Your single information source for bulk and semi-bulk logistics

ULKUISTRIBUTOR

Tank Containers • Flexitanks • IBCs • Drums • FIBCs • Bulk Liners • Road Tankers • Loading / Bagging • Bulk Logistics • Cleaning & Repair Depots • Components

IN THIS ISSUE

Est. 1990

2
4
13
15
16
20
21
23
26
27

Managing Editor

Neil Madden neil@bulk-distributor.com Tel: +33 (0)3 88 60 30 68

Staff Writer

Paul Stephen paul@andpublishing.co.uk Tel: +44 (0)1565 653283

Advertising Director

Anne Williams anne@bulk-distributor.com Tel: +44 (0)20 854 13130

Sales & Development Manager

Danny Holmes danny@bulk-distributor.com Tel: +44 (0)1565 653283 © Ashley & Dumville Publishing Ltd

Bulk Distributor is published by Ashley & Dumville Publishing Ltd Caledonian House, Tatton Street, Knutsford, Cheshire WA16 6AG, United Kingdom

www.bulk-distributor.com

ANNUAL REVIEW IN THE NEXT ISSUE

Components **Logistics Software** To advertise or contribute please email

Bertschi, De Rijke, Hoyer in 4PL venture

hree of Europe's largest bulk logistics operators have formed an independent fourth-party services provider (4PL) in an international joint venture.

Switzerland-based Bertschi, Dutch group De Rijke and Hoyer of Germany are behind the 4PL named Log4Chem.

By pooling activities in chemicals-related logistics, the backers expect to generate transport volumes worth around €200 million in the first few years. The new company has a portfolio including all logistics services, such as co-ordination and execution of liquids and solids transports.

It will function as a neutral facilitator between contractors and services providers, rather than Log4Chem having equipment of its own or other assets. Its role is to focus on gearing up the efficiency of the supply chain, for example, by eliminating 'empty transport legs' and to concentrate on the sustainable use of intermodal transport.

The joint venture is designed to market, co-ordinate and optimise all new 4PL transport activities of the three shareholders. The particular focus is on logistics for the chemicals industry in Europe, Africa and the Middle East. Log4Chem aims to become the "market leader" in these regions.

Combined the three companies have a network of 112 offices, 53,095 transport units and 8,955 employees worldwide.



Linde shipping helium

inde Gases shipped the first container from its newest helium source, Helium II, operated by Ras Gas at the Ras Laffan Industrial City in Qatar on 8 July. Linde has secured long term rights to 30 percent of the output from this latest, and largest, helium source in the world. The company claims this demonstrates its commitment to ensuring a steady supply of one of the world's rarest and most sought-after gases.

Helium is critical to the manufacture and operation of MRI scanners as well as the manufacture of semiconductors, LCD screens and fibre optic cable. As it can only be economically produced from helium-rich natural gas sources, there are a limited number of helium production facilities around the world.

"Due to its unique properties, relative scarcity and global supply chain, helium is one of only a few industrial gases with a truly global market," said Steve Penn, global head of merchant and

packaged gases, Linde Gases Division. "We have therefore strengthened our supply base in Qatar."

The liquid helium is put into a container (like the one pictured on this page). It is loaded onto a flatbed truck and can either be transported to local destinations - or more likely - loaded onto a ship for sea transport. The containers each have a

capacity of around 41,000 litres. Linde is investing over €35 million in new containers to supply the additional gas from Helium II and its expanded source in Skikda, Algeria. Linde is also investing to expand its transfill and container staging facility in Dubai's Jebel Ali Free Zone to accommodate the growth.



anne@bulk-distributor.com or danny@bulk-distributor.com

The helium containers can each hold some 41,000 litres





Asia-North Europe spot rates are thought to be getting closer to the rock bottom levels seen in 2009

Shippers might be the beneficiaries of the current price war in the ocean container sector, but that does not mean there are no risks attached.

Drewry's June Sea & Air Shipper Insight shows that carrier financials that have so far been published for the first quarter of 2013 present the same mixed bag of results that typified 2012. Some carriers made a little money but more lost cash, meaning that the industry at large started 2013 in the red.

The second quarter has undoubtedly been worse. Rates have been in free-fall since the start of the year, particularly in the core Asia-Europe westbound trade where Shanghai-to-Rotterdam spot rates as assessed by the World Container Index have lost half their value.

"Carriers will be forced to curb their losses somehow. Service quality might be forsaken as some operators might ask what benefit they get from offering reliable port-to-port services," said Simon Heaney, research manager at Drewry.

"We expect the first step to be further slowing down on ship speeds, which in itself should not lessen reliability but will lengthen transit times even more. After that, if they are still losing cash, the incentive to offer reliable services will be sorely tested."

The ability of shipping lines to make an announced general rate increase (GRI) actually stick came under scrutiny at the TOC Container Supply Conference in Rotterdam, late June. Carriers are trying to force through a series of GRIs on the Asia-North Europe trade as they once again attempt to force freight rates up to breakeven levels.

The Shanghai Containerised Freight Index was first launched in May 2009 and remains one of the few industry benchmarks. It was born when Asia-North Europe spot rates were at rock bottom, below US\$500 per TEU. And while the current decline has yet to see the indexed rate go as low as that, Alan Murphy a partner in maritime analysts, SeaIntel told the conference that over the past

Static Electricity an Invisible Risk ...?

three months it has dropped more precipitously than ever before.

"We are now moving in and getting close to the bottom of 2009, and it's important to note that this decline is the fastest – it's gone very, very fast, especially over the past three months," he said.

"The clear trend on rates is that volatility is on the increase," he added. "We have seen rates shoot up and rates tear down; rates shoot up again and rates tear down at a much faster pace than before."

He also argued that measuring the success of GRIs should be based on the point of their announcement rather than at the time of their implementation, and pointed to the 1 March GRI earlier this

year which was \$700/TEU. At the time the SCFI actually recorded an increase of \$424/TEU, but compared with the time of the GRI announcement – which took place in January – rates increased by only \$97/TEU. And since 1 March the SCFI Asia-North Europe rate has declined by \$909/TEU.

"If I announce now at the end of June my intention to raise rates by \$500 at the beginning of August, and in the meantime rates drop by \$500, come August I raise rates by \$500 but I haven't actually got anywhere. The GRI is the standard tool that carriers have to raise prices, and it's simply broken now," he said.

Praxair to extend pipeline

Draxair is to build its second air separation plant and extend its pipeline system port of Antwerp.

The new 1,300 tonne per day plant will increase Praxair's oxygen and nitrogen capacity in the port and expand its business with customers under long-term contracts, including agreements with several global companies. Start-up of the air separation plant is expected in early 2016.

Praxair's new plant and extensive pipeline system will have the ability to supply oxygen and nitrogen to the majority of chemical companies in the port. The new facility is also designed to produce liquid oxygen, nitrogen and argon to support customers in the pharmaceutical, chemical, glass, cement, metal fabrication and food industries in Belgium and the Netherlands.

According to the Antwerp Port Authority, some of the world's leading refining, petrochemical and chemical companies have announced more than $\in 1$ billion of investments into the port. The port authority also projects an additional $\in 1$ billion of investments to be made in the near future.

"The increase in installed capacity, as well as an expansion of Praxair's pipeline network, gives us the reach and production to supply the increasing oxygen and nitrogen demand of customers throughout the port," said Todd Skare, president of Praxair Europe. "Integrated ports such as Antwerp have remained competitive, in spite of the extended recessionary period in Europe, and we fully expect the port to continue to grow and attract significant new investment in the future."



spark plug will discharge up to 100 milli-joules of ignition energy.

A single spark from an electrostatically charged road tanker is capable of discharging over TEN times that amount of energy.

Are You Protected?



Shipper

Down Mexico way for Callebaut



For Barry Callebaut the extension of the Toluca factory makes Mexico the fourth biggest country in terms of liquid chocolate production capacity worldwide

Scallebaut has inaugurated its expanded chocolate factory in Toluca, 65km southwest from Mexico City, Mexico.

As announced in June 2011, Barry Callebaut acquired the industrial chocolate and compound production facility in Toluca from Chocolates Turin to strengthen the company's presence in fast-growing emerging markets. In January 2012, Barry Callebaut announced the expansion of the factory based on the signing of a long-term outsourcing agreement with Grupo Bimbo.

Together with its factory in Monterrey (Mexico), the extension of the factory in Toluca marks an important cornerstone in Barry Callebaut's strategy of expanding into emerging markets that offer above-average growth opportunities. For Barry Callebaut, it makes Mexico the fourth biggest country in terms of liquid chocolate production capacity worldwide.

Dave Johnson, president of Barry Callebaut's region Americas, said: "We are very proud to strengthen our local presence in Mexico with our state-of-the-art factory in Toluca, next to the country's economic centre. Moving closer to our customers puts us in an even better position to continue opening up the Mexican confectionery market. This attractive market is expected to grow significantly over the coming years."

Jesus Carlos Valencia, the general manager of Barry Callebaut in Mexico, added: "Today's opening of our second local factory is a strong symbol of Barry Callebaut's commitment to the Mexican market. With the extended capacities, we are able to reinforce our position as the local leader as well as to build our market share in other countries in Central America." With an annual production capacity of around 65,000 tonnes, Toluca will be among the largest factories within Barry Callebaut's global network, offering more than 140 jobs. Since fiscal year 2011/12, the total amount invested in Toluca is approximately CHF45 million (US\$48 million). The facility integrates a high level of automation and meets the highest quality standards to guarantee maximum food safety. Barry Callebaut established operations in Mexico in 2009 when it opened its first chocolate factory in Monterrey, Nuevo Leon. After four years of actively being present in the domestic market, the company became the largest manufacturer of chocolate on an industrial scale in Mexico, providing more than 300 jobs and manufacturing chocolate products for small to large food manufacturers in its two local factories. Barry Callebaut operates 10 chocolate, two cocoa and one combined (cocoa and chocolate) factories in the Americas.

Schirm invests €20m in new plants

ehnkering subsidiary Schirm, a production services provider for the chemical industry in Europe, is expanding its production and warehousing capacities at its corporate headquarters in Schönebeck in the German state of Saxony-Anhalt.

The company is investing more than $\notin 20$ million during the next two years. A fungicide centre with EC and SC formulation plants and a dangerous goods warehouse will be built at the site by mid-2015. A third section of the multi-purpose synthesis plant is due to be commissioned in the autumn of 2015.

"These investments will enable Schirm to take account of the increasing demand for high-quality outsourced production services," said Dr Bernd Müller, CEO of the Schirm Group. "Our customers particularly appreciate our full-service approach. Among other things, we handle the synthesis of organic compounds for agricultural and fine chemical applications and direct refinement within one company."

"Schirm has special strategic importance within the Lehnkering Group. The fact that we provide both logistics and production services is an important feature when competing with our rivals. The investments in the plant complex will form a major basis for future growth at the Schönebeck site," added Uwe Willhaus, CEO of Lehnkering GmbH.

