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Tankcontainer MAGAZINE

Volume 6 | Issue 3 | September 2019

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Tankcontainer MAGAZINE

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Tanks, tariffs and tit-for-tat

This issue of *Tankcontainer Magazine* focuses on Asia. China's growth inevitably drives global growth, not least by recycling its excess savings into western capital markets and by pursuing foreign direct investments on a massive scale.

China also relies on 'soft power', primarily trade, to influence its Asian neighbours but at the global level – which means at the US/EU level – its trade leverage is more limited. The respective GDPs of the US ($20.5 trillion), the EU ($18.7 trillion) and China ($13.6 trillion) is of less importance for deep sea tank container operators than the trade between these trading blocs.

The inter-continental trade flows between these blocs obviously include chemicals, which are inescapably caught up in the escalating US/China trade war. China is, after all, the world's largest consumer of specialty chemicals, accounting for nearly a quarter of global demand.

Last September, the US imposed 10% tariffs on a further $200 billion worth of Chinese goods, including 1,364 chemicals. In May of this year, these tariffs were raised to 25% in response to China allegedly retreating from commitments made in previous negotiations.

The US is now planning to impose tariffs of up to 25% on another $300 billion worth of Chinese goods, including a further tranche of 114 chemicals which represent $2.7 billion of imports from China (although these are a reinstatement of the proposed tariffs that were abandoned last year as a sop to US chemical producers).

In retaliation, China will also tax some chemicals by up to 25%, including tank container stalwart cargoes such as methylene diphenyl diisocyanate (MDI). Benzoic acid, titanium dioxide, polybutylene terephthalate, phenol, propylene oxide and silicone will also be subject to tariffs.

The tariffs are limiting the export potential of specialty chemicals from the US but imports from China are being harder hit.

According to the ACC, the US tariffs implemented so far affect $15.4 billion in annual chemical and plastic imports from China, while the Chinese tariffs impact some $10.8 billion in US chemical and plastic exports.

Other regions are seeking to exploit this heavyweight stand-off. By refining Middle East crude oil, rather than simply exporting it, $15-a-barrel is added to its current value of $55-a-barrel. If petrochemicals and specialty chemicals are then produced from the refined crude oil, a further $30-a-barrel is added. These added-value chemicals find ready markets in Asia, and often need to be moved in tank containers.

Anecdotal evidence from the global deep sea tank container players suggests that overall shipments at the global level are nevertheless bearing up well but this masks some significant changes to tank container trade flows as a result of the tit-for-tat tariff war.

Market leader Stolt Tank Containers saw China-to-US shipments fall by 61% in Q2, compared to Q2 2018, with US-to-China shipments falling by only 9%. Revenue fell 5%, compared with Q2 2018, partly due to pricing pressure from competition.

The company increased its fleet to 40,138 units by taking advantage of favourable leasing rates to meet incremental demand.

Despite historically low *per diem* day rates tank container leasing still remains an attractive income-producing asset, with returns being driven principally by low interest rates, economies of scale and the low prices of new build tank containers from China's manufacturers.

At the most fundamental level, the primary function of tank container lessors is, after all, financing with one of the key financial indicators being cash-on-cash (the ratio of annual pre-tax cash flow to the total cash invested).

Economies of scale were one reason behind the recent acquisition by Ermewa of Raffles, with its fleet of over 14,000 tank containers. When added to the fleet of Eurotainer, a Ermewa subsidiary, and combined with the fleet from last year's purchase of Taylor Minster Leasing, a specialised owner-managed tank container leasing company, Ermewa Group's fleet is more than 60,000 tank containers.

Careful readers of *Tankcontainer Magazine* over the past 12 months would have seen the signals of a major acquisition in the leasing sector in the offing – it featured in several issues – proving that what Benjamin Franklin said in the 18th century is as true now as it was then: when it comes to investing, nothing pays off more than being well-read.

Leslie McCune, Editor

Van den Bosch DMCC partners with freight forwarder STACKS Logistics in Cape Town

Logistics service provider Van den Bosch DMCC has concluded a partnership with freight forwarder STACKS Logistics in Cape Town.

STACKS brings over 15 years of experience in African logistics and became the local agent for Van den Bosch in South Africa on 1 September 2019.

"With this partnership we aim to further develop our liquid bulk transport activities from and to South Africa", General Manager Bart van de Vorst of Van den Bosch DMCC explains.

"The focus is specifically on the transport of liquid food products in ISO tank containers. The South African market offers huge opportunities in regards to the transport of liquids in bulk as an alternative to the traditional drums and IBC's.

"With the start of this promising partnership, we want to further strengthen our position as a tank operator on the South African market."

STACKS will be the first point of contact for the South African business relations of Van den Bosch and will also be responsible for the further development of the liquid bulk activities from and to the South African market.

Managing Director Olivier Vanreusel is delighted with the partnership: "We are excited to develop the liquid bulk activities together with Van den Bosch and aim to become a key player within the food & beverage logistics industry in South Africa."

An additional advantage is that STACKS offers in-house customs.

"We operate as a freight forwarder with our own customs department. This will enable Van den Bosch to offer their South African customers a full in-house door to door solution."

Over the past years, Van den Bosch has developed a strong position as tank operator on the African market. Branches were established in Dubai, Ghana, Ivory Coast and South Africa and this year investments were made again in 400 new ISO tank containers.

"The start of this partnership marks a next step on the African market", Van de Vorst continues. "Just like Van den Bosch, STACKS has a strong focus on Africa. The slogan 'connecting Africa' fits in seamlessly with our vision and ambitions."

Vanreusel agrees: "We share similar values, vision and focus. We aim to keep developing partnerships with Van den Bosch in other African countries as well and conquer these markets together."

Van den Bosch DMCC has been represented in South Africa by Aspen International since 2016, with whom a joint venture has been concluded.

This collaboration will become part of the new STACKS-Van den Bosch partnership.

Owner Gary van Niekerk continuous to be a strategic advisor for both Van den Bosch and STACKS. His extensive network and expertise in the field of bulk, reefer and fruit transport are a valuable contribution to the new partnership.

"By means of this strategic collaboration, Van Den Bosch DMCC, STACKS Logistics and Aspen International are joining forces to connect and serve the South African market even better and to further develop our logistics activities", concludes Van de Vorst.

FortisBC secures first export contract for Tilbury LNG facility

FortisBC has entered into its first term supply agreement to produce liquefied natural gas (LNG) for Top Speed Energy Corp. to export to China.

This term supply agreement is an unprecedented development in Canada's LNG export industry and was made possible by the completion of the Tilbury LNG expansion project in Delta, B.C. earlier this year.

The two-year agreement will see 53,000 tonnes of LNG a year or about 60 ISO containers (standard-sized shipping containers) a week shipped from Tilbury to China by the summer of 2021. The volume of LNG to be exported is equivalent to the volume necessary to heat more than 30,000 average B.C. households for a year.

"This is the first agreement of its kind that will see Canadian LNG shipped regularly to China," said FortisBC vice-president of market development and external relations, Douglas Stout.

"There is strong demand for Canadian LNG in China and this is an exciting time to be working in the industry here in B.C."

In 2017, FortisBC became the first company in Canada to supply LNG for export to China. Since then FortisBC has been supplying LNG to customers for export to China on a spot basis.

With the project adding LNG production capacity of 250,000 tonnes per year and additional storage capacity of 46,000 cubic metres, Tilbury is leading Canada's export industry into uncharted territory.

Clean design

Tilbury's new expansion facility is designed to be one of the cleanest LNG facilities in the world. This agreement would reduce between 90,000 and 180,000 tonnes of GHG emissions annually, according to a lifecycle green-house gas (GHG) emissions tool developed specifically for Tilbury. This is the GHG emissions equivalent of removing every passenger-sized diesel truck in B.C.

LNG plays an important role for Canada both as an attainable way to reduce GHG emissions, and as an economic opportunity.

"This is an encouraging step for Canada's LNG export industry," said the Hon Amarjeet Sohi,

Chinese industries and residential buildings are switching from coal to natural gas to significantly improve air quality and address climate change. According to the International Energy Agency, LNG imports will be critical to transition China's energy system to a path that limits global warming. Shipping LNG by ISO container helps meet the energy demands of industrial and public utility customers in China who are not connected to a pipeline network as the containers can be transported virtually anywhere and don't require large regasification terminals to convert the LNG back into natural gas.

"Our company is pleased to work with FortisBC to move their LNG to China's fast-growing market," said Top Speed Energy CEO Chen Jianrong.

Egytrans revenues up 43% in first quarter

Egytrans, a provider of logistics and transportation solutions in Egypt, announced its consolidated revenues increased 42.8% to EGP 89m in first quarter (Q1) of fiscal year (FY) 2019, with its regular core business continuing its upward trend from 2018 showing growth of 48% in a market that grows 4.2% annually.

The company's net profits after taxes for Q1 increased by 26.9%, reaching EGP 17.6m up from EGP 13.8m.

Additionally, separate revenues reached EGP 79.5m, registering a 58.2% year-over-year (y-o-y) increase. In the meantime, costs increased by 52.7% to EGP 58.1m.

On the other hand, selling, general, and administrative expenses and costs increased by a mere 2.1% recording EGP 7.9m. As a result, earnings before interest, tax, depreciation, and amortisation (EBITDA) margin surged by 204.3% to EGP 13.4m in Q1of 2019 compared to EGP 4.4m in Q1 of 2018.

Furthermore, net profits after taxes increased by 25% to EGP 23.7m in Q1of 2019 compared to EGP 19m in Q1of 2018, representing net profit margin of 37.8% and 29.9% for both years respectively.

Egytrans Depot Solutions (EDS), a fully owned subsidiary of Egytrans, specialises in storing, cleaning, and repairing ISO Tanks. EDS' performance has shown a remarkable growth of 12.2% during Q1of 2019 over Q1 of 2018 with the company continuing to hold 70% market share in its segment.

Moreover, EDS recorded 8.8% increase in its Q1 of 2019 net profits after taxes to $0.141m compared to $0.079m in Q1 of 2018, while revenues recorded an increase of 12.2% to $0.257m as opposed to $0.229m in Q1 18.

Abir Leheta, chairperson of Egytrans, (pictured) said, 'we continue to focus on increasing top line and improving profitability and our results are a confirmation of that. The strong performance of Egytrans's core business is especially encouraging,' adding that Egytrans's ongoing strategy is to elevate the core business line 'with our increased focus, operational efficiency, and increased customer engagement continues to drive traction in this segment. Going forward, we see even greater potential for this business.'

This performance was achieved in spite of the World Trade Organization's revising its trade-growth outlook for 2019, down to 3.7% from the original 4.4%. Leheta is optimistic, pointing out that Egytrans's performance in 2018 represented a record year for its core business in spite of growing trade tensions.

Den Hartogh and onepoint conclude cooperation

Den Hartogh Logistics and onepoint recently concluded a cooperation agreement for Managed Services.

Both parties already worked together in 2018 when onepoint supplied infrastructure solutions and technical support to Den Hartogh, now it manages the company's central infrastructure.

