worldwide rental of tank containers for liquid products to the chemical and food industries, with flexible volumes and fittings. Its business has a fleet size of 9,000 units and the company claims it stands for tailor-made solutions with a high level of quality assurance and service, which the company has now been providing for more than 30 years.

Safety and quality in all areas are a top priority for TWS. Its focus lies on a clear customer orientation, cost-efficient operations, and protecting human beings and the environment. In addition to central coordination, qualified order management, positioning and insurance, TWS is able to deliver a full service offer meeting consistently high worldwide standards.

As an independent, ownermanaged IT service provider based in Hamburg, evodion IT GmbH operates at the interface between technology and business, guided by business processes. The company's staff act as advisers and partners in developing customised software solutions and company-wide portals. The range of services extends beyond purely IT-related matters. Evodion accompanies and supports its customers in implementing the digital transformation and in introducing, replacing or salvaging IT systems. In addition to offering advice on IT matters, the main focus of evodion IT GmbH lies on



customised software development. It covers the entire application life cycle. Its knowledge of methods, its skills and agile approach put evodion in a position to develop software that is aligned to the business processes of its many customers.

The beginnings

TWS was facing growing numbers in terms of its tank container fleet size, rentals and customers. This reinforced its growing desire to have its own, tailor-made IT system that was capable of modelling all the processes within the company.

The aim of the development process was to achieve future-proof, optimised coordination, and qualified and flawless order management for TWS's full service, while meeting consistently high standards in the light of Industry 4.0 developments.

In order to offer TWS customers an even better service, evodion IT GmbH was tasked with digitalising TWS's entire business model, from quotation, through contract, rental, return and billing, as well as the maintenance of inventory and master data. It also kept a careful eye on the rigorous implementation of TWS's corporate philosophy concerning safety and quality, clear customer orientation and cost-efficient operations. In the course of numerous preliminary discussions, a complex set of requirements was drawn up for evodion IT GmbH.

The two companies have been working together on this special IT project since the end of 2017.

The implementation

Evodion IT GmbH was chosen for its agile implementation and approach. From the start, the collaboration between the two companies was characterised by high speed, direct communications and top quality. The close geographical proximity between TWS's Hamburg branch and evodion IT GmbH, whose





22-24 MAY 2019 | SHANGHAI | CHINA

YOUR PLATFORM IN ASIA TO MEET THE GLOBAL INTERMODAL MARKET











MEET AN INTERNATIONAL MARKET

9,500+ senior buyers



BE AMONGST LEADING INDUSTRY BRANDS

200+ global exhibitors



DISCUSS AND DEBATE

60+ hours of free conference sessions



FINALISE DEALS

95% of visitors have decision-making power

www.intermodal-asia.com















Follow us on







headquarters are also in Hamburg, simplified the collaboration enormously.

The methodology chosen for the project is known as "Scrum". Scrum is a technique used in software development. It is characterised by an agile approach in the way the project is organised, especially in terms of software development.

The main benefit of Scrum is that new requirements can be fed into the system after every iteration, known as a sprint. Each iteration produces a working system, which comes closer and closer to the pure end product as time progresses. In contrast to other iterative software development models, the main focus of Scrum does not only lie on working systems, but ones that can actually be used. This avoids the situation in which customers do not receive a usable product until the very end of the development process, meaning that potential changes can only be requested at the final

The agile methodology has many advantages. The project team can quickly adjust to changes in customer needs. Sprint reviews are held at fixed intervals every few weeks, at which the customer and the developers get together to look at and harmonise the results and the status of the solutions, which allows changes to be implemented and demonstrated more quickly. Extensions to the functionality of the system can also be harmonised better. In addition, the risk of misunderstandings and discrepancies in the expectations concerning the implementation of the system are minimised. The Scrum approach means that the new system with which the developers and customers are working is always at a virtually identical stage of development.

The result

The new IT system for TWS

models all the processes within the company. The joint use of a uniform software package makes the collaboration between the Sales, Customer Service, Technical Services and Accounting departments even more efficient.

Since the customised software is tailored to the requirements of TWS, all the procedures within the system are identical to the procedures that already exist in the company.

When users log on to the system, they are assigned to a user role that corresponds to their actual position within TWS. This differentiation between user roles means that each user automatically finds him or herself in his or her own working environment within the system.