Schirm operates plants at four business sites in Germany and also has a business site in the USA, Schirm USA, Inc. The companies are assigned to the chemical manufacturing division within the Lehnkering Group.

High-quality plant protection products and fine chemicals are due to be produced at the fungicide centre with its formulation plants for liquid products and the expanded multi-purpose synthesis plant at Schönebeck in future; this will be handled on behalf of wellknown chemical corporations for global use. The combination of an EC and an SC plant and the direct links with highly automated filling lines will provide customers with cost benefits. The investment programme also includes the construction of a warehouse for dangerous goods, which will not only cover Schirm's in-house requirements, but also offer warehousing space for outside customers.

"We're constructing the warehouse for dangerous goods together with the Lehnkering Distribution Logistics division," said Dr Müller, who is also COO of the Lehnkering Group.

Valves & fittings for safer tanks, since 1919



CHEMICAL ROAD TANKERS / RAIL TANK CARS / IBCS / ISO TANK CONTAINERS





Tel: +33 557 426 700 / sales@perolo.com / www.perolo.com

AMERICAS / EUROPE / AFRICA \ ASIA \ OCEANIA

Annual FIBC review sponsored by



Right Quality
 Right Service
 Right Price
 Right Choice ✓

Sinobangla Industries Ltd (SBIL), founded in 1996, is the largest manufacturer and exporter of FIBCs and woven polypropylene (WPP) bags in Bangladesh.

The aim of the Company has always been, and still remains, to produce quality products meeting complete customer satisfaction. At every stage of production, stringent quality control measures are adopted to ensure delivery of high quality prod-SINOBANGLA's unvielding ucts. quality control policy has further consolidated the reputation of the company both at home and abroad. Sinobangla has a vertically integrated production system starting from polymer extrusion to weaving, coating, printing and sewing. This system provides the needed flexibility to meet varied requirements of the customers.



Flexible industry captures new markets

The usage of FIBCs is thought to have more than doubled in the past decade, and its role has evolved to a point where it is a common method for transporting a wide range of products. Bulk Distributor asked a number of key players in the FIBC market about the current climate, their expectations for the next few years and recent, significant developments

Europe's FIBC industry

Oliver Grüters, president of The European Flexible Intermediate Bulk Container Association (EFIBCA), reviews the European FIBC industry in the past year

The global success story of FIBCs started in the 1960 and 1970s, when a number of industries widely used big bags for storage purposes and for transportation of dangerous and non-dangerous goods. Until today, FIBCs have been broadly used for certain applications. Being an industrial packaging, it is evident that the wellbeing of the FIBC sector is closely linked to the economic performance of the eurozone.

2012 turned out into a transition year for the European economies. Governments announced spending cuts and in many cases raised taxation on company and personal incomes. These actions were intended to keep up or regain the competitiveness of the economies. But, in combination with monetary expansion, the effects for the upcoming periods are quite difficult to predict and provide an insecure economic climate.

Last year, only four years on from the start of the global financial crisis in 2008, the 27-country eurozone has fallen into its second recession. Gross domestic product shrank by 0.3 percent in 2012.

But the FIBC industry resisted well: In 2011, imports of FIBCs into the eurozone reached a three year high. In 2012, imports dropped by 2.3 percent compared with the previous year, but remained significantly above the import figures of 2010.

Still, the weak economic environment influences the packaging sector as well; markets for industrial packaging have become very price sensitive. FIBC distributors and manufacturers in Europe are witnessing a previously unknown pressure on prices during recent years.

At the same time customers' demands towards their suppliers are constantly growing. They do not only expect high quality products and services. The dedication to corporate environmental and ethical management is becoming more and more a competitive edge for FIBC

producers and distributors. On top of this, the rather complex European legislation, such as the new European food contact regulation, demands

flexible processes which allow incorporating changing requirements immediately.

European economists predict the GDP to rise by 0.4 percent in 2013. The development of growing demands and changes in legislation will remain. FIBC producers and distributors need to be aware of the fact that 'just' producing a suitable product is not enough to succeed in the European FIBC market.

To counter these challenges EFIBCA, being the trade association of the FIBC industry in Europe for 30 years, has been gaining importance. Having started as a trade association for European companies only, EFIBCA adapted its constitution and in 2008 opened up to all players active in the European market. Since then, EFIBCA's major task has been to keep an eye on global developments, to inform its members and to initiate and keep an intense information exchange within the sector.

Throughout the year, the association informs on the latest developments through newsletters, e-mails, website and regular meetings.

EFIBCA's activities aim at promoting quality and safety. In the upcoming months, the quality scheme EFIBCA Q, as well as a user handbook for the safe handling of FIBCs, will be launched. But besides quality standards, sustainability aspects are gaining importance in the FIBC market. EFIBCA takes this into account and offers specific services, such as ecological life-cycle assessments of FIBCs or the voluntary participation in a Code of Conduct.

The growing number of members appreciate that the association is taking an active lead in the industry. Due to the increasing complexity of the economic conditions in the eurozone, market participants demand a reliable information exchange and guidance on various aspects of the market. EFIBCA is building trust and reputation to the benefit of the FIBC industry in general and member companies in particular.

Milestone for LC Packaging

On 8 June, LC Packaging Group celebrated its 90th anniversary. Established in 1923 as a distributor of second hand jute bags, LC Packaging has developed into a producer and worldwide distributor of FIBCs. With production locations in Bangladesh, South Africa and partners around the globe, FIBCs are distributed through LC offices and warehouses in 15 countries in Europe and Africa. The company has more than 1,000 staff worldwide.

To enhance customer satisfaction and adhere to international safety standards, the company's Bangladesh plant, Dutch-Bangla Pack (DB Pack), recently implemented ISO 9001, ISO 14001, ISO 22000, OHSAS 18001 and SA 8000 certification standards. In Bangladesh DB Pack is only the sixth organization to be awarded the SA 8000 certificate - a standard for decent working conditions and corporate responsibility. The SA 8000 certificate was presented at the end of 2012 by the Dutch Ambassador in Dhaka, a representative of the Dutch Ministry of Economic Affairs which had supported DB Pack in obtaining the certificate. LC Packaging says that DB Pack is considered by the Dutch Government as an example of what CSR means in reality. Something it is extremely proud of. Today DB Pack is reportedly the only FIBC producer worldwide to hold all the above certificates, resulting in increased efficiency and reduced costs, a vigorous quality and hygiene policy, reduced risk of accidents, reduced labour risk resulting in high labour retention and reducing environmental risks. The company's production plant in South Africa, LC-Shankar, was set-up in the same spirit. According to LC Packaging, although still a young enterprise, LC-Shankar is already considered to be a high quality, reliable partner for local and international clients active in South Africa and surrounding countries. Last month the group opened a new office in Johannesburg from where all sales activities are co-ordinated. The production of FIBCs will stay in Pietermaritzburg.

We currently enjoy duty free access to EU 27, Canada, Japan, Australia, New Zealand and Russia.

ONLY MEMBER OF EFIBCA & FIBCA FROM BANGLADESH



www.sinobangla.com Tel: 880-2-9676963, 8628561•Email: sbil@sinobangla.com



Emmbi goes green

E numbi Polyarns has developed an FIBC made completely out of a single homopolymer in order to disprove the widely-held perception that paper bags and Carboys are more ecofriendly than polymer based FIBCs.

"FIBCs (PP) may not be bio-degradable, but so what? Why not design articles which can be 'recycling friendly'," said managing director Makrand Appalwar, who is also a polymer technologist.

"Emmbi has developed an FIBC which is made completely out of a single homopolymer. This helps user companies recycle the bags at the end of their first life cycle in the single processes. This is done by homogenising all the components such as stitching threads, B-locks, filler cords, liners and various other components going into the bag."

According to Appalwar, this makes Emmbi's FIBCs easier and cheaper to recycle and therefore supports the company's vision to prevent any of its products ending up in landfills. The recycled palates received from its FIBCs go on to be used in the injection moulding industry.

Contrary to the belief that natural materials like jute or burlap and paper are more eco-friendly as a packaging material, Emmbi says its widespread research has provided data that proves otherwise. (See table.) Emmbi manufactures 600,000 FIBCs of various types and sizes, every single month, across their four manufacturing facilities in and around Silvassa, near Mumbai, India.

Emmbi reports packing close to 65 percent of all the major detergent sold in India and distributing FIBCs and other woven PP & PE material to customers in more than 45 countries across five continents.

Annual Review – FIBCs

Comparative Study of Eco Friendly Woven Polymer Based Packaging Over Conventional Paper Based Packaging Assumption: For Packaging 1 Million Tonne of Bulk Cargo (Like Chemicals or Food Grains or Fertiliser)

"2310 MT" polymer (PP) will be required for 1 mio MT of bulk cargo packaging			"7200	MT" jumbo pape 1 mio MT of bulk		red for	
Stage I: From crude derivative to plastic granules in refinery		Stage I: From trees to the jumbo paper rolls in papermill			apermill		
Resources consumed	Energy Required (in 1000 GJ)	Fresh Water Used (1000X LAKH LITRES)	Chemials Used in Processing (in MT)	Resources consumed	Energy Required (in 1000 GJ)	Fresh Water Used (1000X LAKH LITRES)	Chemials Used in Processing (in MT)
Production of plastic from crude RM	180	1.5	0.015	Production of paper from wood pulp	615	17.5	4500
Stage II: From plastic granules to usable plastic bags		stic granules to usable plastic bags Stage II: from jumbo paper rolls to usable paper bags					
Production of bags from plastic granules	50	1.0	negligible	Production of bags from paper	55	negligible	negligible
TOTAL	230	2.5	0.015	TOTAL	660	17.5	4500
Stage III: Transportation required to move plastic woven bags from factory to packaging unit			Stage III: Transportation required to move paper bags from papermill to packaging unit				
USAGES (TRANSPORTATION PER 100KM DISTANCE, 9	EXCESS FUEL (X 1000 LITRES)	EXCESS ENERGY (GJ)	CHEMICAL USED in MT	USAGES (TRANSPORTATION PER 100KM DISTANCE, 9	EXCESS FUEL (X 1000 LITRES)	EXCESS ENERGY (GJ)	CHEMICAL USED in MT
TONNE TRUCK LOAD AND 3.05 KM/L FUEL CONSUMPTION)	TAKEN AS BASIS (ZERO CONSUMPTION)	TAKEN AS BASIS (ZERO CONSUMPTION)	NA	TONNE TRUCK LOAD AND 3.05 KM/L FUEL CONSUMPTION)	16.6 times more than polymer based packaging	927.9 times more than polymer based packaging	NA
Stage IV: Ener	gy saving & recovery	y in recycling the use	d plastic bags	Stage IV: Ene	rgy saving & recovery	y in recycling the use	ed paper bags
	RECYCLING	INCINERATION	CHEMICAL USED in MT		RECYCLING	INCINERATION	CHEMICAL USED in MT
Recycling & waste management	(ENERGY SAVING THOUSAND GJ)	ENERGY RECOVERY THOUSAND GJ)	NA	Recycling & waste management	(ENERGY SAVING THOUSAND GJ)	ENERGY RECOVERY THOUSAND GJ)	NA
	45	100			35	170	



Flexible Intermediate Bulk Container

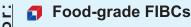
Rishi FIBC Solutions Private Limited

First totally integrated air conditioned clean-room (2 Lacs Sq. Ft.) manufacturing facility in Gujarat certified by

The American Institute of Bakers – AIB ("Superior" Grade)

& British Retail Consortium – BRC ("A" Grade)





	1 Ood-grade 1 1003
101	Pharma-grade FIBCs
eq	Conductive Type C Bags
	Dissipative Type D Bags
specialized	UN Bags
o e c	Baffle LDPE Liner Bags
	Net Baffle Bags
C B	Container Liners
L	Aluminium & EVOH Liner Bags



Mahuvad - Ranu Road, Ranu, Padra Dist. Vadodara - 391 440, Gujarat, India. Tel.: +91 2662 305 000 Fax: +91 2662 305 015 E-mail: mail@rishifibc.com Url: www.rishifibc.com

Annual Review – FIBCs



A quick word with...