The transport sector is constantly evolving, with a continuous focus on fast and efficient services. Logistics IT systems must seamlessly connect to internal and external systems in order to function optimally.

W'ith onepoint we have a full service IT partner with years of experience in logistics. This allows us to focus on our core business activities," Den Hartogh said in a statement.

Den Hartogh Group IT Director Yvonne Kubbinga, commented: "I've experienced onepoint as a no-nonsense party with focus on innovations, just like Den Hartogh. Onepoint is a flexible partner thinking along to optimally structure our infrastructure and to support us in the workplace. I look forward to work together and take our IT environment to a higher level."

Onepoint NL Managing Director, Peter-Paul Feijen, added: "At onepoint, we are proud to work again for Den Hartogh, a beautiful and characteristic family business with almost 100 years of experience. It's our task to support Den Hartogh with its innovative objectives."

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HOYER Group continues to grow its green fleet

With a view to the future, the HOYER Group is working on sustainable solutions in all areas.

To protect the environment and reduce pollutants, alternative drive systems play a central role for the globally active logistics company, which is progressively enlarging its fleet with LNG (Liquefied Natural Gas) trucks and CNG (Compressed Natural Gas) vehicles, thus sending out a strong signal for low-emission, noise-reduced transport.

The most recent additions are two LNG trucks put on the road by the logistics specialist together with its partner Nippon Gases Deutschland.

HOYER uses these two liquefied natural gas fuelled IVECO trucks of the Stralis 440S40 NP type to carry industrial gases such as hydrogen and nitrogen on an everyday basis from the Hürth site throughout the entire federal state of North Rhine-Westphalia on behalf of its partner Nippon Gases Deutschland.

HOYER brought the same truck model into operation last year to transport mineral oil. Its environmental and performance figures – 15 per cent less CO2 and 60 per cent less nitrogen oxides are emitted – prompted the logistics specialist to make the additional investments despite significantly higher procurement costs. Other convincing plus points included 15 per cent less fuel consumption compared to the diesel counterpart, and a low-noise engine for more comfortable driving and considerably reduced noise emission.

Thomas Hüttemann, Managing Director of the Gaslog business unit of the HOYER Group, says "As experts in transporting gases liquefied under pressure and cryogenically, we ensure gases of all kinds are transported safely and smoothly on a daily basis. The growing LNG market has an especially positive effect on the balance sheet of our business." According to Hüttemann: "Not only transporting these alternative energy sources but also driving with them ourselves immediately was therefore a logical consequence for us."

The logistics specialist has seven CNG-fuelled vehicles operating in parallel nationwide . 96 per cent of the trucks used by HOYER in Germany already have Euro 6 Class low-emission engines.

The subject of alternative drive systems will be followed up intensively in the future to achieve the company's target of reducing CO2 emissions by 25 per cent per ton/km by 2020. The purchase of electrically-powered cars is also being considered. Currently, however, the market does not yet offer any adequate solutions for heavy commercial trucks of the kind used by HOYER. The fact that a service station network for alternative energies is not yet available in many countries represents an additional obstacle.

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Stolt expands capacity at Houston by 40%

Stolt Tank Containers (STC) has recently completed its US$11 million investment at its Houston, Texas depot, increasing storage capacity by 40% to 80,000 square metres.

This significant upgrade means the depot now has the capacity to store 3,000 empty and 400 loaded tanks, offering customers a one-stop-shop for loading, storage, heating, cleaning and repairs.

The Houston metropolitan area comprises the largest concentration of petrochemical manufacturing in the world as well as the busiest US port for foreign tonnage. STC's strategic advantage of an inhouse depot in Houston provides a level of response and support for customers that is unparalleled in the industry.

Dan Shelton, Depot Manager, Houston, said: "We have increased our storage capacity by 40% - laying 12 acres of concrete in order to maximise the use of our property. Unlike other depots with more basic conditions, concrete offers a smoother surface for the movement and storage of tank containers. A new workshop has also been added which is dedicated to the repair and servicing of high-pressure gas tank containers.

"We understand that safety is the number-one priority for our customers, and we make it ours too. We've installed new fall protection and a facility-wide emergency siren. Our new automated heating system has raised safety levels at the depot even further, as our technicians can focus on the safe management of the overall heating process. The system has also improved turnaround times for heating services. STC Houston offers customers the convenience of one location where our team of dedicated, highly trained staff can heat products, clean and repair tanks. Having these services available in one, accessible central point can help customers reduce costs related to additional movement by road and chassis rental." added Dan.

"All our recent investments are focused on putting customers' needs first," said Mike Kramer, President Stolt Tank Containers. "2019 will be an exciting year for STC as we continue to expand our depot network. We recently opened two new depots in Saudi Arabia and our modernised depot at Houston is setting the standard for depots around the world. This month we also launched our new online service: Track and Trace which enables customers to check and follow the status of their cargo in real time. We're proud of our ability to offer our customers a wide range of reliable services, using some of the most modern equipment and technology in the industry."

Van den Bosch introduces FreightInsight

Van den Bosch Transporten has taken a new step in supply chain connectivity. By introducing FreightInsight, Van den Bosch provides customers with real time information on the actual status of loads. The online portal also gives access to additional information, such as the expected time of arrival, previous loads and loading reports.

"With FreightInsight we meet the growing need for traceability, transparency and connectivity in the supply chain", Pirke van den Elsen explains. As the Manager Business Development at Van den Bosch Transporten, he was actively involved in developing and introducing the online customer portal

Real time information on orders

FreightInsight is inspired by the track and trace information you receive after ordering a package online. Van den Elsen explained: "Everyone wants to know what is happening to his or her order. That is the same in bulk transport. Thanks to FreightInsight, our customers have real time insight into their logistic flows. They can simply follow the actual status of their orders via a personal dashboard, as well as the expected and actual time of arrival. Moreover, they have access to additional information, such as previous loads, payload, loading and unloading weight, temperature and nonconformities."


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Suttons teams up with Border Force

North-west UK-based logistics specialist Suttons International is working with the Border Force agency, assisting its officers in the fight against smuggling.

Suttons provided Border Force, a law enforcement agency within the Home Office, with a tank container designed specifically to help train officers in the detection and prevention of illicit goods entering the UK.

Barry McNally, Managing Director, Suttons International, said: "Suttons is proud to assist the Home Office in keeping the UK's borders safe and secure and has supplied Border Force with a training tank that can be used to demonstrate where contraband items might be hidden to aid detection when freight enters the UK from overseas.

"As experts in isotank training, we were quickly able to fit out a suitable tank to show how the tank could be modified to hide contraband."

Border Force will also use the tank container for demonstration purposes at courses and conferences globally, with the potential to train other border agencies around the world.

Suttons International operates a growing fleet, transporting more than 8,000 tank containers around the globe with key business centres in New Jersey, Houston, Widnes, Antwerp, Ludwigshafen, Kuantan, Singapore, Shanghai, Tokyo and Khobar.

Stolt Tank Containers launches Track and Trace

Stolt Tank Containers (STC) has launched a new online Track and Trace solution which enables customers of STC to check and follow the status of their cargo in real time online. The service can be accessed via www.stolttankcontainers.com via mobile or desktop and without registration.

A direct link to Track and Trace information will be included with every booking placed with STC, to provide direct access for the customer.

With Track and Trace, STC customers can now easily control their shipments online. The Track and Trace page shows details for each individual tank and clearly highlights if there is a change in ETA, if any tanks are short-shipped or a change to the schedule.

Stolt Tank Containers' mission has always been to make shipping bulk liquids as easy and convenient as possible.

The outstanding level of service and expertise provided by STC means its customers can trust that their products are always handled with care.

STC is committed to finding new and innovative ways to help customers manage their shipments successfully and efficiently. Track and Trace is a key part of this, giving customers the opportunity to access up-to-date information on their shipments and the status of their tank containers 24/7/365.

ICTSI Argentina gets new petrochem clients

More companies are choosing TecPlata, a subsidiary of International Container Terminal Services, Inc. (ICTSI) in Buenos Aires as Argentina's preferred international trading gateway, with two big companies added to its growing number of clients.

State-owned energy firm Yacimientos Petroliferos Fiscales (YPF), and the Argentine subsidiary of Dow Chemicals recently signed agreements with TecPlata to handle their cargo and service their import-export needs. Both companies operate several facilities in greater Buenos Aires, which hosts a bustling petrochemical industry.

Initially, YPF has started to export lubricant products to the city of Santos in Brazil and import raw materials from Pecem, one of the most important ports in the Brazilian state of Ceará. YPF's chemical division has already started to ship ISO tanks to Brazil from TecPlata.

Dow meanwhile will export polyethylene (PE) from TecPlata to the Port of Itajaí, in Santa Catarina in southern Brazil.

Log-In, among the shipping clients calling at TecPlata, will facilitate the transport of these materials through its regular calls to Brazil.

Bruno Porchietto, TecPlata chief executive officer, said: "These agreements are very important for us, and fill us with optimism towards our goal of bringing the terminal to the highest level of capacity. The fact that these two companies, YPF and Dow Chemical, transport part of their cargo through our terminal is an encouraging sign that we are on the right track."

TecPlata is the country's first port of call due to its easy access to sea lanes. With state-of-the-art infrastructure, equipment and computer systems, the terminal is free of congestion, giving it a strategic advantage to become the preferred gateway for the country's various agro-industrial products.

Suttons' in-house refurbishment move proves a success

A global logistics specialist based in North West England has refurbished more than 120 tank containers since moving the service in house just under a year ago.

Suttons International made the move in response to demand for its services around the world and to revamp its existing international tank container fleet.

The service, which sees anything from minor repairs to full tank refurbishments has been such a success that the company is now offering the facility to its customers.

John Sutton, CEO, Suttons Group, said:

"The new custom-built workshop helps us to keep the fleet up to the high standards our customers expect and is a continuation of our long-term investment plan.

"Before any refurbishments take place a thorough inspection of the tank is carried out to establish current condition. If a repair is needed an estimate is raised of the likely time and cost to bring it up to standard.

"The specialist team is able to complete around 12 tanks a month and it's paying dividends in terms of smartening up the fleet at a competitive price.

"We have always offered a cleaning service to customers but offering full tank refurbishment further increases the condition of the fleet and shows our commitment to the global market."

Suttons International operates a growing fleet, transporting more than 9,000 tank containers around the globe, focused on the bulk chemical and gas sectors with key business centres in New Jersey, Houston, Widnes, Antwerp, Ludwigshafen, Kuantan, Singapore, Shanghai, Tokyo and Khobar.

Stolt Tank Containers integrates with FourKites

Stolt Tank Containers (STC) is pleased to announce the succcessful implementation of its new integration project with FourKites, an end-to-end supply chain visibility platform.

The new platform combines information from multiple suppliers so that customers can access a single view of their entire supply chain."

"FourKites provides information for all of the key stages during the transport of a tank container: depot departure; loading; gate in; loaded on board; vessel departure, etc., as well as providing information about any planned changes to the schedule."

"“Implementation of the platform is part of STC’s ongoing digital transformation programme, which is focused on using the power of technology to deliver a seamless, tailor-made experience for our customers”, explains Shane Robertson, Principal Business Analyst at STC Business Applications.