An important new feature of the new IT system is the automation of numerous processes and the generation and dispatch of documents straight from the system. Offers and quotations, contracts, exemptions, repair orders and invoices can now be retrieved at any time and crossreferenced via quotation, contract and equipment numbers. The large number of cross-references between the pieces of information, as well as outside the user's working environment, means that all the relevant information can be viewed at a single click. This makes the collaboration between different departments even simpler and the status of an order clearer.

Tank containers and other equipment which are already in the inflow or still undergoing repairs, can already be included in forward planning. All TWS employees involved in a particular order know the status of the equipment and can act accordingly, without having to resort to long communication paths or complex system maintenance.

The search for suitable equipment in line with customers'

special needs and the alignment with available units has also become even more user-friendly and precise.

From the moment that TWS is contacted, customer care conforms to the highest quality standards. The offer and quotation generated is later automatically converted into a contract with identical contents; the selection of the tank containers always takes into account the technical requirements; and from the first invoice to the return of the equipment, all the steps of the process are handled and can be monitored via the system.

This allows TWS to ensure that customers continue to receive the best service.

Export functions and analysis tools round off the new system.

By analysing all the information and data it maintains, TWS will in future be able to identify market developments more quickly and to analyse the reasons behind them.

The benefit

Developing customised software for TWS has meant, most of all, optimising the processes throughout the entire company. The philosophy at TWS of delivering full service to its customers has been raised to a new level by having its own customised IT system.

However, this special flagship project in the logistics industry has also boosted the image of the IT service provider evodion IT as an agile corporation. By tackling the highly specific demands of this industry, which do not match those of any existing system, evodion IT has gained a huge amount of experience for its entire team.

The collaboration between the two companies has been positive and open from the very start, and this too is one of the secrets behind the success of this remarkable IT project.

Flaxfield tank container solutions

More than 50 years collective experience in the field of sales, production and engineering /product development of tank containers.





Your partner for:

- Stainless steel 20 ft & swap body tank containers
- Carbon steel gas and cryogenic tank containers
- Composite light weight tank containers
- Other related products:
- Spilltainers
- Off shore tanks
- Always in stock: used and new tank containers (in R'dam and Shanghai)
- Service centre capabilities in Rotterdam







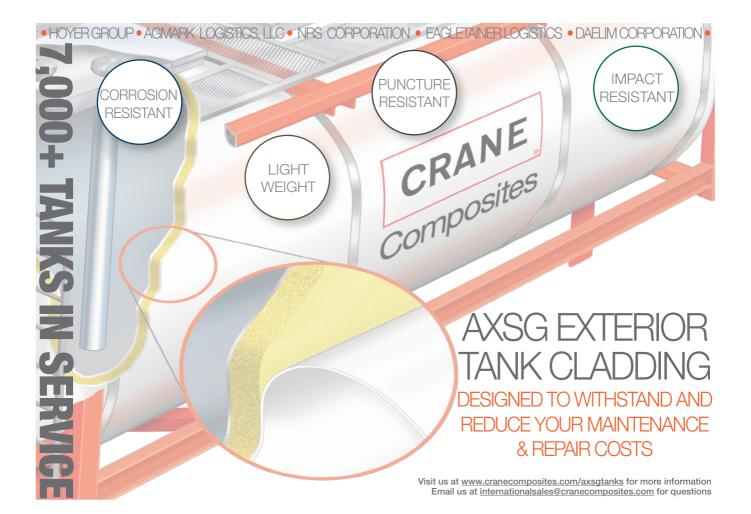




SPILLTAINER.COM,

Moezelweg 173 (Harbour no. 5612) ▶ 3198 LS Europoort - Rotterdam ▶ The Netherlands ▶ T: +31 181 233588 ▶ www.flaxfield.nl ▶ sales@flaxfield.nl

OUR MISSION? OFFERING TAILOR MADE SOLUTIONS FOR TANK CONTAINERS AND RELATED PRODUCTS THROUGH A SERVICE DRIVEN MENTALITY.



Making an impact with new software

Jan van de Nes reports on DEPOT Software's approach to IT implementation

Why do companies buy software? The obvious answer is to create more efficient operations - thereby lowering costs - or to achieve better business performance with fewer staff. Operational faults can also be eliminated, with all the associated benefits.