Lewis Anderson, Executive Director, FIBCA

What are the aims and objectives of your organisation?

The mission of the Flexible Intermediate Bulk Container Association (FIBCA) is to motivate customers to use FIBCs to maximise their profitability, safety and sustainability; and to educate its members about regulations and standards, promote the use of their products, and to be a strong voice for the FIBC industry with regulatory agencies around the world.

Some of the activities we have undertaken to fulfil our mission include the creation of: Safe Handling Guidelines for FIBCs; Reference Label and Safe Handling Pictograms; Buyers/Design Guide; Recycling and Reuse Services Directory (collection, material handling, conversion, closed loop refurbishing and open loop refurbishing); Reuse Guidelines; Glossary of Terms; Industry Advisory Panel (Providing a forum to address end-user issues and obtain feedback on FIBCA initiatives); Code of Conduct.

FIBCA also issues periodic industry updates and holds two conferences a year to educate members on a variety of topics. The conferences include committee work sessions where members help develop new educational materials and address current industry issues.

Has the role and usage of FIBCs changed significantly in the past decade?

Yes, based on import numbers for the United States, Canada and the EU27, the usage of FIBCs has more than doubled in the past decade. Along with this increase, the role of FIBCs has evolved to a point where it is a common method for transporting a wide range of products. One of the most significant factors for the growth in usage can be attributed to conversion. The conversion from smaller bags and drums to FIBCs continues to increase. The change is typically driven by either economic or ergonomic factors. Once in place, customers also find greater accuracy (vs. batching by a multiplier of smaller bags) and greater productivity (time savings of semi-bulk systems vs. human interface with smaller containers). Another area where we have also seen a steady conversion is in the plastic resin industry. We continue to see a conversion from Gaylord boxes to FIBCs. The

Lewis Anderson, Executive Director, FIBCA

advantages here are both economic and ergonomic. The weight of the packaging is significantly reduced by converting to an FIBC and it is much easier to discharge the contents with the bottom spout on an FIBC.

Can you provide a little history about the FIBC?

Flexible intermediate bulk containers, also known as 'bulk bags', were first manufactured sometime in the late 1950s

or early 1960s. The specific year and location continues to be debated; however, FIBCs were being manufactured around this time in the United States, Europe and Japan.

The first FIBCs were constructed of heavyduty PVC-coated nylon or polyester. The initial cost of this type of FIBC was high so they needed to be reused to be cost effective.

The next stage in the evolution of FIBCs occurred in the late 1960s-early 1970s. High-strength lightweight polyolefin fabrics (ie, polypropylene) were developed and the technology was used to develop the FIBC designs we commonly see used today. Again, there is some debate over the exact date and location where this transformation first occurred; however, it is known that experimentation with woven polypropylene FIBCs was occurring in the USA, UK, Japan and Canada around this time.

The rapid growth in the manufacturing and use of FIBCs first occurred in Europe. Due to the oil crisis of the 1970s, the oilproducing countries of the Middle East suddenly required large quantities of cement. FIBCs were used to transport the cement from numerous European locations. The success of these cement shipments opened the door for the early adoption of FIBCs for a wide range of dry goods in Europe.

Growth in the USA was slower than in Europe until about 1984 when FIBCs began to be used to transport hazardous materials under US Department of Transportation exemptions. The early adoption was more gradual in the USA but FIBCs are now used for the storage and shipment of virtually every type of dry good.

What interesting developments can you tell us about?

FIBCA has long participated in various industry conferences and trade shows but we have a new initiative we are excited about. FIBCA has established an Industry Advisory Panel which will be a conduit between the association and FIBC customers. This will provide a two-way flow of information which will help FIBCA respond to the industry needs and issues. By providing a voice to our industry's customers and end users, we believe that FIBCA can become even better at meeting the needs within our industry. advantages over other packaging options

- FIBCs have integrated handling features so no pallets are required
- FIBCs can be customised to the needs of the customer
- Filling and discharging features, liners and coatings
- Static dissipative properties
- Food grade and pharmaceutical applications
- UN certified for dangerous goods
- Before and after use they can be compactly folded so they take up very little space
- FIBCs can be used to transport and store of a wide variety of materials including chemicals, food, agricultural products, minerals, plastics, pharmaceuticals and much more
- FIBCs can be recycled

How competitive is the FIBC market for manufacturers?

The market is very competitive if you are just looking at price, but price is really the least important item when selecting a FIBC supplier. At FIBCA, we believe that quality control procedures, knowledge of industry standards and regulations, customer service, manufacturing facility certifications, etc, should be the main focus. There is much more to packaging than price. A failure to focus on what truly affects performance can cost far more than what may be saved on the front end.

In your opinion, how do companies stand out and maintain competitiveness?

I feel that a company stands out based on what they bring to the table; quality control procedures, knowledge, customer service, facility certifications, performance testing (UV, tensile, top lift, etc) and by highlighting how those items impact the ability of the FIBC to perform consistently in the field. At FIBCA, we believe we need to change the discussion to focus on, "What is the cost of guality?" Customer feedback and news are now distributed at a dizzying pace so it's critical that FIBC users take steps to ensure they have a FIBC designed to meet their needs and that it's backed up with the knowledge and expertise needed to ensure consistent performance. A company's reputation depends on selecting a solid FIBC supplier.

Shipping dangerous goods obviously has many differences. To what degree is the safety of materials shipments coordinated at an international level? Ensuring the safety of dangerous goods shipments starts at the UN level and it's critical to monitor all of the additions and changes that are constantly being proposed by the members. The UN activities directly impact the FIBCA member companies which are spread across five continents. Everything from what dangerous goods can be shipped in FIBCs to the marking and testing requirements begin with the actions of United Nation's sub-committee of experts on the transport of dangerous goods. At FIBCA we have two very important affiliations which allow us to monitor and comment on issues that impact the use of FIBCs for dangerous goods. The first FIBCA affiliation is the International Confederation

of Plastics Packaging Manufacturers (ICPP) which has consultative status in the UN Committee of Experts on the Transport of Dangerous Goods. The ICPP monitors proposals at the UN and is able to comment, propose changes, etc, on behalf of FIBCA and the other ICPP members. The second important FIBCA affiliation is the Dangerous Goods Advisory Council (DGAC). Through our membership in the DGAC we are able to stay informed of developments impacting all areas of dangerous goods transportation. Our DGAC membership also provides us with access to a wealth of technical expertise and a valuable conduit to regulatory bodies.

What effect do rises in energy and raw material prices have on the industry?

We're all feeling the impact of higher prices in our day to day life and the FIBC industry is no exception. While higher prices provide challenges, they have also resulted in growth. Increases in transport costs have highlighted the low package to product weight ratio of a filled FIBC and the compact lightweight nature of an empty FIBC. As costs increase, the freight advantages of FIBCs will continue to drive conversion from other types of industrial packaging.

Reconditioning of FIBCs is obviously a sustainable option, what are the pros and cons of this?

The reuse and reconditioning of FIBCs can be cost effective and can reduce a company's environmental impact, but it is critical that procedures are in place to ensure that the FIBCs continue to meet or exceed industry standards. Each situation is unique, so reuse needs to be evaluated on a case by case basis. The FIBC design, product and distribution environment all need to be considered to determine if reuse is an option. FIBCA has created a directory of companies that can help determine if reuse is an option and if so, what cleaning, inspection, and performance verification procedures will be required. General reuse guidelines have been included in the directory which is also available at www. fibca.org.

In short only FIBCs that have been designed for multiple use according to the latest version of the ISO 21898 standard should be considered for reuse. FIBCs should only be reused within a 'closed loop' system, in which the FIBC is cleaned, reconditioned and qualified for reuse to handle the same product in the same application for which the FIBC was originally designed. A 'closed loop' system usually involves the co-operation of the FIBC manufacturer, the purchasing customer and the end user.

What benefits are there of using FIBCs over similar methods?

FIBCs have many benefits over other types of industrial packaging. Some of these include:

- A very low package to product weight ratio. An FIBC weighing 2-4kg is commonly used to ship 1000kg of dry goods
- An empty FIBC is lightweight which provides significant freight cost

What does FIBCA hope to achieve in, say, the next five years?

We recently celebrated our 30th year with 75 member companies located on five continents. While we expect to continue to see growth in membership, our focus will continue to be to motivate customers to use FIBCs to maximise their profitability, safety, and sustainability; and to educate our members about regulations and standards, promote the use of their products, and to be a strong voice for the FIBC industry with regulatory agencies around the world.

Annual Review – FIBCs

council has a term of two years and a new set of office bearers is elected

members and receive aid from other associations, bodies and government

The association also strives to establish technological capabilities that

match international standards. Primarily formed to promote the use of

providing international recognition. Formed in the year 2002 with just six

members the association has grown to encompass 27 companies today. It

represents almost 90 percent of the Indian manufacturing capacity and is

a vibrant and active organisation. India today produces FIBCs to world

standards and is a globally accepted sourcing point for high quality bulk

establishment of quality standards, assisting quality up-grading and

FIBCs, IFIBCA acts as a catalyst for expansion in export growth,

at its AGM. This organisation will also facilitate, get affiliated, admit

for the promotion of the objectives of the association.

Indian industry well-represented

With many leading FIBC manufacturers now located in India, the Indian Flexible Intermediate Bulk Container Association (IFIBCA) was formed in 2002 by the country's producers.

ndia's FIBC industry has grown fourfold in the past decade – from 40,000 tonnes a year to 160,000 tonnes. Just as significant the percentage of food grade FIBCs has also shown a big increase. When the association was founded in 2002 food grade production represented just over 8 percent of total output; in 2011 this had climbed to 25 percent.