“By harnessing our own extensive digital supplier network, updates are made automatically, in real time, to customers via FourKites whenever our logistics partners notify us of key status update.

"By connecting with FourKites STC customers can simplify their own processes by negating the need to check multiple separate platforms. It’s a great way for customers to streamline and automate their interactions with STC.

"STC is leading the industry in its use of technology – it was the first tank container operator to join the INTTRA and Infor Nexus platforms and recently launched its Track and Trace online shipment tracking platform.

“This development enhances STC’s logistics’ technology portfolio, and has the potential to deliver significant benefits to STC’s customers."

VTG expands in Brazil with JV

VTG Tanktainer is expanding its interests on the South American continent through a joint venture with its long-standing agent MissionLine Logistics.

The aim of this collaboration is to drive business in the local focus markets Argentina, Brazil, Chile, Mexico and Colombia.

Combining Argentina-based MissionLine Logistics’ comprehensive logistics network with VTG Tanktainer’s expertise, particularly in hazardous goods and chemical transports and flexitank shipments, the new venture is ideally set up to serve these markets.

“We have shared a close and successful relationship with MissionLine for many years and are delighted to be extending this proven partnership now.

“We are confident that by combining our strengths we can create significant added value for our current and future customers,” says Jan Roebken, Managing Director VTG Tanktainer.

VTG-MissionLine Tanktainer do Brasil Ltda.’s Executive Director, Alessandra Torazan, and her staff operate out of the São Paulo office.

This location was a strategic choice: Brazil plays a key role in South America’s chemicals market, and demand for tank container transports is high as a result.

In addition, Brazil today already does 20 percent of its foreign trade with China, and VTG Tanktainer is excellently equipped to serve this transport route, thanks to its joint venture COSCO-VTG, formed in China in 2007.

Constantin Conrad joins Leschaco board

At the logistics service provider Leschaco, Constantin Conrad, son of Jörg Conrad, the owner and CEO of the group of companies, has joined the Managing Board as Chief Digital Officer (CDO).

He will continue to drive the digitisation process within the Leschaco Group.

In addition to his existing responsibilities for Corporate Communications, Global Business Transformation and Corporate Ventures, he is now also responsible for Corporate Information Technology.

"We are both very fortunate to be able to create a smooth generational handover and I am very happy that my son is now taking on more responsibility in our family business," said Jörg Conrad.

Constantin Conrad first completed a dual course of study in a shipping company, where he then worked for three years. He subsequently completed a two-year MBA programme at the IESE Business School in Barcelona.

He was already involved in the Leschaco Group during his MBA programme and, among other things, was in charge of the founding of Leschaco Iberia S.L., where he assumed responsibility as Branch Manager for the Barcelona Office in June 2018, as well as the founding of the company's own corporate venture Logward GmbH und Co. KG. in May 2018.

APC promotes Sokol to Industrial Sales Manager

Advanced Polymer Coatings (APC) has promoted Matthew Sokol to the position of Industrial Sales Manager, responsible for sales of the company's ChemLINE® brand of high performance coatings worldwide.

He previously worked for APC in another industrial sales role, as a Strategic Account Manager handling a number of large oil and chemical accounts.

Prior to APC he was the Founder and CEO of Hammerhead Marine, a company that he sold.

Sokol is involved in a number of outside activities including: a Member of the John Carroll Entrepreneurial Hatchery Committee; a Board Member for the Entrepreneurship Educational Consortium; and as a Team Leader for "The Relay For Life" movement, that raises funds for the American Cancer Society to help communities attack cancer.

He is a graduate of John Carroll University in Cleveland, Ohio, with a degree in Communications & Marketing, and a minor in Entrepreneurship.

Michael Lange is new VP sales at Hoover Ferguson

Hoover Ferguson, a global leader in tank & container solutions with more than 40 locations in 25 countries, announced today that it has appointed chemical industry veteran, Michael Lange, as Vice President, Sales – North America.

Lange joins Hoover Ferguson in this newly developed position with a wealth of experience in the chemicals industry, including more than 20 years with Univar USA.

In his new role, Lange will be responsible for leading the company's North American sales team which focuses on chemical container solutions across the chemical, petrochemical, onshore oil & gas, food and beverage industries. Lange will report to Arash Hassanian, Senior Vice President, Global Chemical and Catalyst Containers.

"The knowledge and experience that Michael brings to the role will breathe new life into our strategies and approaches," said Hassanian. "This is an exciting time for Hoover Ferguson, and we're pleased to welcome Michael to the team."

Saleh Bahamdan joins the GPCA board

Saleh Bahamdan, CEO of Sahara International Petrochemical Company (SIPCHEM), has joined the board of directors of the Gulf Petrochemical Association (GPCA).

Bahamdan replaces Ahmed Al Ohali, who was appointed head of the general organisation for military industries in March.

Following an illustrious career in roles such as president at Al Waha Petrochemicals Company, SABIC's director of engineering and project management and manager of operations control at Jubail Petrochemical Company (Kemya), Bahamdan was appointed CEO of the newly formed SIPCHEM in May this year.

THIELMANN expands into Asia Pacific

Tankcontainer Magazine hears from Alejandro Galvez, Chief Commercial Officer of THIELMANN, how its WEW acquisition fits in and how Asia Pacific activity will grow

TCM: What does THIELMANN specialise in?
AG: THIELMANN is a leading manufacturer of stainless steel containers, including tank container solutions serving customers operating in a range of industries including chemical, oil and gas, nuclear, emergency services, defence and government. Our tank container systems are fully certified for the storage and transport of some of the most hazardous substances on earth in some of the most demanding climatic conditions.

Our wider product portfolio also includes storage tanks, powder handling systems, small industrial containers, intermediate bulk containers and stainless steel kegs.

TCM: What are the company's roots?
AG: Founded in 1740, THIELMANN has gathered over 275 years of knowledge and experience in container production and usage around the globe.

TCM: How has it grown to today's company?
AG: THIELMANN has developed into a global manufacturer of standard and customised stainless steel containers to meet the needs of its global customers.

In 2016, THIELMANN acquired WEW Westerwälder Eisenwerk GmbH, in Weitefeld, Germany. With this acquisition, THIELMANN was able to integrate a combined engineering expertise of over 100 years, WEW patents, WEW design rights and unique production and service capabilities, strengthening its offering in the tank container market and adding integrated capabilities including combining liquid/ gas storage with ancillary services, such as pumps, specialist linings, filtration, telemetry and heating and cooling systems.

In order to meet the requirements of its global customer base, THIELMANN has eight locations in Europe and America and has recently expanded into the Asia Pacific region with personnel based in Singapore, Thailand and the Greater China region.

TCM: Who owns the company now?
AG: THIELMANN is a member of HERITAGEB Group, a German company founded at the turn of the 20th century. The entrepreneurial family behind the company is now in its third and fourth generation.

TCM: What range of industries are served by THIELMANN?
AG: Within our tank container business, industries served include

chemical, oil and gas, nuclear, emergency services, beverage, defence and government.

TCM: Why did THIELMANN buy WEW Container Systems GmbH?
AG: THIELMANN saw a natural fit with WEW, with its specialist capabilities in the 3,000-50,000 litre range offering a perfect complement to THIELMANN's existing 5-5,000 litre product range.

Bringing WEW into the THIELMANN group meant synergy between the two companies, with the ability to offer standard products and tailor-made solutions for customers in the food, beverage, pharmaceutical, chemical, and oil and gas industries in the 5-50,000 litres range.

With the acquisition also widened its range of industrial customers and gained new access to further industries, such as defence and government, emergency services and nuclear, while strengthening its activities in the chemical, oil and gas industries.

TCM: Which steels and special materials are used in tank container construction?
AG: Our tank containers are most frequently constructed from carbon and stainless steel (V2A/V4A) in all grades. Special materials such as Hastelloy, nickel and titanium can also be used.

TCM: What range of linings are used?
AG: For some acids or alkalis, an inner lining for the tank containers is necessary, and we offer Chemline, Proco-EMAIL and Säkaphen among others. Further inner linings variants can include plastic coating (PFA/FEP/Teflon), special interior lacquers, lead linings and glass-enamel coatings.

TCM: How are THIELMANN frames different to conventional designs?

AG: THIELMANN tank container frames may have ISO or non-ISO conformity. Our most common design is the 20' ISO tank container but we can build units from 5' up to 40' ISO as well as specialist designs built to spec.

A key differentiator with THIELMANN frames is that the tank is separated from the platform it is being transported on rather than being a single entity. This removes the pressure on the tank and lets the frame take the burden, preventing warping or breaking.

This is particularly important when dangerous materials are being transported, as the tank is protected from the bumps in the road.

TCM: Which recent tank container projects have been good examples of THIELMANN's specialist expertise?
AG: In 2018 we delivered tanks to the Norwegian Polar Institute (NPI) for deployment to Antarctica. These tanks each hold 24,000 litres of diesel as part of a fuel tank farm near NPI's Troll Station, the Norwegian research station in Antarctica.

Each tank container is built within a 20'x8'x8'6" welded headbeam frame. Made of stainless steel with 3mm double shell, the tanks have top discharge and are certified to store and transport jet ATF fuel, diesel fuel and petroleum.

As THIELMANN tank containers are built out of steel capable of withstanding the specified minimum operating temperature of more than -40°C, we did not need to bring in any special equipment or tooling to complete the build, despite the harsh operating conditions. The tank containers were completed with hard-wearing paint and will require no maintenance throughout their service life – we are confident they will be providing fuel to the NPI for the next 30 years or more.

TCM: What are today's most important trends in the tank container industry?
AG: We are seeing demand for tank containers on short lead times. To meet this demand we have developed a number of specialist units for the storage and transport of alkalis in any supply chain. Sensitive cargoes can be protected by heating/cooling systems as required, together with other safety equipment. We have maximised these designs for a range of applications, meaning we can deliver them in very short timeframes.

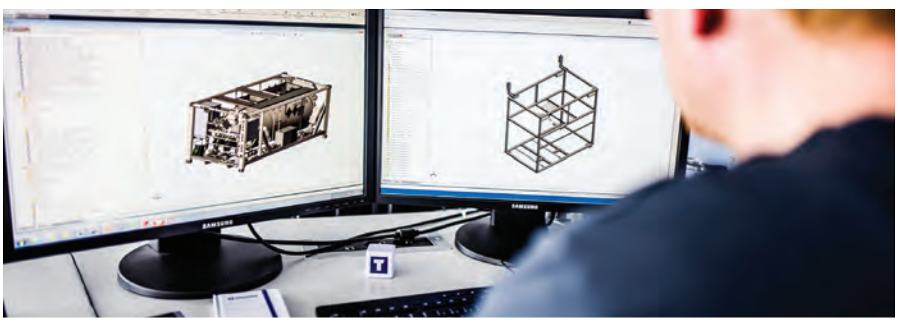
We are also seeing demand for smaller, portable tank containers capable of safely transporting hazardous liquids under medium to high pressure by road, rail and sea.