Individual software users in a company adjust fast, readily adopting new software and its impact on working methods but these working processes inevitably change. This process of workplace evolution may work when smaller software packages are introduced for items like text writers, spreadsheets and powerpoint presentations. However, the introduction of ERP software, which integrates business

processes, depends on more than adaptive individual behaviour and is often a company's ultimate support tool.

Business processes in the tank container industry, and among tank container service providers in particular, show how software can be leveraged to get more control and better performance of a business. Tank container service providers make essential contributions to the tank container sector by offering operators and transporters global depot facilities for inspection, maintenance and repair, cleaning, loading and unloading.

These activities have to be prepared, executed, controlled and managed. A huge variety of administrative tasks need to be coordinated and tracked, from communicating with clients to invoicing.

Software supports these complex business systems but the purchase and implementation of it make not be straightforward. Having a clear starting point is critical.

The key questions include: "Why are we buying this system", "What is our goal?" and "What will we try to achieve with it?".

For many companies, it is a difficult process. Even where there is a solid base case, the business case may be killed due to poor implementation. By working with suppliers, the potential trauma of implemation can be eased.



Michel van Overbeek and Gerjan van der Giessen







CHOOSE YOUR TRANSPORT WAY.

CHEMICAL EXPRESS: A KEY PLAYER IN EUROPE FOR CHEMICALS BULK TRANSPORT

With a new organisation but with consolidated experience, Chemical Express transports your chemicals, both hazardous and non-hazardous all over Europe.

Wherever you have to deliver your products, however you prefer (by rail, road or sea), thanks to our modern and flexible fleet of 1500 tank-containers, 150 road tankers,110 trucks and 400 chassis, our specialist team will find the best way to deliver your chemicals to your customers safely, on-time and in an environmentally friendly way.

Certifed by:









Please send your enquires to: commerciale@chemicalexpress.it info@chemicalexpress.it www.chemicalexpress.it

Via Luigi Volpicella, 194 80147 Napoli - Italia 0039 081 2439711 Via delle Brecce, 127 80147 Napoli - Italia 0039 081 2439730 Strada Regionale, 11 28069 Trecate - Italia 0039 346 3133138 Riu Vinalopo – Zona Industrial 46930 Quart de Poblet Valencia - Spain 0034 627894010 DEPOT Software supplies a fullservice depot management system to control depot yards and for supporting tank container service providers.

Michel van Overbeek and Gerjan van der Giessen from DEPOT Software say: "Our software package has been used for over 20 years and contribute to an organisation's success. We have learned a lot by ourselves in the past years through trial and error about the best way of implementing our software. We increasingly saw how installing software, creating customised software modules and supplying all the accompanying hardware did not deliver the results we had in mind."

Experience has led DEPOT Software to the next level and Van Overbeek is enthusiastic about this new approach. "What we advise is to go back to the original business case and follow this rigorously. It can bring less movement at the start of a project but we see that this will pay off in the implementation phase. It is critical for the success of any software package to get all those working with it onboard. To do so, draft a communication plan and involve employees at an early stage in all actions. If you don't, we guarantee that the success rate will not be half as great as it could be. We are convinced that this is the only way to sustainably implement and achieve the expected performance."

Using the implementation of their own DEPOT Software as an example, the two managers developed a implementation roadmap.

The most important success factor is to involve the whole organisation in the roadmap. This commitment is essential for both the implementation phase but, as importantly, the following phase, which must be arranged before starting.

DEPOT Software has formulated

this in a so-called Governance Model which has the following steps:

1. Alignment with the roadmap

To gain optimal business value within the time and budget constraints, ensure alignment with the roadmap. Increase collaboration between IT and staff and ensure collaboration between strategic, tactic and operational levels.

2. Business Case

The business case is the raison d'être of the project and needs to be designed to ensure success. Besides the usual aspects of a business case, four items require attention: Replacement strategies should be resisted, as they simply duplicate the business processes currently in place without bringing about real improvement; A **DEPOT Software implementation** is never finished; there is always room for further improvement; -Conduct an impact analysis on a detailed level to understand the full impact of implementing DEPOT Software; - List the KPI's required to evaluate the success of the future state.