In order to support this growth, IFIBCA runs many programmes to help its members. Membership is open only to manufacturing units having completely integrated facilities from tape lines, weaving, lamination and conversion to bags. The governing council consists of eight office bearers. The president heads the council and is supported by a vice president, the immediate past president and five other members who represent the five zones of the country - north, south, west, east and central.

The general secretary is ex-officio member of the governing council. The

Fluid-Bag looks to mining

Luid-Bag Ltd has partnered with South African-based Engen Petroleum to pioneer the introduction of Fluid-Bag systems in mining operations in sub-Saharan African nations including South Africa, Mozambique, Angola, DRC, and Ghana.

For the past 30 years the Finnish company has developed and manufactured a range of 900 and 1000 litre flexible one trip containers.

A Fluid-Bag is a flexible IBC for storage and transport of industrial volumes of liquids and semisolids. The plastic foils in contact with a liquid can be altered, according to the type and characteristics of a particular product. The container is a sealed system avoiding air ingress during filling or

discharge, maximising product protection against, among other things, moisture, UV, air born bacteria and contaminants. The Fluid-Bag is claimed to ensure consistency and cleanliness of product, reducing down time and maintenance, especially important where machinery is operated in harsh mining environments.

bags.

According to Fluid-Bag, mining companies and equipment operators have come to value and take advantage of the benefits of contaminant free greases and lubricants. Using the flexibility of the Fluid-Bag, lubricant residues are reduced to a minimum, and equally with grease products as low as 0.5 percent when discharged in conjunction with Fluid-Bag handling equipment.

Fluid-Bags are today widely transported by rail, globally by sea container and proven excellent for long and short haulage under extreme conditions. Another benefit is that Fluid-Bags reportedly weigh an average of 70 percent less in gross transport mass compared to most drums.

Important from an environmental perspective, all the components that make up a Fluid-Bag are fully recyclable. Handling of waste oil is increasingly an environmental hazard especially in the early phases of a mining operation. Some sites use emptied Fluid-Bags for temporary waste storage pending disposal via the correct authorities. Used Fluid-Bags are foldable which allows scanning in high security areas such as diamond mines.

Lohia machines

ohia Corp is aiming to assist the Lincreasing numbers of companies diversifying into FIBCs manufacturing with its high productivity machines. It expects this increased demand for FIBCs as plastic woven sack producers look for better margins compared to regular bags.

Some of the world's leading FIBC producers already use Lohia machines from PP granules to woven fabric. For the raffia industry, the company offers two models of tape extruders in five different extrusion capacities with a range of downstream configurations, 10 types of tape winders, 12 models of circular looms with variants, extrusion coating line, high speed flexographic printing machine, bag cutting-stitching line, fabric cutting lines for FIBC applications and spin-draw-wind lines for producing high tenacity PP yarn.

From standard 25 or 50 kg bags and big bags of up to 2000 kg capacity to specialised applications such as geotextile and tarpaulins, Lohia claims to offer solutions for most products.

The company has to its credit a number of innovations that have been successfully launched and adopted by bag producers. The most significant is the autoroto, the tape winder with automatic transfer mechanism to produce tape bobbins of equal sizes and the duotec tape extruder that uses a two stage stretching technology to reach production speeds of up to 600m/min. Another product that Lohia has developed is the Lofil for production of PP Multifilament yarn by spin-draw process. It is suited to bag producers who would not like to depend on external suppliers of a vital element in bag making - the PP high tenacity yarn.

International standards are waiting to welcome you to India.

Where the technologies and practices of the West intersect with the commitment and cost benefits of the East, you will find Neobags. While our factory sets standards in India, our diligence exceeds expectations around the world. So drop us a line and discover just how welcoming a Neo way of working can be.

www.neobags.biz



17,000 sq. m. campus • World-class machinery • State-of-the-art laboratory for development & testing • Installed capacity of 400 MT/month Convenient access to Mumbai's ports • Focus on creating customised solutions

Plot No. Z/73, Z/74 & Z/75 Dahej SEZ (Part 1), Vagra, Bharuch 392140, Gujarat, India. E: info@neobags.biz

Do you prefer a headache Or safe sacks?

We are uniquely suited to be your productivity partner.

With the most comprehensive portfolio of flexible industrial packaging and products, unparalleled manufacturing and technical resources and customer service centers across the globe, Greif Flexible Products & Services helps your supply chain run more efficiently.

Your Supply Chain Productivity Partner















Flexible Products and Services

greif-flexibles.com





Annual Review – FIBCs

Rishi hits 5m

Rishi has hit the targets of producing 5 million FIBCs annually and achieving 95-100 percent utilisation within the space of six years. Joseph Francis, Rishi's executive director and CEO, attributes this to the knowledge of his team of 25 engineers who have worked hard to make the company's vision a reality by continually striving to create a quality product.

"Our vision is to be a quality producer rather than going after quantity," he said. "To produce a quality product, you need knowledge, experience, a good facility and more than anything a clear-cut strategic vision. When we set up our production facility, we set our target also to become the global supplier of choice by the year 2016.

"2016 is not very far, but I am very confident of achieving the same with our in-depth knowledge, experience of about 20 years in this industry and our burning desire to be a quality producer. This is evident from the market share we enjoy today."

According to Rishi, it is the only FIBC manufacturer to retain its AIB Superior category rating and BRC A grade this year despite a tightening of standards. The India-based company also says it is the only FIBC producer in the Asia-Pacific region to manufacture all types of FIBCs.





Barrier foils from Protective Packaging

anchester, UK-based Protective Packaging Ltd supplies a Manage of climatic packaging solutions including its barrier foils for FIBCs.

Polythene liners let water vapour and aggressive gases seep in allowing product deterioration to occur. This can be eliminated by the use of barrier foil liners which are designed to provide protection for dried products sensitive to moisture and other climatic variables. They can also prevent odour transfer either into or out of the product.

Combined with a barrier foil liner, FIBCs can be used to pack bulk products which previously had to be shipped in sealed containers such as steel, plastic or fibreboard drums due the FIBCs inability to provide complete climatic protection for very hygroscopic and oxygen

Protective Packaging Ltd says its barrier foil liners offer a 40 percent increase in shipping space efficiency over drums

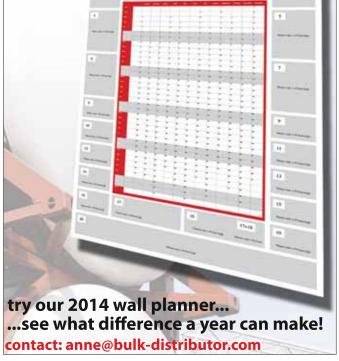
sensitive materials.

Protective Packaging says combining the barrier foil liner with an FIBC not only offers material cost savings but, in addition, shipping space efficiency can be improved by up to 40 percent compared with drums.

All liners are tailor made to suit the dimensions of the FIBC and can be made open topped, with a flat base or with filling and/or discharge sprouts, to ensure safe filling and emptying of the FIBC. Liners can be fitted with valves that facilitate gas flushing of the liner allowing residual oxygen to be displaced, vacuuming of the liner and taking samples of the residual air for analysis without the need to open up the hermetically sealed liner.



isbir Sentetik READY FABRIC STOCKS ARE AT YOUR SERVICE





Would you like to have your BIGBAGs within 12 production days?

ISBIR SENTETIK DOKUMA SANAYI A.S. Cavirhisar Mevki, 10034 - Balikesir / TURKEY

Tel +90 (266) 283 00 00 Fax +90 (266) 283 00 01 info@isbirsentetik.com sales@isbirsentetik.com www.isbirbigbag.com

isbir Sentetik

Annual Review – FIBCs



A quick word with... Joseph Francis, Executive Director & CEO, Rishi FIBC Solutions

Can you give a brief history to RISHI FIBC Solutions?

Rishi FIBC Solutions Pvt Ltd was established in 2007. We occupy a 200,000 sq ft fully air-conditioned facility with "Hepa Folteration" which is specially designed to produce food grade and pharma grade bags. Rishi FIBC has food grade certifications from British Retail Consortium, UK (BRC) with 'A' grade and American Institute of Baking, USA (AIB) plus superior ratings other than ISO 9001:2008 and ISO 22000:2005. Rishi is the only company in South Asia which has achieved superior category rating in the AIB audit on three consecutive occasions and the only fully integrated company in the world to have an AIB Superior rating last year after AIB

...a word from the manufacturers, Rishi FIBC Solutions

tightened its standards. Currently, Rishi FIBC caters to the European, African, US, Australian and Japanese markets.

How has the company developed over the past 6 years?

Rishi FIBC started its operation with a turnover of US\$ 1 million dollars in the first year which increased to \$30 million last year. It has developed as a quality manufacturer and created a name in European, American, Australian and high demanding Japanese markets.

How competitive do you consider the market you operate in? What do you offer to your competitors to create customer loyalty?

We consider this market as extremely competitive and we operate in the high end chemical, industrial and food industries where quality is the main criteria rather than price. We have created a ripple effect by offering a high quality FIBC at an affordable price level. As a policy, we do not compete with others in the distribution segment. If possible, we try to work with one customer in one country and if that is not possible we will quote only to the customer that approaches us first.

What is important when manufacturing an FIBC? What determines a good product from a poor product?

According to my knowledge, the global FIBC industry is not an organised sector. I am happy to say that ours is a system-driven company rather than just a people-managed company. There are so many factors that determine quality of product. It begins with the packing, appearance of the end product, safety factor, safe working load, cleanliness working atmosphere, infrastructure, etc. Since we are in the high end product manufacturing line, hygiene practices are very important.

Which bulk products cause the most problems when being transported in FIBCs?

According to me, very poor quality products make a very big problem as the end customer that handles the bag does not have proper knowledge about handling FIBCs even though all handling instructions are clearly mentioned in the label. It is unfortunate that a very low price FIBC can create a big problem in the handling stage, eg, the building industry. The current economic climate in Europe is a challenging one for many businesses, how has it affected Rishi? The current economic climate in Europe has not made any significant difference in Rishi's operations. As mentioned above. we are in the high end markets and the shrinkage in demand in the food industry or high end chemical industry has not been that great. We get more and more customers from the high end chemical and food industry with the recommendation from these industries in Europe and have steadily increased our business over past few years. From 2008 onwards we have achieved a growth rate of about 40 percent year-on-year. From this scenario, it is obvious that the current economic climate in Europe has not made any significant change to our operations.

What are your plans for expansion?

This is a good question and I do not want to give a vague reply to the market. We are looking forward to meeting our customers' exact requirements and I assure all of them that their requirements will be fulfilled without problems. Currently, we are dispatching about 600 containers, ie, around 5 million bags a year and we are looking forward to a great future in this business with our partners in Europe, USA, Australia & Japan.