We have developed two new products in this area: the THIELMANN T14 (medium pressure), which can carry dangerous goods Class 3, 4.3, 6.1 and 8 and is compliant to most international compliance codes, including IMDG, RID/ADR, T CFR49, Customs Convention – TIR, US DOT CFR49, IDO standards; and the T22 (high pressure), which is suitable for the transportation of dangerous goods in classes 4.2, 5.1, 6.1 and 8 by road, rail and sea, while meeting international requirements for transportation including IMDG/ADR, US DOT CFR49, Customs Convention – TIR, ISO standards.

TCM: How are customer preferences changing for tank containers?
AG: Our customers operating in crowded markets must maximise value for money across their asset base, and THIELMANN tank containers made from high grade stainless steel offer a life cycle of up to 30 years with low maintenance requirements. Our tank containers are reliable, safe and can withstand operations in tough conditions and extreme climates.

TCM: How does a European tank container manufacturer successfully compete against all the established players in China?
AG: By maintaining our specialist capabilities alongside a from-stock product portfolio designed for operators seeking the very highest standards in engineering excellence, safety and reliability. Not only does our product portfolio cater to standard requirements, we can offer specially engineered tank container solutions. For special applications we have the flexibility to consider orders starting from three to five units.

TCM: Why is a permanent presence in Asia Pacific now an important part of the global expansion strategy?
AG: We see strong growth opportunities in the APAC region and believe our offerings to be unique in this market space.



Alejandro Galvez

Alejandro Galvez is the Chief Commercial Officer (CCO) of Thielmann in Zug, Switzerland, and has worked in the mechanical or industrial engineering industries.
He has a Bachelor's degree in Industrial Engineering, focusing on a Master of Energy Engineering from Universidad Politécnica de Valencia.
He has been CCO, Co-CEO and CCO and Deputy CEO of THIELMANN since 2013, having moved from Bosch in 2005.

TCM: Will THIELMANN set up tank container manufacturing in China?
AG: All THIELMANN tank container systems will continue to be produced in Germany in order to ensure the quality of our products. Our presence in China will continue to consist of a sales office in order to be closer to our clients in the Asia Pacific region.

TCM: What are the unique challenges of the Asia Pacific market?
AG: Price is always going to be a big factor when operating in Asia Pacific, but we see evidence that there is demand for highly engineered products that are designed to last and remain safe and fit for use throughout their service lives. That is our unique value proposition in this market.

IMT and NTtank become 'Smart'

Partnership signing at NT Tank in Nantong

Dutch telematics company IMT is supplying one of the leading Chinese tank container manufacturers

It's stating the obvious that telematics are increasingly required in the tank container industry.

One of the leading manufacturers of telematics for the tank container sector is Intermodal Telematics BV (IMT), based in Breda, The Netherlands. IMT specialises in telematics for the tank container industry and has installed more than 40,000 sensors on tank containers worldwide.

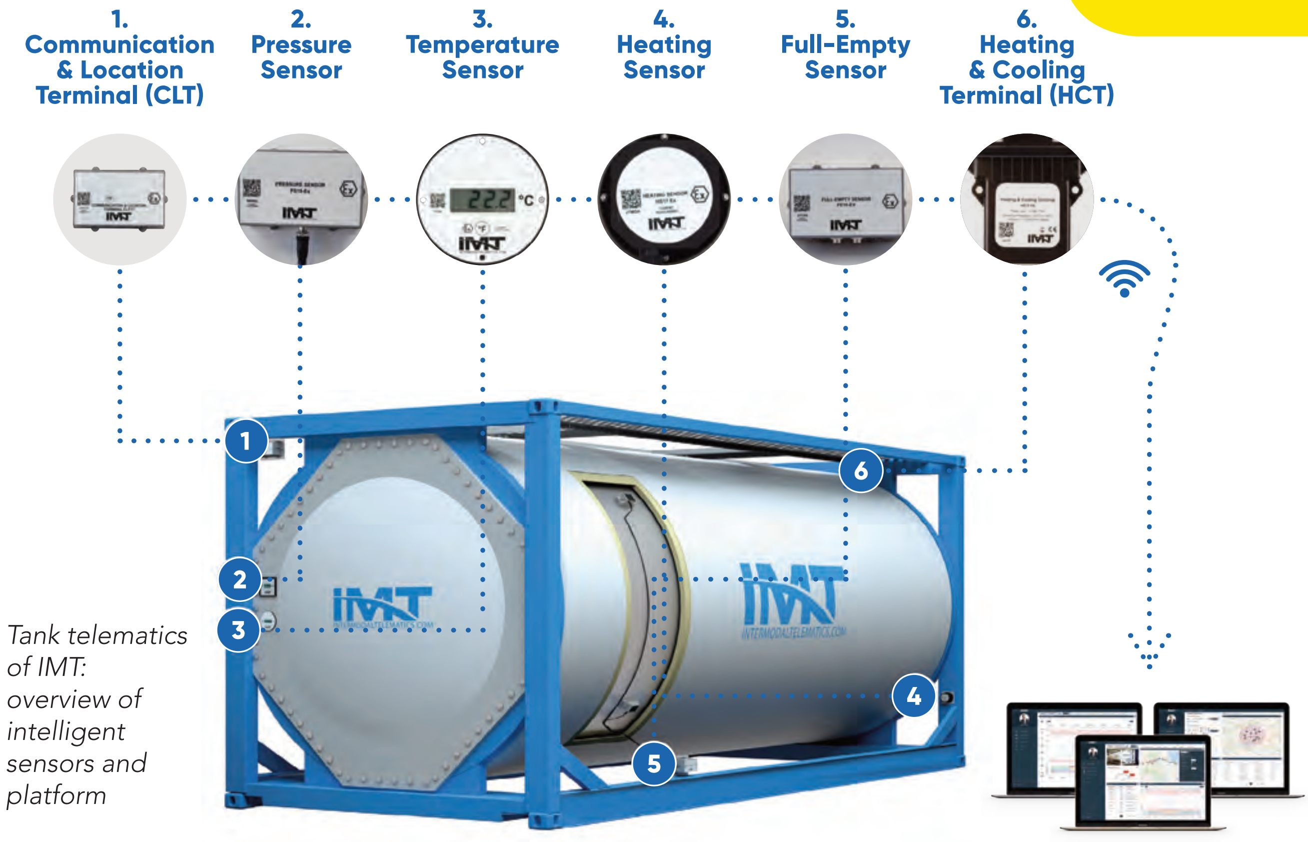
In recognition of IMT's strong position in the industry, the Chinese company Nantong Tank Container Co., Ltd. (NTtank) has chosen IMT's so-called 'Pre-Kit' to install on all their tank containers, and at no extra cost for new-builds. In addition, NTtank will become the exclusive sales agent in China (excluding tank container manufacturers) of the complete telematics solution of IMT.

Minutes to get 'Smart'

The Pre-Kit includes a digital thermometer (Type WT17-Ex) and a bracket for the easy installation the Communication and Location Terminal (CLT).

IMT calls the Pre-Kit 'the preparation to change tank containers into smart tanks within 5 minutes'. With the installed Pre-Kit, the temperature can be checked in °C and °F on the tank container with an accuracy of 0.3°C and no calibration is ever needed. IMT holds a patent on this non-calibration technology.

At the same time, a customer can upgrade its tank container at any time into a 'Smart' tank container in less than 5 minutes by installing the Communication and



Tank telematics of IMT: overview of intelligent sensors and platform

Location Terminal (CLT17-Ex) on the CLT-bracket and paying an activation fee for the WT17-Ex digital thermometer.

Dethmer Drenth, Managing Director and founder of IMT, says that installation of the CLT is very straightforward to do, by screwing it with two bolts onto the CLT bracket which will be pre-installed by NTtank on every new tank container.

Jie Huang, General Manager of NTtank, based in Jiangsu Province, explained more about the reasons why his company choose IMT as a partner to make their tank containers smart: "To make a tank container become a 'smart' tank container is a trend for the future tank container industry. We are devoting ourselves to develop more advanced, safer and smarter tank containers. IMT is a world leading smart equipment supplier.

We choose IMT to be our partner to cooperate with each other to help our customers and friends to upgrade their tank containers into smarter tanks based on both companies' excellent products and worldwide service".

NTtank is the world's second biggest tank container manufacturer. Its annual capacity is 10,000 tank containers (including 8,000 standard units and 2,000 specials). According to the latest ITCO tank container fleet survey, NTtank manufactured 8,500 units in 2018, an 85% utilisation rate.

Its main customers include lessors such as Eurotainer, Exsif Worldwide, Seaco, Trifleet, Raffles, CS Leasing, GEM, TWS etc. and operators such as Stolt, Hoyer, ITT, Suttons, Newport, Den Hartogh, Bertschi, Sinochem etc.

Since starting up in 2007, NTtank's development has been 'healthy and stable'. The company says is always insists on quality products and best service, 'which wins most of our customers' and friends' trust and support.

IMT

Intermodal Telematics BV (IMT) was founded in 2013 and claims to be the world's leading independent telematics solution partner for the tank container industry, offering smart sensor technology and a software platform with which operators, container manufacturers, lessors and shippers obtain the insights to improve their product quality, efficiency and safety.

The company offers generic as well as tailor-made telematics hardware and software.

The company says it is by far the biggest supplier of telematics technology for the tank container sector. So far more than 40,000 sensors are installed on tank containers worldwide. The sensors operate in explosive atmospheres and are are all ATEX certified.

"With our 11 hardware engineers, 35 software engineers and our own in-house assembly line, IMT assures every customer the best top edge product with the highest quality. We set the standard in smart sensor technology", Bernard Heylen states.

The company's sensors and platform improve operating efficiencies, secure quality of cargo and provide track history of all relevant data of each container; location, temperature, pressure, full-empty, heating and load-unload data.

These data monitoring and retrieval leads to transparency of transport, safety, quality and integrity control, flexibility and efficiency as well as management by exception.

The next chapter

James Graham previews the 53rd annual meeting of the European Petrochemical Association on 6-9 October

The theme this year in Berlin will be how the industry is writing together the next chapter of the European petrochemical Industry.

The annual meeting provides an efficient platform for the global petrochemical business community to meet captains of industry and selected stakeholders, to exchange ideas and best practices and stay abreast of international market developments as well as technological, geopolitical and societal trends, says the EPCA.

The last time the event was held in Berlin, delegates discussed the challenge for the industry to adapt to the changes the 'Fourth Industrial Revolution' – digitalisation – is bringing about. Not only is it impacting industry's structures and systems, but it is changing the way people work and the skills that are needed in the petrochemical industry.

S&P global outlook

Global petrochemical markets are bound to face numerous challenges in the second half of 2019 with the dispute between superpowers and the emergence of China's new mega-refineries impacting trade flows, demand-supply dynamics and currency fluctuations. With more new capacities coming on stream soon, turmoil may be the new norm in global markets.

According to business intelligence analyst S&P Global, the EPCA meeting is being staged as "the global petrochemical industry is heading into the second half of 2019 caught in a whirlwind of volatile crude oil prices, ongoing trade disputes and geopolitical tensions."