3. Kernel, Action Plan & Communication

When departments are aligned and a business case is created, it's time to create the IT kernel and the action plan for implementation. A four-step approach is recommended:

- A Evaluate the current situation before designing the IT kernel. This should be based on the results from the detailed impact analysis as performed when designing the business case. This approach enables you to address potential problems with the future model and reduce the risk of business issues.
- B Next, design the future IT kernel with the future process model and exact functionality. Use a process-driven approach: concentrate on the new process in relation to system functionality,

instead of focusing only on the former.

- C Before freezing the DEPOT Software kernel, build the action plan around these changes. Decide about future solutions and formulate a clear program for IT change and investment.
- D Communicate the business case, the IT kernel and the action plans to all levels within your organisation.

4. Commitment

Commitment to the plan and future results applies not just to the initial process but also to the period after the change has been completed. If this is not done before starting, there is a serious risk of a lack of commitment in the future, especially when the future situation is not as described in the business case.

To ensure future commitment, take the following into account when designing and implementing the new governance model:

- Identify the key staff members, or change agents, who should drive the change
- Identify change delta for each process, with a change program for each of them
- Install a deployment organisation
- Outline the predicted impact of implementing the future solution
- Make sure all key players agree on the way forward
- -Identify the scope of the change, required effort and key focal points
- Install a clear governance structure to evaluate the system and reach decisions on issues and changes that may come up.

5. Implementation

At this stage, keeping sight of the end goal is key. Do not fall into the trap of collecting easy gains by implementing the smallest impact/change first. This increases the risk of losing track of the long-term strategy.





GETTING READY FOR THE FUTURE: SC 4.0

11th Edition 15 - 17 April 2019 | InterContinental Festival City Hotel, Dubai, UAE

The rise of new and disruptive technologies is having a major impact on industrial operations, but more importantly it is changing how supply chains work. A new set of technological advancements, collectively referred to as 'Supply Chain 4.0' are influencing how organizations are overseeing various aspects of their operations. Amid these changes, new opportunities are arising for the GCC chemical industry to lead the regional transformation into more automated and integrated supply chains. However, this will involve overcoming many challenges. Those who embrace these changes and take greater risks will extract greater rewards.

The 11th edition of the GPCA Supply Chain Conference will be held under the theme "Getting Ready for the Future: Supply Chain 4.0". The three-day conference will take place from 15-17 April 2019 at InterContinental Festival City Hotel, Dubai, UAE. It will showcase the impact of disruptive technologies on GCC chemical supply chains through a series of expert presentations, case studies from the region and the world, dedicated masterclasses and audience engagement platforms. It will connect leaders from the industry, service providers, consultants, regulators, academia and other key stakeholders to share their knowledge.

Register your interest now by emailing:



Veritas, the goddess of truth

Bureau Veritas offers guidance to companies to help them understand and meet the complexities of the rules and regulations which govern the tank container industry

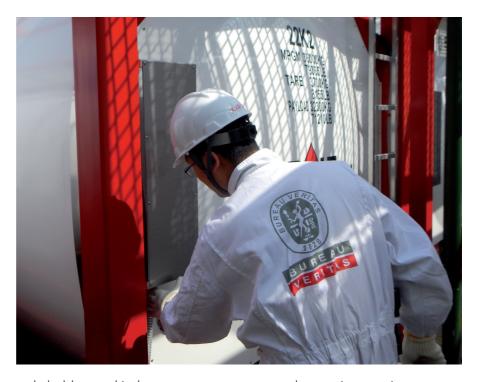
The service is in increasing demand for, while global chemical businesses grow, so too do their needs for the transport of chemicals and other dangerous goods.

The organisation was created in 1828 and has around 76,000 employees in over 1,400 offices and laboratories in more than 140 countries. It has a network of nearly 400 qualified transport inspectors in 46 countries and three strategically-located technical centres around the world.

Bureau Veritas also reviews tank container designs – thereby ensuring type approval – while its initial inspections act as a quality check during the manufacturing phase. Periodic and voluntary inspections ensure the integrity of tank containers during operations.

Sharing safety knowledge
Bureau Veritas also partners with
other organisations to ensure
safety and regulatory compliance
when transporting dangerous
goods.