Grayling lines them up

Grayling Industries is a North American manufacturer of specialised flexible film products for industrial applications. Although its primary products are IBCs and liners and products for contamination control on asbestos abatement projects, it also manufactures FIBCs for dry bulk products.

Brands include Guardian IBC container liners for liquid and dry applications and PaperIBC containers. Grayling distributes the PaperIBC one-way, corrugated tote for bulk liquids and the Buckhorn Citadel rigid, collapsible, reusable tote also for handling bulk liquids. It also makes available FIBCs with Guardian form fit liners. These liners 'form fit' the interior of drums, bins, boxes, totes and almost every type of IBC, from 55 gallon drums to 330 gallon totes for liquid products, to Gaylord boxes and bulk bags, or FIBCs, for dry flowable materials.

By form fitting a liner to the inside of the container, the company says industrial processors of liquids and dry flowable materials are able to realise gains in efficiency in operations, including: helping to insure fill consistency, speed filling and/or dispensing of product, reducing the amount of residual material left after dispense, eliminating production problems due to liner issues, reducing freight and warehousing costs, eliminating container cleaning costs and reducing overall waste.

Grayling brands include Guardian IBC container liners



Global Presence 65 Countries

850 Tapelines • 36,000 Looms

30 years of excellence

With over three decades of experience and as a leading global supplier of machinery for plastic woven fabric, Lohia delivers reliable and competitive products to its customers. These products, in turn help our customers reduce the cost of quality.

www.lohiagroup.com

D-3/A, PANKI INDUSTRIAL ESTATE, KANPUR 208022, INDIA T: +91 512 3045100 | F: +91 512 3045299 | E: sales@lohiagroup.com

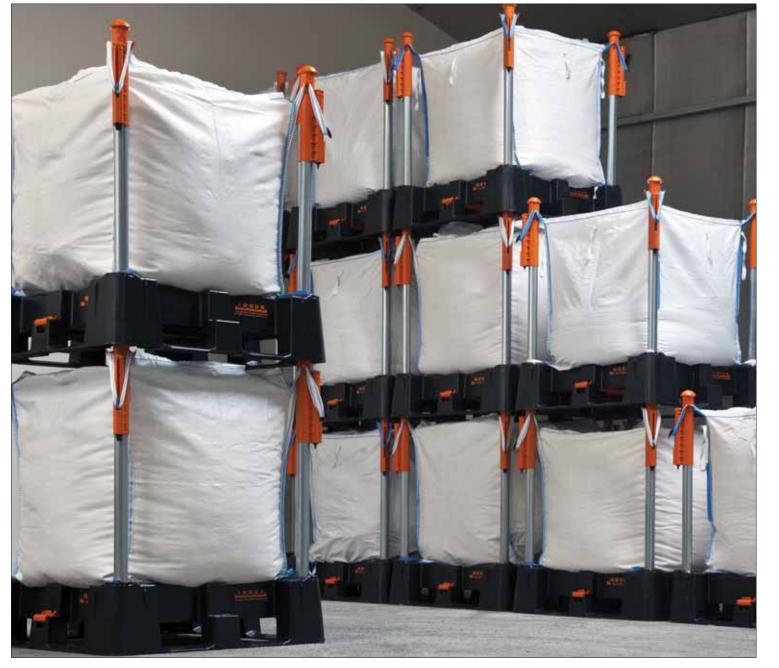


TAPE EXTRUSION LINE • TAPE WINDER • CIRCULAR LOOM • EXTRUSION COATING MACHINE Printing Machine • Bag conversion system • Multifilament Spin-Draw-Wind Line

Delivering Advantages



Annual Review – FIBCs



Indus integrates

ndus Integrated Bulk Logistics hopes to provide an extra dimension in the safe storage, transport and discharge of solids in 'bag bags' with the Indus Neva. The Indus Neva is the second product development from the Netherlands-based company which has its head offices in Veenendaal.

In 2009 Indus introduced the Conbox (now called Indus Isar) for stackable storage and handling of bulk materials in big bags at a volume of 1 cbm. The Indus Neva is equipped to handle and stack solids at volumes up to 2 cbm. Although the standard volumes are 1 cbm, 1.6 cbm and 2 cbm, systems for every other volume can be provided (at customer request) by adjusting the height of the four stacking poles.

The Indus Neva is already in use in logistic environments for different bulk materials such as granules, powders, seeds, nuts, etc.

According to Indus, the possibility of safe stacking and easy discharge are the main advantages of the system. In food-related areas the hygienic characteristics play an important role. If not in use or on an empty return transport the volume of the Indus Neva can be decreased to 20 percent of the original volume. The openings in the bowl-shaped bottom part give the possibility to store up to 40 stacking poles.

The Indus Neva is equipped to handle and stack solids in big bags at volumes up to 2 cbm



At Emmbi, we're constantly working to make our products and services more reliable, less expensive and more eco-friendly. We do this by combining our understanding of your business, our expertise in polymer processing, our state-of-the-art manufacturing processes and innovative product applications. The result? Satisfied customers. Happier employees. Supportive vendors and partners. And, ultimately, a happier world around us.

Talk to us today, to find out how we can make a difference to your business.

• FIBC • CONTAINER LINERS • ANTI-CORROSIVE VCI PACKAGING • FLEXI-TANKS

6th Floor, Hari Om Chambers,Off New Link Road, Andheri [West],Mumbai 400 053, INDIA. Call us at : Tel.+91 22 6784 5555, Fax: +91 22 6784 5506. sales@embbi.com



12 • BULKDISTRIBUTOR

Annual Review – FIBCs

July/August 2013



A quick word with ...

Metin Gultepe Executive Director & CEO ISBIR Sentetik

Milestone: € 35,000,000 capital increment in ISBIR and new management

Mr Metin Gultepe took over General Manager of ISBIR and also acting as CEO of ISBIR Holding as of May 2013. ISBIR has completed considerable investments during the last decade, and recently increased its capital for another EUR 35 million.

Can you give a brief history of Isbir? Isbir was founded in 1968, and became a subsidiary of Isbir Holding Company, which has investments in several different industries. When FIBC usage became popular in the 1980s all over the world, but mainly in the USA and Europe, Isbir started big bag manufacturing and soon became a recognized and trusted FIBC manufacturer after less than 10 years in business.

What about investments accomplished by Isbir ? In order to offset increasing global competition, Isbir started a big investment

project in 2005. While annual production capacity was 6.5 million big bags in 33,000 sgm (355,000sgft) of manufacturing facilities until 2004, in 2010 production capacity rose to 15 million units under 180,000 sqm (1,900,000sqft) of in-door area within three plants. All these plants have been equipped with modern technology, and are based in Turkey. In order to ensure consistency in product quality, 100 percent vertically integrated production facilities are in operation. All incoming materials are produced in our own facilities with Isbir quality to achieve maximum performance of end product. Food grade production is carried out under this 180,000 sqm plant area. Additionally, to meet and serve the different needs of customers, an ISO8 (Class 100,000) clean room has been available since 2011. Both food grade and clean room facilities are audited periodically by independent organisations - especially the clean room where pharma grade production is taken care of. This clean room is a unique production facility in the world under ISO8 specified 'ultra clean' conditions.

Why Isbir mainly focused all investments in Turkey?

Turkey, having a growing economy and stable position, offers the right business

...a word from the manufacturers, ISBIR Sentetik

environment for a company which takes into consideration 'sustainability'. That's why; Isbir has made all its investments in Turkey.

What are the fundamental reasons for accomplished investments?

While planning our investments, the most important issue is to be customer-oriented. Investments are designed in such a way to provide goods to customers at a higher quality and in shorter production time. We can produce high quality products at larger quantities by means of state-of-the-art machinery. Our production capacity, machinery park and ready fabric stocks gives us a 10-day (on average) production time for a big bag. This guick production time gives unique advantages such as minimisation of warehousing cost, flexibility in production planning, urgency in demand to our customers. If we compare the lead time from the Far East to Europe, the importance of our short production time will quickly become apparent. Based on the current product segmentation, we are able to serve all kind of customers who need different bigbags. Quite large needs of different industries, from standard industrial grade bags to ISO8 Clean Room grade bags are supplied by Isbir.

This is because we have focused on the following three elements: short production time, consistency in quality and a wide ranging product portfolio.

What is the importance of management change for Isbir?

Completed investments for construction of new production facilities and modernisation of the machinery park, together with capital increases of €35 million enables Isbir to satisfy and provide quick and quality service to our valuable customers.

In times of increasing global competition, customer satisfaction can be ensured only by means of 'quality conscious and reasonably priced products. To achieve this, conventional production methods should be replaced by modern techniques supported by the latest technology. Isbir always focuses on customer satisfaction. Beside of all our completed investments, reorganisation eventually becomes an integral part of this goal.

What are your thoughts about the future of global FIBC markets?

The world-wide recession also affects manufacturing companies that supply packaging materials to industry. In order to overcome such times, R&D activities have gained more importance than ever, as has the supply of alternative products to our customers and gaining their confidence, which has helped Isbir to stand one step forward in the competition. Also, studies conducted together with our customers, where the FIBC is a dominant packing method, have resulted in a demand for products respectful to the environment, having multiple uses with low carbon footprints.

Quality control at Mayur

Mayur Woven Pvt, India's largest exporter of PP/PE woven products, is pleased with the progress it has made since shifting from the production of small bags to FIBCs only 30 months ago.

It reports annual sales of 2 million FIBCs in various industries including fertiliser, seeds, chemicals and cement. It adds that the reason for success is the 100 percent control it has over quality due to its integrated plant with everything being made in-house.

Full traceability of products over the entire production chain, reduced delivery times due to flexible production processes and plant location near to four of India's largest maritime ports is another advantage that Mayur Wovens has.

The current FIBC range includes single loop, two loop & four loop bags with different filling and discharge spouts. It also offers baffle bags, and tunnel bags which can be dustproof. In liners, the company offers normal liners, form fit liners & baffle liners.



Mayur Wovens exports 80% percent of its products to USA, Canada, Western Europe, South America and Oceania. It started a warehousing presence in USA and Western Europe where besides stocking of goods, it has a team of technical sales support who aid customers on all aspects of FIBCs, such as design, cost control measures and improved performance or logistics.

Future plans are to offer clients clean room facilities by the end of this year and to expand its FIBC range to include type C static conductive bags, dust tight bags and net baffle bags.

an ILC Dover Company

Grayling

Mayur Woven reports annual sales of 2 million FIBCs having entered the market 30 months ago

Get the most out of your container Guardian IBC Liners

800-635-1551 • 770-751-9095 • Fax: 770-751-3710 grayling@graylingindustries.com

www.graylingindustries.com

IBCs

No shocks with antistatic additive, says BASF

We are all familiar with the crackling sound and one's hair standing on end when taking off a synthetic sweater – which is at worst mildly

discomforting. In industry, however, the electrostatic charging of plastics can cause the failure of electronic components and computer chips and is even capable of igniting combustible gases, vapours and dusts.