International upheaval has shaped trade flows and price movements say the analysts in the first half of the year alongside another major trend – the rise of new petrochemical plants as additions to upstream refineries in China. Its new mega-refineries, as well as new capacity in Southeast Asia, seek to bridge gaps in key upstream and downstream supply chains and have upended established trade flows into China, while also affecting prices and product margins associated with upstream petrochemicals such as isomer-MX and paraxylene.

The trend is expected to continue for the rest of 2019, with further capacity due online in the coming months, says S&P Global.

US trade disputes with China and Mexico have upset global supply, with tariffs and counter-tariffs forcing producers of various petrochemicals to look for new markets and possibly disrupt long-established supply chains if traditional routes are closed or too costly.

Refinery outages in various regions have further redirected export flows between Asia, the US and Europe. With some markets facing oversupply or lack of demand, due to both the trade disputes and additional Asian capacity, there was a general bearish trend in the first half of 2019, and this is expected to continue this year.

Geopolitics in the Middle East, notably US sanctions on Iran, have also interrupted some global oil flows, while continued shale-led surplus olefins production further cements the position of the US as the global price floor for many petrochemicals.

China-US trade wars

The Gulf Petrochemicals and Chemicals Association (GPCA), representing the downstream hydrocarbon industry in the Arabian Gulf, considers the series of economic tit-for-tat actions between the US and China largely originated with US measures, to which China has responded in kind. The US has imposed three rounds of tariffs on Chinese products in 2018, totalling $250bn worth of goods.

Increased tariffs imposed on US imports into China will not only affect the Chinese market but will raise prices of goods in the global market. Increased Chinese propane tariffs will make imported US feedstock propane uncompetitive and could create a shortage of propylene for the production of polypropylene, acrylics and other derivatives.

In the US, industry organisations like the American Chemistry Council have voiced concerns that US manufacturers of finished goods would struggle to be competitive, if the cost of chemical raw materials and intermediates goes up as a result of higher duties on Chinese imports into the US.

River highs and lows

The River Rhine is Europe's most important waterway, but its seasonal high and low water levels cause problems for transport operators, reports Jan Van de Nes

In recent years the water levels of the River Rhine and its subsidiary rivers like the Waal, Lek and Neder-Rijn in The Netherlands are subject of extreme differences. In periods of extreme high temperatures and little rain, the rivers contain not enough water to allow ships with stacked containers up to four levels, to pass. But in springtime, when snow and ice is melting in the mountains of Switzerland and southern Germany, the water levels are so high that ships can't pass the bridges if the containers on deck are stacked up to higher than 2 layers.

The River Rhine is Europe's most important waterway to bring cargo in a few days from Rotterdam Harbour to all major cities in Germany and Switzerland but also in cities in other European countries. Thus because the river is connected to other rivers by canals.

But the river has its own problems. For example Rhine Barges with three layers of containers on deck only can pass non-moveable bridges when the water level gives space for 7 or 9 metres from the bridge to the water surface. When the opening is 9.10 metres or more, even 4 layers of containers are allowed.

However this water surface level can be reached because of lack of water in the rivers beds. Because ships need enough water under the vessel to allow the propellers to run. Most Rhine barges sit 150 cms deep but in low water times, they should sit only 130 cms.

And this is not something shipowners can change in a minute...

There are more problems. Extreme high water levels occur also. Leading to not enough space under the bridges....

Mostly in springtime this mean less load capacity for the barges. Which lead to higher cargo prices for the logistic companies. Only in case of moveable bridges – which disturbs the road traffic in the cities and therefor are not common in countries like Germany, Austria, Hungary – these ships and barges can pass. But as said, especially in Germany and the countries that can be reached from the River Rhine by connecting canals like the Rhine-Donau Canal, many bridges are not moveable...

Low water on the Rhine at Arnhem

Blocking the river by barges

The extreme low water levels are also worse in another way. The river bottom will hit barges with heavy and voluminous loads and in case there bottoms sit deeper than 130 cms. This causes blockages by these barges on the river.

In 2018 many barges blocked the river in Germany. This possibility seemed to occur also this year. June 2019 was the hottest June on record since the collection of weather statistics first began in 1881.

Some saw this as a sign that – as in 2018 – they might be in for another long, hot summer, with weeks of drought and low water on the Rhine. Lucky for many logistic business, it wasn't the case...

The Rhine and its subsidiaries are not only for cargo transport. The water is used by large industries at the river banks for their operational processes. For instance for cooling purposes but also for production. And the water is tapped by drink water companies to produce consumable drinking water.

So when the levels are extremely low, many users find themselves in trouble.

Authorities try to avoid the biggest troubles. In times of extreme low levels, water using companies like BASF and other large industries are shut down. Of course these periods should be as short as possible and therefor logistic activities on the rivers are either replaced to special equipped barges or to rail transport. Not to road!

For this reason, since autumn 2018, Waterway Logistics from Zwijndrecht, Holland (part of the Contargo Trimodal hinterland logistics network) has taken the precautionary measure of having four barges in its fleet modified so that they have 10-15 cm more water beneath the keel in very low water conditions.

"We use barges for about 75 percent of our container transports", says Cok Vinke, Managing Director Contargo Waterway Logistics. "Periods of very low water like those we experienced last year lead to big reductions of the amounts that can be transported, and extra costs due to the purchase of additional tonnage and other transport capacities."

So in 2018 Contargo began to have modifications made to some of its contracted vessels. At two boatyards in Antwerp and Dordrecht, metal plates have been welded onto four vessels in such a way that they now have to sit only 130 cm instead of 150 cm deep in order for their propellers to have enough water.

Thanks to this investment of approximately €10,000 per vessel, the barges can now sail in the same water levels with 10-15 cm more water beneath the keel, and can thus transport 200-300 tons more cargo in low water.

This also means that in low water conditions, water no longer needs to be carried in the rear ballast tanks. Thus even with very low water levels, the barges can navigate the shallowest point at the German city of Kaub.

"Water levels in the Rhine have always been subject to seasonal fluctuations. However, in the interests of the transport industry and climate protection, goods transport by inland waterway needs to be strengthened. For this reason public policy must take the initiative and act as soon as possible to remove existing bottlenecks. In the current Federal Transport Infrastructure Plan, draft optimization of navigation channels in the Middle Rhine is addressed as a priority need. We hope this will be implemented as soon as possible", says Cok Vinke.

High water: same problems

The same activities occur when the water levels are extreme high. Because the barges can't sail with four or three layers, more containers have to be transported another way. In this case rail freight offers solutions. Nevertheless the authorities try to bring the extreme high water levels as soon as possible back to normal proportions by opening all locks in the rivers. This way the water surplus flows faster to the sea. Closing the locks when the water level is too low, is not everywhere a solution. Because in some areas there might be enough water but downstream there is not....

Another important logistics service company, VTG in the German city of Hamburg, offers the solution of rail freight. Remco van Staaijeren, Head of the railway operator Retrack (a VTG subsidiary) tells about how the situation affects VTG.

"We have many years of experience in operating rail freight transports along the whole Rhine corridor. This area is affected by the flood of the rivers Rhine and Maas (Meuse) from Switzerland through Germany and The Netherlands as well as from Luxembourg to Holland and Belgium.

"When the water levels lower, more logistic companies demand for replacement transports – usually heavy transports in large volumes, and mostly for shorter periods, although in case of extreme drought the time frame can be longer. Rail transport is preferable to road, not least because it is much more environmentally friendly. However, an issue when responding to extreme water levels – both high and low – is the transport capacity on the railroads. This is limited both with regards to train lengths and the frequency of slots for cargo trains.

"We are proud that we successfully managed the situations with extreme water level that we have experienced especially in the past two years, and that we were able to offer replacement transports by rail in all cases where we have been approached – among others, because we as VTG have a large number of container railroad cars which are available on spot bases as well in for instance Rotterdam which can be used in periods of low water."

Since 2007 the Dutch government opened the new cargo railroad from Rotterdam Harbor to the German border with the name "Betuwe Route". This railroad is provided with several electrical systems so many kinds of locomotives can use it. You'll find as well Dutch locs as Germans, Belgians and even locs from several railroad private owned companies.

The railroad especially is designed to bring cargo from motorways to this modality. The competition with the Rhine barges only comes in times of extreme low or high water levels.

Raising the bar in Asia

The cleaning systems Netherlands-based Gröninger is able to install in Asia means tank containers can be cleaned to the highest international standards. Brian Dixon reports

It's been a busy time for the Asian arm of Rotterdam-headquartered Gröninger Cleaning Systems. For example, the company has just installed a new tank container cleaning facility at the COSCO-owned Cogent Container Depot in Singapore.

Featuring one 200-bar and three 100-bar steam cleaning bays, superfast four-minute tank drying and an air purification system for odorous and noxious products, the new facility can handle 40-60 tank containers a day.

"In European terms, that's quite a substantial-sized depot," says Lindsey Wallace, Gröninger's director of Asian operations. Moreover, the facility's wastewater system, itself developed by Gröninger in conjunction with a longstanding partner firm, has been designed to handle not only multiple waste streams, but also a total daily capacity of up to 80 tank containers.

"They've got a lot of flexibility in the way they specified the depot. They wanted to cover as big a range [of products] as possible."

Given that Gröninger first set up shop in Singapore in 2011, it is perhaps a little surprising that this is the first cleaning facility the company has installed there.

"It's always been difficult, because Singapore has grown so rapidly," Wallace says, explaining that the intense land-use pressures resulting from the country's urbanisation has meant approvals for new depots have not been "given easily by the government". In this case, though,

Cogent chose to develop the facility in tandem with a new dangerous goods warehouse on Jurong Island, an area noted for its concentration of chemical facilities and refineries and thus incurred little difficulty in gaining a green light for the project.

But it's certainly not just been in Singapore where Gröninger has been active. As well as installing a three-bay tank container cleaning facility in Japan for NRS Group, it is also now putting the final touches to a new cleaning depot for COSCO in Zhangjiagang, near Shanghai. While the system also enables the fully automated cleaning of units, Wallace reveals that this Chinese facility was "designed somewhat differently" to that deployed in Singapore.

"Normally in Asia, we put our systems in [box] containers and they operate in containers," he says. "We can build everything inside the container. We can plumb it, we can wire it and then it becomes a plug-and-play 20' or 40' box container where we connect the incoming utilities to it. That means we can do everything to a European standard in Rotterdam," he continues, noting that this approach "can halve our time on site down for commissioning and installation".

However, while it's routine to operate a cleaning system from a box container in warmer climes, Zhangjiagang "is somewhat colder". Thus, this particular project required the construction of a "European style of depot" - the necessary plant is housed within its own purpose-built structure. However, inside this building, the kit used has all been manufactured to the same high standards as that for any other Gröninger installation , including food-grade 316L stainless steel components as standard.

"Everything in our systems is designed around cleaning [with water at 85°C] at 100 litres at 100

bar a minute," Wallace states. After that, the customer is able to tailor the system to meet their own particular needs.

Additionally, once cleaning has been completed, customers can also make use of a Gröninger Drypack, which ensures no moisture is left inside a processed tank container, which can then be shipped and loaded immediately.

One Asian customer employing the Drypack system is India's Bayarea Terminals, for which Gröninger recently installed a new tank container cleaning station within the port of Hazira.