In 2018 Bureau Veritas organised the first International Technical Tank Container Conference (ITTCC) where they shared their knowledge with other players in the sector. This helped capture and share the opinions of port authorities, competent authorities, operators, lessors and other



stakeholders and industry experts.

With an apparent need for industry specialists to meet regularly, Bureau Veritas has agreed to continue its ITTCC on a bi-yearly basis.

2019 is the start of a two-year strategic plan designed to increase Bureau Veritas' global coverage, deliver certification faster and right-first-time, further develop its inspection tool (Hermes) while increasing the quality of its service by the development of E-learnings.

News: Bureau Veritas Germany

expands container services

Bureau Veritas Germany has expanded its service portfolio to include periodic inspections of rail tank cars and road tankers. Its services now include the certification of new containers (according to CSC, ADR, RID, IMDG and TPED), periodic inspections and special tests for repairs or post-cleaning.

Bureau Veritas specialists will attend Transport Logistic in Munich on June 4-7 (Booth 703/8 and in the ITCO village).



Chemical Management Resources Limited

Short-term, project-specific expertise for ISO tank container projects

- Independent petrochemical and petrochemical supply chain expertise, focused on the rapid growth Middle East
- ISO tank container market research and business planning

Independent advice on:

Competitive intelligence Competitor and market analysis

Business development How and where to position assets ahead of competition

Strategy development How to penetrate the chemical market or grow share

• Business plan review Does it reflect market reality? Will it get Board approval?

Petrochemical training
 Understanding petrochemical dynamics and product flows

Partner selection Identification, screening, market reputation

Project examples:

- Commissioned by the Gulf Petrochemicals and Chemicals Association (GPCA) to produce the seminal study of the Middle East petrochemical supply chain
- Produced the world study of the tank container market and players
- Identified Middle East partners for world leading tank container operators and leasing companies
- Identified tank container acquisition targets
- Produce the quarterly 'Middle East Tank Container Market Review'

Leslie McCune, Chemical Management Resources Limited Im@chemicalmanagement.co.uk +44 7783042664 www.chemicalmanagement.co.uk

Eurotainer opts for IMT telematics

Leading tank container lessor France-based Eurotainer has chosen Intermodal Telematics (IMT) to equip its fleet

Eurotainer will install IMT telematics on all their new-build tank containers and gradually install throughout the fleet.

Telematics enables customers to monitor their tank containers worldwide, keeps them updated on issues when they arise and allows customers to use their tank containers in the most efficient way.

According to Dethmer Drenth, IMT managing director and founder, Eurotainer is now "aligned" with other industry-leading companies that have chosen IMT in making telematics a standard in their "equipment and product offering".

IMT is a leading telematics provider for the tank container market. Based in Breda, in the Netherlands and convenient for the ports of Antwerp and Rotterdam, IMT develops, produces and commercialises generic, as well as tailor-made, monitoring sensors and telematics systems for tank containers. All of its tank container telematics are produced in-house.

The company, which was founded in 2013, moved into new offices a few months ago, "preparing for the growing demand in the sector" notes Drenth.

Of the 63 employees at IMT, 10 are hardware engineers and 30 are software developers. Their common purpose is to guarantee flexibility, reliability and quality.



Eurotainer has a diverse fleet of tank containers for the transport and storage of liquids and gases. Its global tank container fleet includes 150 different types, configurations and capacities. The company is based in Paris, France, with offices around the globe. Its equipment services a wide range of customers from industries as diverse as petroleum, chemical, mining, food and transportation.

According to Marco Beije, Eurotainer purchasing and technical director, the decision came after a selection process that compared a number of telematics suppliers, and he says: "We found that IMT excells on hardware, software and support levels. Important factors that play a role in our choice for IMT are quality, reliability and thinking along with our wishes and needs."

Bernard Heylen, IMT sales director, says: "Getting Eurotainer on board means a lot to us. It clearly shows that the market is ready for the next step towards telematics. With this partnership, Eurotainer is clearly positioning itself as an innovative market leader."

Telematics provides a better view on tank container locations and their status at depots. Internal processes such as storage, tank container maintenance and cleaning can be better managed and optimised. Customer service is also enhanced, with customer's able to receive an automatic email with loading and unloading timestamps, and a cargo temperature chart of the trip, just a few seconds after the tank container is discharged.