On the surface of a polymer, which is at first electrically neutral, charge may be generated by contact with another surface and subsequent rapid separation. Without suitable dissipation, this charge can neutralise in an uncontrolled and abrupt fashion.

To address this problem, BASF has developed an antistatic thermoplastic polyurethane (TPU) granulate – under the Elastostat brand name in the TPU portfolio. Elastostat is available as a master batch, ie, as a ready-to-use granular mix. The material is part of the Elastollan product range that has been embodying BASF Polyurethanes' TPU expertise for over 30 years.

Most polymers have insulating properties and are therefore susceptible to electrostatic charging. These materials can now be rendered antistatic through the addition of

be rendered antistatic through the addition of Elastostat, BASF says. Elastostat has the edge over existing solutions in that its antistatic effect is permanent and does not require any specific ambient conditions such as a certain atmospheric humidity. Moreover, the product is easy to process. The material is highly compatible with standard plastics like polyethylene (PE), polypropylene (PP), polystyrene (PS) and ABS. Simply mixing it with the polymers yields high homogeneity and thus eliminates the need for elaborate compounding. For the plastics-processing industry, this is of great significance, because usually no liquid additives are processed; 7.5-15 volume percent of the antistatic TPU master batch is added. The properties of the matrix materials are scarcely affected and, thanks to the additive's neutral coloration, the material can be dyed in any desired colour

Plastics with defined electrical properties are capable of dissipating electrostatic charge in a controlled and permanent way. The decisive characteristic for assessing the electrostatic charging or discharging of a material is its surface resistivity. TRBS 2153 (German technical rules for operational safety "Preventing ignition risks resulting from electrostatic charging") defines a



BASF says its Elastostat antistatic TPU granulate is particularly suited to the production of industrial packaging

material's electrostatic properties in terms of its conductive, dissipative and insulating capacities. A material with a surface resistivity of less than 106 Ohm is said to be conductive. Such materials are capable of rapidly dissipating generated charges, and this can cause damage to sensitive electronic components. Materials with a surface resistivity greater than 1012 Ohm are defined as insulating. Most plastics are insulators that are easily electrostatically charged by friction. Owing to their very low conductivity, the applied charges can remain on their surfaces for a long time and electric charging of several thousand volts (on synthetic sweaters, for example) is therefore possible. Materials with a surface resistivity of 106 to 1012 Ohm are termed dissipative and are known as Intrinsic Dissipative Polymers (IDPs). The new antistatic additives cover the range of IDPs.

The new TPU master batch opens up large fields of application, particularly for industrial packaging made of polyolefins. Antistatic treatment is a must for containers in which combustible liquids or dusty goods are transported.

In their most common form, IBCs consist of a polyethylene inner container, a tubular metal outer frame and a pallet. From now on, adds BASF, such containers, which are used for chemicals, foods, cosmetics and pharmaceuticals, can be produced more easily and at lower cost.

Nordic Venture for Schütz, All-emballage

Schütz Nordic and Swedish packaging reconditioner All-emballage have started working together in a partnership. The joint venture sees Schütz Nordic, based in Kongsvinger, Norway, strengthening the company's position in the IBC and reconditioning sector.

Norway and Sweden have a combined area of around 774,000 sq km making it the largest peninsula in Europe. Until now, all Schütz IBC collection and reconditioning services in the Nordic countries have been provided exclusively by the Schütz factory in Kongsvinger. The site is located 100 km to the north-east of Oslo. In August 2011, it relocated to a larger adjacent site and was modernised at the same time, including the installation of new production technology.

All-emballage was founded in 1940 and originally started out recycling steel drums and canisters. In 2000, Jonas Esping took over the company and established it as a specialist for IBC reconditioning. Since then, the company has grown to become one of the biggest companies in this sector in the Nordic region.

Both companies are now working together to recondition used containers. The alliance enables Schütz to meet the increasing market demand for this service in the region. Schütz is also extending its service range, and in addition to classic reconditioning and inner bottle replacement will now be providing washing and other disposal services.

The joint venture allows Schütz to realign the company's logistics in Scandinavia. The specific geography of the region, with it countless islands, fjords and mountain ranges, poses considerable challenges for freight transport. Now, Schütz says it can continue to guarantee swift collection and reconditioning of used containers. Shorter transport routes also help to cut costs and generate fewer CO2 emissions.

Conical space savers

An alternative to the traditional steel drum that offers a saving on storage space, has been launched by UK independent manufacturer Ramsden Steel Drums Ltd. The conical 220 litre open head drums, in a range of four thicknesses, are said to be ideal for

all traditional oil and chemical markets, but are also suitable for food processing industries, powders, metals and wider markets.

"The ability to stack a high number of drums on a single pallet is already attracting a lot of interest from new markets," said sales director Dawn Richardson. "A maximum of 68 drums can be stored on one pallet, compared to the traditional drum storage of four drums per pallet. This could reduce warehousing and logistical costs as less space is required for the storage of these containers."

The steel drums vary in weight between 13kg to 16.5k depending on steel thickness and UN certification and can be supplied with or without head closures or internal lacquer lining.

Richardson added: "Our focus on customer service will remain our priority. Our intention is to expand our range of standard steel drums to include innovative new products and we have commenced with this range of conical spacesavers."





REPACKED TEMPTATION RECOline – For moving packaging solutions

The modular IBC allows easy cleaning and replacement of individual components. Optimum requirements, therefore, for a resource-saving multiple use. With the PACKONE TICKET you ensure the free return of your used IBC (www.werit.eu/ticket-service).*WERIT controls the return of your used packaging, including reconditioning and reuse.

Ask for RECOline. We are happy to tell you more! Phone +44 (0) 161 776-1414 / manchester@werit.eu

To find out more about our IBC range please contact WERIT and we will be delighted to discuss your requirements. Phone +44 (0) 161 776-1414 / manchester@werit.eu

WERIT UK Limited GB-Manchester · Darby Road, Irlam, M44 5BP

IBC - tailor made



14 • BULKDISTRIBUTOR



t has been quite an interesting first half of the year in the world of industrial packaging.

In addition to the usual round of meetings with regulators and enforcement agencies and those specific to the EU Industrial Packaging Association (EIPA) and the UK Industrial Packaging Association (IPA), we had the second International Conference on Industrial Packaging in Amsterdam. This brought together representatives from over 22 different countries – all interested in continuing the development of worldwide co-operation for the transport, use and reuse of drums and IBCs. When discussing the technicalities of performance testing, scope of use, reuse and environmental efficiency, it can be easy to simply consider one's own specific sector of packaging.

The International Conference heard from a number of highly respected experts. One of the presentations was on the progress of developing a carbon footprint to highlight the benefits of using multi-trip, re-useable drums compared to lightergauge, single trip drums. For steel and plastic drums, it looks like being a useful and predictable model to reference; however the model required for fibreboard drums is likely to be quite different, as this material is grown in a similar way to any managed crop and the environmental dynamics do not compare to mineral extraction issues.

When considering just one sub-sector of Industrial Packaging – IBCs – we have a number of further choices, namely 'heavy duty' all-steel units, all-plastic, composite, flexible, fibreboard, not to mention all the various possible capacities. Within this, the composite variety can be large, heavy-duty items (typically bought for repeated re-use within a company's own stockholding) or the very popular, 'lighter-weight' units. However, these are also suitable for a wide range of dangerous goods and are proven to be repeatedly re-useable on an international stage. So trying to develop a single, user-friendly, set of regulations, standards, testing

Packing an opinion...

One Size Fits All?

In the first of a series of articles exclusively for Bulk Distributor, Phil Pease, CEO of the Industrial Packaging Association, discusses some of the most pressing and important issues in industrial packaging.

protocols and environmental performance models can be a very daunting task!

International market

Our well established and truly international framework, managing the complete life-cycle of industrial packaging has developed over many decades and is something of real value - in both economic and environmental terms. That you can purchase, fill and ship a drum or IBC on one continent and it be valued as an asset for refurbishment, re-filling and reuse in a completely different part of the globe is a true example of international co-operation. The same could be said for freight containers of course, but they don't encompass the same range and versatility of use; from multimodal transport across continents to being a part of the actual process operation. Of course, from the days of wooden barrels, these containers have evolved exponentially to what we see today - safely containing a multitude of products, across a range of packaging designs, sizes and materials catering for every sector of industry.

International packaging & environment

Such international use has demanded an equally international understanding and development of rules and standards. Last October saw the publication of the first set of ISO Standards on Packaging and Environment (something for which I was proud to lead the UK delegation on), following a five year programme of global discussions on every packaging type; from drink cartons to drums and from coffee to chemicals. I witnessed firsthand the importance of understanding how even a small change may be of benefit to one packaging sector, yet create a significant problem for another. That is the real challenge – to produce rules and standards that provide true benefit to all the packaging sectors, across all the various aspects of use and on an international stage...not easy!

Global labelling – a hazard in itself?

One of the current challenges for international consistency is the development of the Globally Harmonised System (GHS) of classification and labelling of chemicals. They are intended to make life much easier for companies needing to ensure compliance across the international stage, after all nobody wants the high cost (or practical problems) of using different labels for each country and the risk of long, expensive delays from port and Customs authorities if a label or marking doesn't comply.

So the GHS is necessary and welcome. However, it has hit a snag - and a potentially big one at that! The proposed GHS classifications for corrosive products would place over 90 percent of what is currently Packing Group II or III into the highest danger category of Group I. Immediately rendering millions of established packagings currently in safe use with a wide variety of corrosive products, outside the legal permit for such use. This must be addressed as a matter of urgency and a key topic for debate at the forthcoming round of UN Sub-Committee Meetings in Geneva.

Testing, Testing 1,2,3

The prescribed methods for design-type performance testing and production leak-proofness testing have ensured an enviable safety record for dangerous goods packaging for many years. As with all such things, technologies and process systems have developed and evolved over the years, with a number of 'alternative' methods being adopted by manufacturers and authorised by the various National Competent Authorities.

With closely controlled, high-speed production lines enabling dangerous goods packaging to be produced, to consistently fine tolerances and the necessary tight control over manufacturing costs, it is simply not practical to expect a package to wait for 10 minutes for a leak-test to complete – as required for IBCs in paragraph 6.5.6.7.3 of UN Recommendations. Also, for many of the rigid, composite designs of IBC (referred to by some as 'lightweight' IBCs), the stated test pressure of 0.2 bar will deform the unit to an extent that it is no longer fit for purpose. It may not have leaked (hence passing the test) but is no longer in a saleable condition. This imbalance between the text of the Orange Book and the real-world applications has been sitting on the side-lines, with nobody wishing to raise the issue (for a fear of upsetting the status-quo) for too long.