Strategically located close to the chemical industry hub of western India, the facility allows units to be cleaned in four static back-in positions, with a fifth drive-through bay dedicated for road tankers. Bayarea also benefits from the use of multiple rotor jets in each bay to enable a fast turnaround. Meanwhile, standard cleaning procedures for various chemical residues are all stored within the system's Programmable Logic Controller, further raising efficiency and safety.

But while Gröninger, which last year opened a new subsidiary in Shanghai, sees "enormous potential" in Asia, it has not all been straightforward for the company, whose high-end and tech-savvy approach to cleaning has often been at odds with the rather lackadaisical methods traditionally associated with the region. Indeed, in some countries, methods employed would astound many western chemical and food shippers.

For instance, while all Gröninger cleaning systems are designed to eradicate the need for 'man entry', it is quite typical in Asia for cleaning staff to enter a tank container and manually clean the interior with hydrocarbons and a scraper, often with little or no means of protective clothing or equipment. Moreover, the idea of using steam and hot water to clean a tank container is not something that has always sat easily with people accustomed to cleaning with kerosene or diesel.

Wallace says: "Europe is a very mature market when it comes to cleaning. They've developed systems over the years and followed the environmental legislation as it's grown. But with no environmental legislation and you were looking for what you thought was the easiest way to clean tanks, people didn't think about using hot water."

A key reason, Wallace explains, is the idea that oil and water do not mix. However, Gröninger's technique employs the specific addition of cleaning chemicals that ensure they do. What's more, by using steam and hot water, Gröninger's systems can greatly speed up the unit cleaning cycle to around 30 minutes.

After all, unlike when using solvents or hydrocarbon to clean a tank container, the use of hot water does not result in any degradation of the bottom discharge valve's O rings or gaskets, which would otherwise have to be removed and replaced after each clean.

"When you're cleaning with water at 85°C [at 100 bar], you've got 1,000 litres of it per clean that flows out through the bottom discharge valve. In Asia, every [bottom discharge valve] is taken off every time [a tank container is] cleaned and it takes about two and a half hours to change everything and put it back on," Wallace states.

Things, though, are clearly changing. In part, this can be attributed to tighter environmental regulations, growing health and safety concerns and rising labour costs, which all make manual cleaning increasingly less appealing. And there has been a general raising of the bar in terms of professionalism, with local and foreign chemical and food shippers more reluctant to employ cleaning companies whose methods put their workers and the environment at risk.

Indeed, Wallace observes, those companies that have installed Gröninger systems across the region have greatly benefited from being able to market themselves as top-tier firms, able to clean units to the highest international standards. Furthermore, these companies are also able to gain from Gröninger's enviable level of customer support and service.

"All our systems have monitoring points," Wallace says, explaining that, thanks to the internet, both a depot's manager and Gröninger's own service team in the Netherlands can remotely keep tabs on each and every cleaning cycle in real time. Any technical issues that arise can be quickly rectified, something that is both good news for the cleaning company and good news for their customers.

JOT's got it covered

Japan Oil Transportation continues to see growth for its international tank container services, writes Brian Dixon

Tokyo-headquartered Japan Oil Transportation (JOT) has announced sales worth more than ¥7.8bn ($73.6m) for the first-quarter of its 2020 financial year, a 1.5% increase on the ¥7.7bn achieved 12 months ago. Despite the rise, however, the company saw both its ordinary income and operating income fall 13.9% and 48.8% over the period, from ¥321m to ¥276m and from ¥180m to ¥92m, respectively. In part, this decline was due to "uncertainty in overseas economies" and rising costs, including those associated with labour and a driver shortage.

Nevertheless, the company, which closed its 2019 books with a net income of ¥831m from sales of around ¥34.2bn, reports that during the first quarter its Chemicals and Container Transportation business notched up a year-on-year sales growth of 3.1% to reach more than ¥2.1bn. At the same, this segment turned a quarterly operating loss of ¥10m a year ago into an operating income of ¥38m.

With a fleet of more than 8,500 "chemical product containers", JOT has "a track record of handling over 200 types of cargo", including liquids and dry products such as acrylamide, acrylic acid, acrylonitrile, acetone, ethylene glycol, dicyclopentadiene, styrene monomer, phenol, propylene oxide, polypropylene glycol, latex, surfactants and bromine as well as polyethylene, polypropylene and vinyl chloride resin.

While most of JOT's tank container fleet is made up of 25,000 litre units with tare weights of either 3,620 kg or 3,680 kg, the company also offers a choice of specialised baffled systems with filling capacities ranging from 11,000 litres to 26,000 litres. The company also provides custom-made lined units for aggressive and hard-to-handle substances. Similarly, JOT offers tank containers with various optional fittings and ancillary equipment, enabling it to meet the often highly demanding needs of industry users.

One-stop service

JOT's domestic chemical transport operations pride themselves on their ability "to develop composite integrated transport services" for all types of tank containers.

"We take care of everything, from setting up a transport system with the optimal combination of railroads, [road transport] and ships all the way through [to] making the arrangements for daily orders and squaring up accounts," the company says, adding that it can provide this 'one-stop service' thanks to its "nationwide distribution network and a wealth of experience".

Since October 2013, JOT has provided customers with international tank container transport services. Identified by company president and representative director Shoichiro Hara as a key growth area, along with LNG and hydrogen transport, this branch of the company's operations covers both spot hire and long-term leasing options, undertaking both port-to-port and door-to-door logistics services.

To bolster its business outside Japan, JOT opened an office in Singapore in 2015 "for the purpose of collecting information, such as market research". This has since been upgraded to a branch office "with the aim of further expanding the international transportation business".

"By enabling not only information collection, but also local sales activities, we have prepared an environment in which we can focus on expanding sales channels," the company says.

At the same time, JOT is also represented beyond its home territory via an extensive network of agency offices and depots in 10 other Asian countries, viz China, India, Vietnam, Thailand, Indonesia, Singapore, the Philippines, Malaysia, South Korea and Taiwan. Primarily serving the needs of Japanese chemical industry customers looking both to export and import product, JOT is well placed to operate seamless one-way and round-trip regional transport services supported by an on-line tracking system. The company does not offer tank container services outside Asia and notes, perhaps unsurprisingly, that the largest of its trades is with China.

Another important area of business is that between Japan and South Korea. While the local press has reported on the souring of relations between these two countries, including each removing the other from their 'white lists' of preferential trading partners, JOT reports that as yet there has not been any obvious impact on tank container movements.

Growing demand

While there may yet be a few bumps in the road ahead, the general picture is one of continued healthy growth, fuelled largely by what JOT sees as the enhanced safety, economic and environmental benefits offered by using tank containers as opposed to shipping packaged chemicals in standard box containers.

To cater for this demand, the company added 500 new units to its fleet during its 2018 financial year, resulting in the total number of tank containers available for international shipments rising to more than 1,600.

"On this occasion, in order to differentiate our newly manufactured containers from those of [our] competitors, we made the insulation that covers the tank body thicker than that of existing containers in order to reduce the heating time and [lower] costs," JOT says. It also fitted the new units with "lids to the loading and unloading valves to improve insulation performance".

Similarly, "as an initiative to improve safety", it also "increased the surface area of the walkway fixed to the upper section of the [tank container] relative to that of existing containers, changing the specification to one that takes into account safety during loading and unloading operations".

The company has also developed "a new type of low-height" tank container aimed at customers "considering [the] replacement of old tanker trucks or looking for [a] new transport means".

By keeping the height of these new systems to below two metres, JOT "achieved a height close to that of tanker trucks" while simultaneously reducing unit tare weight. Additionally, "by providing toolboxes, hose cases and folding ladders as standard features" rather than options, it has also "managed to reduce the time required for [the] conversion of new containers".

In fiscal 2019, the company acquired 30 containers and plans to purchase more which will add to the variety of tank containers offered.

Safety first

JOT says that "caring about safety is the most important thing", asserting that this, along with its high level of customer service and commitment to regulatory compliance, is a key factor in helping it stand out on the market. Indeed, all JOT tank containers, as well as all its many tractor units, road tankers and rail tanks, are affixed with the logo of the company's group-wide Safety 1st initiative. This, it says, "allows us to always keep safety awareness in mind and to deliver safety and reliability to our customers".

However, there is far more to the company's commitment to safety than simply attaching a sticker to its numerous transport assets. "Led by the Group Safety Planning Headquarters, we conduct safety audits on all of our garages and depots," it says.

"These audits ascertain whether or not rules and procedures are being followed and correctly put into practice as we strive to thoroughly enforce our Safety 1st policy. Moreover, in the unlikely event that a serious accident occurs, an Accident Investigation Committee is launched and the entire JOT Group comes together to determine the cause of the accident and inspect related preventative measures, with the goal of preventing similar accidents from taking place in the future."

In line with this, JOT is also a keen proponent of the Japan Trucking Association's G-Mark workplace safety excellence programme. First launched in 2003, this safety evaluation scheme makes it easier for companies to quickly identify safe and reliable transport partners, with JOT reporting that "at present, nearly all of [its] offices have been awarded [this] certification." Likewise, when it comes to tank containers, JOT performs rigorous checks of all sites where cleaning and repairs are undertaken to ensure the highest standards of quality and cleanliness are adhered to in order to avoid the possibility of product contamination or transport incidents occurring.

JTS still expanding

Felicity Landon hears how UAE-based JTS will leverage its expertise at its new depot in Sohar, Oman

Joint Tank Services (JTS) led the way 21 years ago when it opened a dedicated tank cleaning and service facility depot in Jebel Ali, UAE – the first of its kind in the region. This year the company has been on the expansion trail, setting up its new JTS Chemical Logistics division and opening a new depot in Sohar, Oman. Looking ahead, it seems there will be further expansion.

The first JTS depot was established in the Jebel Ali Free Zone (North), next to the DP World container terminal, in 1998. "At a time when tank containers were not well known or used in the Middle East, the partners of JTS saw a great potential to offer the first professionally run, tailormade facility dedicated to cleaning, repair, storage and support services for intermodal tanks," says JTS general manager Mr Pasupathy.

"Coupled with the growing regional hub potential, professional environment and services offered by the Jebel Ali Free Zone Authority (JAFZA) and DP World made this a winning combination."

Twelve years later, JTS underwent a major change, kickstarting further growth and laying the foundations for some dynamic years ahead, he says. A wholesale relocation was the result. "The new team recognised the performance and potential this business model offered and therefore approved the construction of a new facility in Jebel Ali Free Zone (South). The direction of the new facility was not only to consolidate existing services for the tank container industry, but also to expand our portfolio by developing business offerings directly to the chemical industry in segments such as chemical drumming, warehousing and distribution."

Today, the JTS Jebel Ali depot covers a total area of more than 28,000 sq m. It has storage capacity for 1,800 empty tank containers, can stack five-high, and provides lifting capacity up to nine tonnes. Its customers include both tank container operators and leasing companies.

JTS is the first and, it claims, the only facility in the Middle East which is quality (ISO 9001:2015), Environment (ISO 14001:2015) and OHSAS 18001:2007 certified and SQAS assessed, says Pasupathy.