Heylen notes that, in the past, only tank container operators and shippers were interested in telematics on their tank containers. Now, he says, they see a clear market shift to leasing companies and tank manufacturers realising the benefits that telematics can deliver for them and their customers.

GPCA's supply chain event addresses 'Supply Chain 4.0'

The GPCA Supply Chain conference discusses how we, as analogue creatures, can leverage digital opportunities

The 11th Gulf Petrochemicals & Chemicals Association (GPCA) Supply Chain Conference takes place in Dubai, UAE from 15-17 April.

Established in 2006 the GPCA represents the common interests of more than 250 member companies from the chemical and associated industries, responsible for over 95% of chemical output in the Arabian Gulf region. Chemical production is the second-largest manufacturing sector in the region, producing over \$108bn worth of products a year.

The theme of the three-day conference, the leading event in the GCC (Gulf Cooperation Council) supply chain calendar, is: "Getting Ready for the Future: Supply Chain 4.0".

'Supply Chain 4.0' which encompasses artificial intelligence, blockchain and the Internet of Things is increasingly influencing how companies undertake aspects of their daily operations, such as supply chain design, logistics and procurement, and making their organisations more agile and resilient.

It is widely accepted that the Fourth Industrial Revolution (4.0) is having a significant impact on the mechanics of the world's economy, not least in the GCC's chemical sector, which is being urged to ramp up its investment in research and development innovation in the sector.

Digitalisation has resulted in changes in all aspects of the industry's operations but there is much more to come, including further scope for the use of digital technologies in manufacturing.

Writing in the GPCA 2018 annual report, Secretary General Dr. Abdulwahab Al-Sadoun says that he is positive that 2019 will be a "pivotal year in the industry's journey towards prominence as a global chemical hub".

"I am confident that 2019 will bring renewed opportunities for success and growth in the global and regional chemical industry. Opportunities will remain high to expand the Arabian Gulf industry's global position through consolidation, overseas inorganic growth, continued product portfolio diversification and developing local technological capabilities," he said.

The conference will focus on the impact of disruptive technologies on GCC supply chains and will feature a series of expert presentations together with both regional and global case studies.

The conference shares knowledge by using its platform to connect leaders from the industry, service providers, consultants, regulators and other key stakeholders.

The GCC region is undergoing a massive transformation which brings with it many challenges for the chemical industry, but also new opportunities driven by a more automated and integrated supply chain.

The conference, held at the InterContinental Festival City Hotel, will open with a presentation from Abhishek Shah, co-Founder and Group CEO of RSA Global, entitled, 'Enhanced ROI from green investments'. He will share his thoughts on shaping entrepreneurial thinking for winwin environmental investments.

Ahmed Al-Shamsi, Borouge's Senior Vice President, Middle East Africa and Europe, and Chairman of the GPCA 's Supply Chain Committee, will make the conference's welcoming remarks. The first session poses the question: 'What does the supply chain look like in the GCC?'. This will be followed a session entitled: 'Strategies for Supply Chain: 4.0 adoption'. A highlight will be a much-anticipated presentation by Richard Morgan, Regional Managing Director, West Central Asia for Maersk, entitled: 'Enhancing customer experience through digitalisation'.

The behemoth Danish transport and logistics group has been at the forefront of pushing the digital envelope and boasts that 90% of its quotations are now made online with half of its cargo bookings on its fleet of over 700 vessels also now made online.

GPCA Supply Chain Excellence Awards will be awarded. This year, there is a new category that recognises distinction in collaboration between service providers and petrochemical producers.

The final day's programme includes a keynote session, 'Powering innovation through digitalisation', and a roundtable discussion entitled: 'Opportunities for regional players to automate and integrate their supply chains'.





ITCO

Promotes and represents tank containers as safe, cost-efficient and flexible means of transport.

In doing so, the organisation has a strong focus on enhancing technological and business developments for the sake of quality, health, safety, environment, and Corporate Responsibility in the tank container industry.

www.itco.org

THE International Trade Association for the Tank Container Industry.

- 150 Member Companies from around 30 Countries
- Representing around 90% of the Global Tank Container Capacity
- Manufacturing, Operating, Leasing, Service Providers, Inspection, Surveyors



EDUCATION
INFORMATION
COMMUNICATION
REPRESENTATION
NETWORKING