I for one applaud the Swedish Expert for presenting the paper and opening up the debate as to how the written requirements can be updated, to reflect modern productions systems and performance requirements necessary for today's demands for cost-effective, advanced packaging design-types.

Men (and women) of steel

My sincere respect goes out to those men and women that give up their time to travel to, attend and debate the many important issues that affect industrial packaging at international meetings, trying to keep ourselves and our environment safe. Contrary to the belief of many, these are not to be considered within such genres as highly-paid MEPs, but are more likely to be working within small budgets, demanding the lowest cost travel and tiny B&B style hotel rooms.

Trying to establish and maintain consistent rules for so many products and packaging types, on the worldwide stage, with multiple modes of transport and so many types of products is a truly daunting task – certainly not for the faint-hearted! But then, meeting great challenges brings the greatest rewards – and we must applaud those that rise to meet these challenges on our behalf head-on. Not all the great battles are won overnight by men and women of steel, but, more often than not, by those of greatest determination and resolve.







SEND YOUR PRODUCTS ON THEIR WAY

Follow the latest solutions for packaging logistics. **FachPack: here you find answers.**

You can find even more information at **fachpack.de/answers** – just scan the QR code!



Visitor service Tel +49(0)911.8606-4979 Fax+49(0)911.8606-4978 visitorservice@nuernbergmesse.de



Tank Container Leasing

BULKDISTRIBUTOR • 15

A win-win agreement

Tank containers have long been a niche part of the container leasing business. Among the major global dry van lessors TAL, Cronos and Unitas have built significant tank fleets, but the sector is still characterised by smaller players dedicated solely to tank containers.

A notable absentee from this market, of course, has been Textainer. Operating since 1979, the Bermuda-registered, but San Francisco-headquartered, company is the world's biggest container lessor with more than 1.9 million containers, representing more than 2.8 million TEU, in its owned and managed fleet, as of the most recent quarter.

But it has concentrated on dry freight containers, with some specials and reefers. It has been looking for some time for a way to enter the tank container market, attracted by the potential growth in movements of bulk liquids primarily in emerging markets where this technology is still relatively new and unknown.

However, the need for specialised technical knowledge and understanding of the equally specialised customer base was a high barrier to entry, even for a firm like Textainer. It needed a partner, a market incumbent with the necessary resources already in place.

This was the logic behind the agreement signed in early June between Textainer Group Holdings Limited and Netherlands-based Trifleet Leasing. Under the agreement Textainer will invest in new intermodal tank containers to be managed by Trifleet. Trifleet will acquire and lease the containers on behalf of Textainer, serving as its exclusive manager in the tank container market.

"It's a relatively straightforward deal," Trifleet managing director Philip van Rooijen told *Bulk Distributor*. "Textainer has been looking for a long time to enter the tank container market and came to the conclusion that it didn't seem sensible to make a move on its own. Trifleet is a top five tank container lessor, but just as important it is independent as management owns the company. We wanted to accelerate our growth and so partnering with Textainer means there will be new opportunities in the market for us as well."

In dry freight container leasing, funding costs are critical to success, while in tank containers expertise counts just much. And it is the combination of both factors that will make this agreement work, van Rooijen believes. "What we are creating is an animal that has the twin advantages of competitive funding costs resulting from Textainer's size and market presence, and Trifleet's experience and expertise in purchasing and managing tank fleets. Trifleet has a wide customer base in the liquid and gas chemicals sector, and also the food stuffs business that has very little overlap with Textainer's existing markets. To my mind that makes for a very attractive proposition," he asserts.

In practical terms Trifleet will buy the tanks on behalf of Textainer leveraging its existing relationships with all the major tank container manufacturers. While Textainer will own the units, Trifleet will manage them and they will also be branded in Trifleet's livery and





Textainer is the world's biggest container lessor with around 2.8 million TEU in its owned and managed fleet

decals. Van Rooijen points that this is not necessarily a new business model for the company as it already manages tanks for other investors.

"We will assist Textainer in purchasing the containers because the technology built into each unit, the necessary components, etc, are critical parts of the purchase process and we have the existing relationships with the major manufacturers," van Rooijen adds.

The primary focus will be on brand new tanks, although if an opportunity arises to purchase existing fleets "we will certainly look into it" he says. As of 1 July 2013, Trifleet had a fleet of some 9,500 owned and managed tank containers, excluding containers subject to lease-purchase arrangements. Trifleet's tanks comprise mostly standard ISO units, but the lessor also runs significant numbers of special tanks, such as swap bodies, gas tanks, high-insulated tanks, non-insulated tanks, tanks with baffles, electrically- or steam- heated units and multi-compartment tanks, available for dangerous goods or food grade products. "Textainer has indicated that it is certainly interested in participating in these special tank sectors as well," says van Rooijen

"This is an exciting opportunity and major step for Textainer," commented Philip K Brewer, president and CEO of Textainer at the time of the announcement. "We have long been interested in leasing tank containers, but hesitated due to the need for additional customer relationships and technical expertise which we do not have. Trifleet is a recognised leader in the tank leasing industry known for its deep expertise and professional service and for the superior quality of its containers. We view this partnership as a true 'win-win' for both companies."

However, the scale of Textainer's initial investment remains an unknown. Textainer does not provide forward-looking statements on fleet build-up; all van Rooijen will say is: "We will continue to invest prudently." However, he adds that any purchases have to be commercially sensible for both parties. "Tank containers is a very small market, if the current global fleet size is just over 380,000 that represents just one-third of the annual production of dry vans, so swamping the market with thousands of tanks in one go will not serve any purpose." balance in its customer base through intensified relationships with shippers. "This is particularly important in regions like China where many shippers have little knowledge of what a tank container is, and so it has become a good way for us to educate that market and build solid relationships with customers," he says.

To a large extent dry freight and tank containers occupy separate worlds. There is little commonality in the customer base, and the fact that tanks are highly regulated due to the products they carry calls for deep technical expertise. However, van Rooijen believes there will be other synergies and lessons for both parties arising from the agreement. "In terms of the management of containers I would say that the dry van business is some years ahead of tank containers and so over time I would hope there are things we can learn from Textainer when it comes to pure asset management."



Trifleet MD Philip van Rooijen - We wanted to accelerate our growth and so partnering with Textainer means there will be new opportunities in the market for us as well

In fact he does not even see the need to reach a critical mass on behalf Textainer because that critical mass already exists. "We have an existing customer base and economies of scale in purchasing so Textainer is effectively joining a train that is already moving forwards. Now it can go a little faster."

The partnership should also be ideally placed to benefit from the growth potential of emerging markets. In regions like China, the use of tank containers is growing thanks to rising volumes of chemical products being shipped to, from and within the country, plus a market trend that sees tanks winning share from more traditional transport technologies, such as parcel tankers, road tankers, drums and IBCs.

Trifleet itself used to be focused more on the logistics operators, but in recent years the company has invested time in creating more

Trifleet now has some 9,500 standard and special tanks in its fleet

16 ● BULKDISTRIBUTOR

Tank Containers



Talke has been the agency for NewPort in Saudi Arabia for several years. The joint venture will enable both partners to increase business volumes significantly

NewPort, Talke in Saudi JV

Global tank container operator NewPort has entered into a joint venture with Talke Group's Saudi Arabian subsidiary. The companies have joined forces to support the booming chemical industry in the Middle East. Talke has been an established player in the region for 10 years, while NewPort is strengthening its long-term foothold in the area with the joint undertaking.

S.A. Talke has been the agency for NewPort in Saudi Arabia for several years. The joint venture will enable both partners to increase business volumes significantly and offer a wider range of logistics services in the Middle East. NewPort operates over 13,000 deep-sea tank containers around the world and together with S.A. Talke, will own and operate NewPort Saudi Arabia Ltd. The joint undertaking will be headquartered in Al-Jubail on the Saudi Gulf Coast.

"We have co-operated closely with S.A. Talke in Saudi Arabia for several years. Entering the joint venture is a natural extension of this partnership. Jointly, we are now even closer to our customers in the chemical and petrochemical industry," explained Rob van Mourik, NewPort's Vice President, EMEA. "This new undertaking will enable NewPort to offer its customers in the chemical sector an even broader range of logistics services. And our office in Jubail places us in the heart of the booming chemical industry." NewPort also runs its own office in Dubai and agencies across countries in the GCC region.

Due to the market, Talke's focus to date has mainly been on handling plastic polymers. The chemicals logistics specialist handles around 10 million tons of these intermediates a year. Increasingly, Talke is also offering logistics services for liquid chemicals, the company's core competence, in the region. In this way, it facilitates the developing structural change towards local manufacture of more finished products in the Gulf region.

"We are pleased that we have been able to reinforce our successful partnership with NewPort with the joint venture. Saudi Arabia is the largest of the many GCC markets we are active in," said Richard Heath, director Middle East & Asia at Talke.

Oliver Klingbeil, S.A. Talke's general manager added: "The diversification of the chemical industry in the region and the growing significance of specialty chemicals require a much broader range of services. The demand for ISO tank containers and professional transport services is constantly rising in the Gulf region. NewPort's large tank container fleet and our expertise in materials handling in Saudi Arabia complement each other perfectly. Together, we can handle large volumes for our customers and offer them a genuine full-service package."

New in port

Meanwhile NewPort has opened an office in the Logport area of Duisburg, Germany. Located at Rheinhausen the office is in a wellsituated hub for intermodal and other transport modes. The reasoning behind the new office was essentially to offer NewPort's German customers the opportunity to communicate in their native language and get closer to various market interests and requirements in terms of chemical and food grade bulk shipments in ISO tank containers.

Within the immediate area the office has good connections with rail and barge terminals serving all major the ports of Europe together with the opportunity for hinterland transport. Some 20 minutes' drive away is one of the company's container depots that it uses for repairs, cleaning, heating and storage.

The office officially began operations on 2 January 2013 and is managed by Jörn Römpke as branch office manager and two sales representatives with the ability for further growth.

Another strategic interest planned for the near future is developing the Eastern Europe Market for NewPort Tank Containers, such as Russia, Ukraine, Poland, Czech Republic and Hungary. These areas will also fall under the responsibility of NewPort Germany.



NewPort's new Duisburg office



Odyssey acquires Hawaii Intermodal

Odyssey Logistics & Technology Corporation (OL&T) has acquired the bulk liquid food products transport business of Florida-based Hawaii Intermodal Tank Transport (HITT). The acquisition was effected through Odyssey affiliate OL&T FoodTrans LLC.

HITT operates one of the largest fleet of double insulated and refrigerated ISO tank containers exclusively dedicated to moving food-grade products.

"It is HITT's ability to deliver environmentally-responsible and sophisticated temperature controlled, high purity logistics solutions for road, rail and ocean transport that earned them the competitive edge and impressive growth that drew OL&T's attention," said Robert Shellman, OL&T president and CEO.