"We maintain a very high standard and are equal to the major depots being operated in Europe. Our key strengths are our customer-centric approach, one-stop solution for all tank container requirements, a highly competent team of people well versed with regulations and codes of practice, and a standardised and refined process that ensures high quality services along with competitive prices."

The new JTS Chemical Logistics division (JTS Chemlog) became operational in July this year. It provides storage of full tanks with Class 3, 4.1, 6.1, 8, 9 and non-hazardous cargo, as well as drumming, warehousing of both hazardous and non-hazardous chemicals, and distribution.

What has been the response from customers so far? "We are getting a positive response from all import and export customers, who are involved in chemical trading in the region," he says. "We have a roadmap to have a similar facility in Oman [the Sohar depot] in the near future."

Eric Chan, heading up JTS Chemlog, highlights JTS's strengths as an integrated

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chemical logistics provider and specialist in chemical logistics.

"Our new facility is equipped with filling stations to help our customer repack their products from bulk to smaller packages, such as drums, IBCs, etc.," he says. "Our full tank open storage areas are fully self-contained and fitted with fire detection systems.

"We are able to reduce order cycle time and deliver better inventory management solutions for our clients, thus creating cost savings for them. Meanwhile, our customised warehouse management system is designed to serve our customers."

The thinking behind JTS Chemlog is clear: "We feel that such value-added services need to be part of the package if you want to be a one-stop chemical hub", says Chan.

The new Sohar depot, Joint Tank Services (FZC) LLC Sohar, is a 100% subsidiary of JTS-Jebel Ali. Set in the Sohar Port Free Zone, the facility has an area of 32,000 sq m. Commissioning of first phase has been progressing in recent months – due to become operational in September, 2019. 10,000 sq m has been developed for cleaning, repair, testing and storage of both full and empty tank containers. A second phase will be developed for drumming and warehousing.

All is being developed in response to the growth of the country's petrochemical industry.

The facility has capacity for 180 empty and 60 full tank containers and can handle T50 gas tank containers. "We have been regularly getting calls from our tank container operators who are dealing with JTS-Jebel Ali, about the operation of this new facility, so that they can start cleaning their tanks there," says Pasupathy.

R. Elavarasan is depot manager at the new Sohar facility. "Uncompromising commitment to quality, health, safety and environmental issues is the greatest strength of JTS," he says. "JTS has brought invaluable experience and expertise, acquired over two decades, to our new facility. This facility is equipped with state-of-the-art machinery and all tank container needs are offered 'under one roof'. It is important that the Sohar facility is also approved by Civil Defense for storing laden tank containers that contain Class 3, 4.1, 6, 8 and 9."

What were the reasons for opening the new depot? "JTS identified the need for a logistics service provider at Sohar which can provide all the services that are required for tank containers, laden tank container storage and transportation," says Elavarasan. "Sohar port has become an ideal transhipment centre between East and West. The new facility is aimed at serving the Qatar and local market. The new highway that connects Sohar and the Saudi Arabia also links existing roads to UAE, further increasing the potential of Sohar port.

Our existing customers are keenly looking forward to using the services that are to be offered in JTS Sohar, as it will greatly reduce the repositioning costs for the operators and for Qatar exporters."

He believes a key factor setting JTS apart has been its investment in people: "This has enabled the building of an experienced and skilled workforce that delivers expressed and implied customer requirements every time."

Environmental issues, of course, remain to the fore. The Sohar depot is in the process of going for ISO 9001 quality management certification during second quarter of 2020. An inhouse wastewater treatment plant has been designed to greatly reduce the impact on the environment. This commitment mirrors that of Jebel Ali, where wastewater is being treated to irrigation standard and used for plants.

JTS's package of services includes cleaning tank containers, IBCs and road tankers, including of difficult cargoes such as resin and synthetic latex; repairing tank containers, including structural and shell repairs; handling and storage of empty tank containers; statutory IMO testing; tank survey, inspection and checks; offsite technical assistance; tracking and coordination; leasing and full transport logistics.

As to the competition, Pasupathy says: "Right now, there are four players in UAE. Two of them are mainly concentrating on their own fleet of tank containers and road tankers. Import volume is being shared between JTS and immediate competition, but still JTS is continuing with the major share of the cleaning, due to our long-term business relationship with major tank container operators and leasing companies."

Clearly the focus this year is on JTS Chemlog and the Sohar facility. But that's not likely to be the end of the story, "We do have plans to expand our activities in other areas of the Middle East but it is too early to comment," says Pasupathy.

Please re-lease me

Ermewa's acquisition of Raffles, to join its Eurotainer subsidiary, underscores the attractiveness of tank container leasing, reports Leslie McCune, *Tankcontainer Magazine*'s Editor and a former Equity Analyst at ING Barings

Desirability comes in many shapes and forms but, in the dispassionate world of business, one of its manifestations is the tank container leasing sector. While there was a discussion on shipping containers at this year's Boring Conference in London, tank containers were viewed as being too exciting to be included (the audience were also entertained by talks on the Albertus typeface, the sounds made by vending machines, and tomato ketchup).

What, then, is it that makes this asset class desirable to the likes of Warren Buffet, owner of Exsif Worldwide via Berkshire Hathaway, and SNCF Logistics, owner of Ermewa (whose recent purchase, Raffles Lease, will probably be bolted on to Eurotainer)?

Pension funds have also been drawn to long-term investments in the sector, looking to generate attractive dividends to fund their regular disbursements. The Ontario Teachers' Pension Plan took dry box operator SeaCube private in 2013 and were said to be interested in buying tank container lessor Seaco from financially-distressed HNA, which recently had China's largest corporate debt pile.

However, while pension funds seek cash-yielding investment opportunities to meet on-going pension liabilities, tank containers – as an asset class – have been too small to invest in directly.

Why are leased tanks attractive assets?

Firstly, the basics. Tank containers are highly regulated assets which must conform to stringent standards of construction and operation, including mandatory periodic inspections. They have a low obsolescence risk and attractive value retention (or terminal value) at the end of their economic life.

While the economic life for General Purpose dry box containers for seaborne use averages 13 years, the economic life of a tank container is 20 years. Economic lives can be extended through proper maintenance but, with the current state of technology, there is little obsolescence risk with tank containers – they are as likely to be rendered obsolete by their cargo capacity than by their age. ISO certification, the stainless steel used for construction and the lack of available substitutes guarantee longevity. The residual values of tank containers are said to historically average over 40% of their initial cost, underpinned by the scrap value of stainless steel.

A hedge against inflation

60-70% of the initial cost of a tank container is attributable to raw materials. These include nickel and molybdenum, which act as a natural hedge against inflation. When stainless steel prices increase, so too do tank container prices, both for new-build and those sold into the secondary market. Nickel is the key driver of the price of the stainless steel, which contains up to 8% nickel by mass, and can make up 50-60% of total cost.

Lease rates are inexorably linked to the global cost of money – as expressed through interest rates – and the accounting treatment of depreciation. Lessors are typically geared companies so per diem rental rates rise with the cost of debt, albeit after a time lag. Gearing measures a lessor's financial leverage and is the ratio of a company's debt to equity - it shows the degree to which a lessor's operations are funded by lenders as opposed to shareholders.

Debt is cheaper than equity

In the shipping sector, companies may lease more dry boxes when per diems are increasing as an alternative to purchasing boxes since taking on more debt may lead to higher borrowing costs and, potentially, reduced liquidity. For normal gearing, debt – with its tax-deductable interest expense – is cheaper than equity, which must be funded by dividends.

Lead times are short

In terms of supply, tank container manufacturers offer short lead


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collaborative
cost neutral
real-time
reliability
Logistics
total cost to serve
sustainable
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control
transparency
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Chemicals
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times and, in economic terms, are so-called rational suppliers. Two Chinese manufacturers - CMIC and NTtank – accounted for nearly two-thirds of all global production in 2018. Both offer relatively short lead times for new build tank containers and can rapidly adapt to changes in demand – when demand fell dramatically in 2009, thousands were laid off at a Nantong tank manufacturer with just a few days' notice.

The dominance and scale of the Chinese tank container manufacturers, which accounted for 85% of global production in 2018, acts as a significant barrier to other firms entering the market (although their size has spawned new Chinese tank competitors such as CXIC and, most recently, JJAP).

Short lead times are reflected in raw material ordering – CIMC and Singamas tend not to order steel more than three months ahead with CIMC getting two-thirds of its stainless supply from TISCO (Taiyuan Iron & Steel Corporation). Most of the remaining demand is sourced from Belgium-based Aperam.

Leasing helps fleet management

In the dry box sector, leasing has historically given shipping lines the flexibility needed to deal with volatile trade volumes and the uncertain forecasting of their individual port requirements.

Leased containers reduce a shipping line's need to maintain surplus inventory and allows them to balance trade flows by seasonally adjusting their box fleets. Tank containers have far less cyclicality than dry boxes, which nevertheless have generated attractive returns for shareholders. Long term leases have stretched to 5-7 years, yielding predictable revenue streams which can be financed by secure debt with matching terms. The business model is fundamentally, like all leasing companies, a net spread between rental income and interest expense.

Lessor revenues are primarily driven by lease rates with fleet utilisation a secondary driver. Inactive, off-hired tank containers fail to generate revenue and incur storage costs at depots. Lessors occasionally accept below-market per diem rates to avoid storage costs. New-build equipment is often left in the yards of the manufacturer at no cost as part of the overall commercial package. Generally, the options for idle inventory are to re-lease, dispose, recondition or reposition.

Low capital cost is essential

Access to the capital markets has undoubtedly provided public equity lessors with funding advantages, although the shorter-term demands of shareholders for growth can increase the risk of ill-conceived acquisitions. Publicly listed firms regularly refinance their debt in the debt markets or by accessing the Asset-Backed Security (ABS) market.

An ABS is a financial security, such as a bond, which is collateralised by a pool of assets such as leases, loans, credit card debt, royalties or receivables. In the past, US container lessors obtained very attractive financing spreads when gross yields compressed significantly. The ABS market has, however, not been open to tank container lessors due to the sector's relatively small size.

Cost of capital is a crucial competitive advantage and gives lessors the commercial strength to drive rates lower to gain market share, which may or may not increase profitability. Dry box container lessors achieved Returns on Equity of over 20% from 2010-2015.

Operator margins are good

In the tank container operator sector, Bulkhaul is the fifth largest with 22,500 units.

The company's 21% operating profit margin (gross profit less admin expenses) for the year ending 30 June 2018 is nearly twice that of Stolt Tank Containers, the industry leader in terms of fleet size, which achieved 12% for the 12 months ending May 2018 (although the comparison is not strictly like-for-like as Stolt also has 21 depots).

How, then, does Bulkhaul's 21% and Stolt Tank Containers' 12% operating profit margin compare with Berkshire Hathaway, the owner of Exsif Worldwide? Berkshire Hathaway is 16.5% owned by the legendary Warren Buffett, whose stake of $84bn makes him the world's fifth wealthiest person.

The Sage of Omaha uses operating profit as his preferred financial performance measure - Berkshire Hathaway's Q1 operating profit margin was 9% ($5.6bn operating profit on revenues of $58.5bn, excluding Kraft Heinz's unfiled first-quarter results).

Admittedly, Berkshire Hathaway's profitability in no way indicates that of Exsif but the returns from tank container leasing are said by industry players to be 'similar'.

What are the critical success factors for lessors?

A critical success factor for tank container lessors is the re-lease potential. Leases typically last five years but lessors will seek to build a portfolio of leases with staggered maturity dates and off-hires at desirable locations i.e. where depots have the necessary inspection levels and a full service Maintenance & Repair capability.

The three critical success factors for lessors are credit quality of customers, cost of capital and the assumptions made on depreciation (which can generate more attractive short-term EBITDA at the risk of longer-term, residual value-related impairments).

Chemical Express pivots to intermodal sustainability

The Naples-based logistics operator, which has transported chemicals for 40 years, is expanding

Chemical Express Srl closed its financial year 2018 with a €33.5 million turnover, up 15 per cent compared to 2017.

The Naples-based company handled 500,000 tons of chemicals (30 per cent of which were hazardous) with over 25,000 shipments made across Europe, especially to Germany, France, Benelux, Spain, with the remainder going to Northern and Eastern countries such as the UK, Portugal, Greece, Turkey and Russia.

The increase in the volume handled was supported by an increase in the fleet, which now has 150 tractors, 150 road tanks, 1,700 container tanks and 450 lightweight chassis. "Our customers are the major international chemical producers and traders, as well as several Italian companies specialising in petrochemicals (solvents, lubricants and petroleum products) and highly specialised products for any industrial or domestic use," Account Manager Francesco Mattozzi explained. "Besides chemicals we transport also liquid industrial waste, products of animal origin (category 1) and food products".

In 2018 and in the first months of 2019, the company also increased the number of employees: "Our management is proud to grant many young people the chance to be hired after a stage. We invest in human capital, constantly looking for talents to raise up for several roles," Mattozzi continued, stressing that Chemical Express is entering into agreements with technical institutes to attract young people into the logistics and transport sector, thus training future generations of logistics operators to work in trade, customer service or technical offices.

In addition to the headquarters near Naples, the company has a site in Trecate (Novara) and Valencia (Spain). The expansion project provides for an expansion in Europe, first through the opening of commercial offices, and then of branches. "We are also making significant investments in social responsibility and sustainable development and applying them to the business through transparent and ethical behaviour, the care for workers' health and compliance with international regulations. The evaluation carried out by a third party (Ecovadis), to which we submitted by joining the association named Together for Sustainability (T.F.S.), confirms our commitment. The certifications held by Chemical Express, namely ISO: 9001 – 14001 – 45001 – 39001, ensure our great concern for the quality of our services, respect for the environment, protection of workers' health and road safety".

The market poses new challenges and provides new opportunities, as Chemical Express is well aware. "Problems for transport operators remained unsolved: the lack of harmonisation of several EU regulations (the sanctions governing weekly rest for drivers introduced only by some countries); the difference in

salaries for Eastern operators compared to the rest of the EU, granting them advantages compared to other operators; the inadequate conditions of several intermodal infrastructures (ports, railway terminals) for operational needs (insufficient space for temporary storage, impossibility of storing dangerous goods), which create problems and imply additional costs for transport operators" a company spokesperson noted.

Chemical Express was established in 1979 by Salvatore Romano and the top management recently celebrated the 40th anniversary. "Our winning formula – allowing us to become one of the major operators within a complex sector such as transport of chemicals in tanks, both in Italy and in Europe – is based on the combination of customers' requirements, protection of the environment and of safety, as well as advantageous economic conditions" Mattozzi says. "Already in the early Nineties the company started investing in intermodal transport, implying the use of a mixed railway/road or maritime/road systems, creating several advantages: an increase in transportable weight of goods compared to road transport; overall containment of costs compared to road transport; increased safety, reducing the number of heavy vehicles on the roads; significant reductions in carbon dioxide emissions in the atmosphere".

"In the transport industry, the chemical sector is the most specialised one", Mattozzi continued. "Great technical competence is needed, in particular for dangerous goods. Moreover, customers' needs - being increasingly focused on the optimisation of timings, on the containment of costs and especially on compliance with safety requirements - imply a constant technological upgrading of units, a speeding-up of the digitalisation process and the maintaining of maximum safety standards during all transport stages and for all the operators involved. To that end, we modernize our fleet on a regular basis to provide customers with state-of-the-art units, respecting the environment and being equipped with the most modern safety systems, with regards to both tractors and road tanks and container tanks, with devices aiming at increasing safety conditions".

In particular, the 'ground operator' i.e. a valve in the lower side of the unit – rather than in its upper side – allows the appropriate pressure for the tank container without the need for drivers to get onto the units. This avoids the potential for falls, although Chemical Express trains its personnel on safety risks, working height considerations and individual protection devices.

Several units are equipped with fall-arresters (LIFE-LINE), allowing drivers to anchor the sling to the fall-arrest on the tank container to ensure that operations at heights are carried out with safety.

Often, transporting chemicals requires specific measures, such as controlled temperature. This requires a verification and resetting of the desired temperature by way of heating the product by induction through hot water or vapour put inside channels placed on the units' surface. The company makes use of certified heating and washing stations operating across Europe. Chemical Express joined the "Responsible Care" programme sponsored by the European Chemical Transport Association ECTA (of which it is a member since several years) which, in agreement with the European Chemical Industry Council CEFIC, launched several initiatives such as the measurement of carbon dioxide emissions related to transport activities and their consequent reduction, the efficient use of resources and fuels, and the collaboration with governmental and international institutions.

"In particular, carbon dioxide emissions can be reduced by using EURO 6 vehicles and by preferring intermodal transport over road transport. This allows for a reduction of up to 80% in carbon dioxide emissions for long distances (average 800 kilometres) compared to road transport. However, in order to achieve this goal, the intermodal logistics infrastructure must be able to compete with the road system by providing competitive services in terms of both timings and costs".

When in October 2016 the Ro-Ro and container shipping company Grimaldi created the Italian Logistics Association of Sustainable Intermodalism ALIS, Chemical Express identified with its values and supported the newly established association by becoming one of its founding members.

The association currently has 1,400 member companies, representing 152,000 employees, with a fleet of over 106,000 vehicles and €22 billion of aggregated turnover.

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A coming of age

Many chemicals industry players are changing ERP systems with no IT resource available. A 4PL like Log4Chem can do it for you

Log4Chem GmbH is a fourth party logistics provider focused exclusively on the European chemicals industry. Over the last ten years we have steadily increased our customer base through our carrier neutral transport management and optimisations. As control towers become a digital reality, we are in the right space at the right time. Are you?

All major shippers have a control tower function somewhere in your organisation, maybe buried between Logistics and Customer Service. This function must now be promoted and technically enabled to give your customers that home-shopping experience of shipment tracking and last mile visibility. It's time to turn the light on.

However, many of you are changing ERP systems, that never-ending migration across a systems Serengeti with no IT resource available. So let a 4PL do it for you.

The decision to outsource can be driven by this necessity, or it can be a pro-active, strategic choice. See this excellent article by David.Gonzalez@Gartner.com at https://www.gartner.com/doc/3803514?ref=solrAll&refval=219023180&qid= for the positive reasons why logistics outsourcing adds more value, faster to your business.

As a chemicals 4PL we have proven that it is possible to cut costs and add more value simultaneously. Selective digitalisation with a team of chemical logistics experts has enabled us to reduce operating

costs whilst improving the transparency and reliability to end customers. It's a simple formula – delays cost time and money, remove the problems and you improve performance whilst cutting costs.

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Our dynamic allocation management gives a defined group of pre-approved carriers the flexibility to opt in and out of lanes as it suits their business. This benefit (and lower risk) for the carriers yields additional margin that is sustainably greater than the cost of our intervention.

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Responsibility the key

Operators transporting hazardous cargoes should learn important lessons from the *MSC Flaminia* fire and its legal aftermath, delegates heard at a TT Club seminar in London

Peter Skoufalos, partner at Brown, Gavalas & Fromm, pointed out that cargo claims after the *MSC Flamina* containership fire were in excess of $100m, and were finally settled for $65m.

Phase 2 of the trial that followed determined that the shipper of the DVB (which exploded as the result of runaway auto-polymerisation) and the NVOCC/tank container operator bore sole responsibility for the incident, which claimed the lives of three crew members.

He warned that TCOs should be aware of the type of exposure they face "even in this niche market".

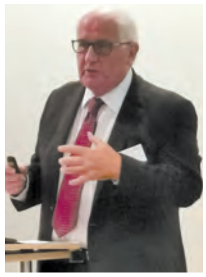
The trial process showed "there are discovery burdens you are going to face", said Mr Skoufalos, and it was vital to keep records about equipment and processes followed.

"The other side wants to know you have been maintaining your equipment properly and inspecting it properly. And they want to know the age of the equipment and where it was before. They want to know the vetting process."

The need for meticulous recordkeeping and back-up recordkeeping was the most important lesson from the *Flaminia* case, he said, and anyone putting dangerous goods into the supply chain should realise the importance of coordinating efforts and the activities of the various participants in the multimodal chain.

Taking responsibility was a key theme of his presentation: "the court found you can't just sit on your hands and say 'OK, I have done the minimum', if you know more" [about possible risks].


Peter Skoufalos


Reg Lee

Mr Skoufalos also highlighted the lack of training among clerical staff who may not have enough knowledge of dangerous goods and their risks, and may accept declarations "as gospel".

TCOs should make sure the cargo being transported is properly classified, and even suggest if another classification might apply.

"Don't say 'we have done something for 20 years and nothing happened, so why bother?'. That is not enough in this highly litigious world."

Operators should develop internal procedures, have them in writing and be able to demonstrate to a judge that they do not take DG aspects of their business lightly, but consider what the hazards are. They should have a dedicated person whose responsibilities are written out, and a middle manager making sure that those procedures are being followed, he said.

"No one will be impressed by a binder full of remit and no one knows who is responsible for what. And the fact that no accidents have occurred should not be an excuse for complacency."

Mr Skoufalos, who represented several NVOCCs in the Flaminia case, warned: "In the context of what we have today and the size of vessels, this might actually be a small claim."

Also speaking at the seminar was Reg Lee, president of ITCO, who praised tank containers as "the ultimate way of making door to door deliveries".

There has been rapid growth in the number of tank containers in the world in the past 20 years, to about 600,000 in operation today, he said.

"I believe that in the next five to ten years, it could be one million – and it should be, because it is one of the safest methods of moving bulk liquids.

"However, we have got to the situation of oversupply, where the Chinese are producing tank containers not for use but for sale, and I think that is dangerous."

He criticised the increasing trend for shipments of bulk liquids in plastic bags in boxes, which he said could reach as many as one million shipments a year by 2022.

"One plastic bag is the equivalent to 7,000 supermarket bags. They end up in landfill or in incinerators. And when the plastic bag is damaged in transit, the risks are high.

"I think people see it as cheaper to clear up the mess when it happens rather than pay the rate (for a tank container)."