As part of the transaction, OL&T will acquire rights to the wellestablished Hawaii Intermodal Tank Transport brand. The new business will be integrated with the intermodal tank services of OL&T's Optimodal business unit under the leadership of Greg Snyder, president of Optimodal, Inc. Following the acquisition, the seller will continue to provide exclusively aseptic transportation of food grade products under the 'AsepTrans' name.

OL&T's logistics network crosses North America, Europe and Asia, serves all transport modes, and moves US\$65 billion in cargo through 200,000 transport lanes and 250 ports using its proprietary global technology platform to improve efficiency, reduce transport costs and provide information to improve decision-making.



New shareholder for Suretank

Norway's HitecVision has bought the majority shareholding in Ireland's Suretank.

HitecVision is a leading investor in the international oil & gas industry and is headquartered in Stavanger. The company's focus is on middle market investments in oilfield services and technology companies, and exploration and production (E&P) companies. Following the transaction Patrick Joy and Niall Lund will retain minority shareholdings in Suretank and will join the newlyconstituted board of Suretank. Joy will assume the position of newly appointed executive chairman of Suretank and will be joined on the Suretank Board by John Fitzgerald, recently appointed as the new CEO of Suretank. "This is a great transaction for all Suretank stakeholders and most particularly for our customer base," said Patrick Joy. "We have established Suretank as the leading global supplier of tanks and CCUs (cargo carrying units) to the offshore oil & gas industry and are excited that HitecVision recognises our best in class customer service and quality standards, our world class operations and our 750 hardworking and dedicated employees. Joy added that the company does not expect any changes in how it does business operationally but will continue to strive for continued improvements in all aspects of its customer-centred solutions. "We welcome on board an active investor that shares our belief in global opportunities and our commitment to the highest standards of customer service and product safety and quality to our many respected clients in the offshore industry."

Worldwide Expertise in Tank Containers

RESPONSIVE

PROFESSIONAL

RELIABLE





www.trifleet.com

 Trifleet Leasing (the Netherlands) B.V.

 Phone:
 +31 78 639 09 63

 Fax:
 +31 78 614 22 10

 info@trifleet.com

Trifleet Leasing (Deutschland) GmbH Phone: + 49 4102 708620 Fax: + 49 4102 7086213 trifleet.com
 Trifleet Leasing (USA) Inc.
 Trifleet Leasing (Asia) Pte Ltd

 Phone:
 +171 39 619 500
 Phone:
 +65 65 352567

 Fax:
 +171 39 611 753
 Fax:
 +65 65 354503

 trifleet.usa@trifleet.com
 trifleet.asia@trifleet.com
 trifleet.asia@trifleet.com

d Trifleet Leasing (Shanghai) Co.,Ltd. Phone: +86 21 54660331 Fax: +86 21 54660332 trifleet.china@trifleet.com

INNOVATIVE

Tank Containers

Langh tank on and off the hook

The advent of the ISO tank container has commoditised the movement of bulk liquids and gases making seaborne transport of such products easier and cheaper. However, there remain some significant costs associated with container handling once the unit is back on dry land.

Notably the have to be lifted using special handling equipment such as dedicated container lift trucks or even reach stackers. These machines can cost several hundred thousand dollars and while that may be in reach for many container terminals and cleaning depots, some facilities may not have sufficient throughput to justify such a large investment.

This is the main reasoning behind a new tank design launched by Finland's Langh Ship Cargo Solutions. The novel feature of the new container is that it is equipped for hook lifting. "Often the on-carriage of tank containers meant for transport by sea is quite expensive on land, as the need for special lifting equipment makes the handling of the containers difficult," said product manager Markku Yli-Kahri.

So just as with the company's other containers, Langh Ship Cargo Solutions' tank container has been equipped for hook lifting has been developed to improve efficiency and save costs. The 20ft tank has a tare weight of 5,780kg and maximum payload of 30,220kg. Capacity is 15,000 litres, and it carries US/DOT, ADR/RID and IMDG approvals.

Yli-Kahri explained: "In addition to the hooks, these containers are tailor made by us in order to ensure that the operations of each customer are as effortless as possible."



Strong demand for Den Hartogh



Den Hartogh has brought forward orders for new 25,000- & 26,000-litre tanks by from Singamas in China for 2013. Strong customer demand was cited as the main reason for requesting the new tanks earlier than scheduled. In addition to this, Den Hartogh has recently placed an order for 500 units at Welfit Oddy and Singamas. The extra tanks will also be added to the fleet in 2013. Director Hans Ekelmans of the Business Unit Den Hartogh Global said that in the first guarter of 2013 Den

Hartogh Global performed significantly better than planned. "Business has more than doubled compared to 2012 and fleet utilisation has improved strongly. This positive development is taking place at offices in Asia (Singapore), Americas (Houston) and Europe (Le Havre and Rotterdam). The strongest growth has been seen in the Middle East region, managed from our Dubai offices.

The fast growth of 'Global' made the decision to bring forward the orders possible. "With the Den Hartogh teams in Singapore, Dubai, Houston, Le Havre and Rotterdam, we are succeeding in servicing our customers globally. The reactions from the market are very positive. In all regions we see a clear positive trend in business volumes. The target for running a tank fleet of 5,000 units in the global fleet by 2015 is clearly within reach. "Since the start of Den Hartogh Global in 2011 we have worked hard on building a global organisation with uniform and customer-focused processes and systems. We wanted to offer customers the well-known Den Hartogh service level and smart logistics."

Latest @tco depot audit

Reginald Lee, president of the Asian Tank Container Organisation (pictured second from left), presented a plaque to the latest depot to be audited by @atco, at the organisation's General Meeting held in Singapore on 8 May 2013.

Lee handed the plaque to Teo Choo Chan, general manager of Daya Ncho Snd Bhd depot in Malaysia.

In his introduction to the meeting lee said that Asia now produces most of the world's 20ft ISO tank containers with over 22,000 produced in 2012 and he fully expected a similar number to be manufactured by the end of 2013.

"In order to help and assist this growing expansion we need to make sure we have the correct infrastructure available to clean, maintain and repair the tanks to the required industry standard otherwise this will cause a bottle neck that will slow down the growth," he commented.

"At @tco we have made a good start with our depot audit scheme but now we need to expand this much quicker to ensure the depots that will be needed are available in every Asian country."



NewPort we never stop.

NewPort Tank Containers is a leading, global tank container operator, specializing in the transportation of liquid chemicals and food in bulk.



NewPort Offices are located in: U.S.A. • The Netherlands • France Germany • U.A.E. • Brazil • Mexico China • Singapore

www.newporttank.com

18 • BULKDISTRIBUTOR

Tank Containers



TWS growing its network

To meet the challenges of today's market tank leasing company TWS is working on the expansion of its world-wide network.

Over the past 12 months TWS has emphasised the establishment of a worldwide network of representatives and special workshops, expansion of its container fleet as well as the lining fleet. Because of the increase in the worldwide network TWS says it can react more efficiently and directly to customer enquiries: "Having local contacts with native speakers is greatly appreciated by customers."

The business turned in positive performance in the leasing sector during 2012 and into the first half of 2013. The number of leased units grew considerably, and the current fleet amounts to about 5,400.

Regarding new buildings the company is in the process of having around 900 units newly built. They vary between standard, swaps with baffles, standard with baffles, specially developed containers depending on the product needs or special construction required by the customer.

Fortunately TWS was not affected that hard by the current euro zone crisis and world economic slowdown. "High quality and good customer support shows its effect here, only swaps have run a bit more slowly as anticipated, but on the whole TWS had no significant returns of equipment".

Still the greatest challenge for tank container lessors is continuously to improve service, safety and quality. To provide the exact equipment, at the precise time, spot on is another challenge, accompanied by a world-wide network and a qualified customer support. It is not always only the price that counts, the company says.

Although the centre of support has always been the needs and requirements of customers, service and flexibility will continuously improve, says TWS. The lessor maintains the quality of equipment is guaranteed by close surveyor control during construction and the good co-operation between highly professional and approved manufacturers. The TWS team has a deep product knowledge as well as professional technical expertise. It is the company's aim to introduce and show the advantages of using tank containers as a mode of transport in international markets where containers are not as widely used as in Europe. There is quite a demand and TWS says it is able to offer individual planning for every need of the customers and every product requirement.

The core business of TWS is the rental of tank containers for liquid products used in the chemical industry, but also for liquid foodstuffs. With its modern fleet of tanks all requirements of the chemical and foodstuff industries are met. Standard containers are offered as well as special purpose units, such as reefer tanks, super insulated units and containers fitted with agitators for foodstuff.

The International Trade Association for the TANK CONTAINER Industry

International Tank Container Organisation



Transmo transferred

As from 1 July, Frans de Wit Holding BV has taken over all of Transmo's tank container repair and testing activities (a 100 percent subsidiary of Caru Containers BV) that also has its registered office in Moerdijk. The personnel as well as the activities have been incorporated in a new company that will offer its services under the name Moerdijk Tank Container Repair (MTR).

These activities will be continued at the existing location at Graanweg 9 in Moerdijk until the completion of the workshops and offices (that are already under construction) at the main location of Frans de Wit in Moerdijk, estimated to be ready in December.

It is expected that, starting mid-August, MTR will be extending its existing activities with the testing and repair of gas tanks. This will enable MTR to offer its customers a wider range of services in the form of a one-stop-shop, in combination with the logistics branch of the group that already performs tank container trucking, storage and heating activities.



ITCO's mission is for Tank Containers to be the preferred method for transporting bulk liquids, focusing on quality, safety and environmental issues. **ITCO** is working to promote operational safety, harmonise national/international regulations and improve market education.

116 Member Companies from 20 Countries

Representing over 70% of Global Tank Container Capacity

Five Divisions: Manufacturing, Operating, Leasing, Service Providers and Inspection/Surveyors

Promoting the Tank Container to Industry, the Public and to Regulatory Authorities

For further information visit www.itco.be or contact secretary@itco.be

Pictured I-r: Amanda Allen, Louise Ellman MP, and Luc Edward

MP visits Suttons

Golobal bulk logistics provider Suttons Group recently played host to Louise Ellman MP for Liverpool Riverside and chair of the Commons Transport Select Committee. She was invited to Suttons UK head office in Widnes to hear more about the growth of the business, meeting with CEO John Sutton and Tony Leighton, Suttons Tanker Division managing director.

Following the meeting Mrs Ellman was given a guided tour of the premises and introduced to Suttons Tanker Division apprentice Luc Edwards and Amanda Allen a skilled welder working for Suttons International Division.

Tank Containers

Girard flanged airline ball valve

Girard Equipment has added a Flanged Airline Ball Valve to its tank container product line. The new valve was made available earlier this year and has proven to be a popular option, receiving positive customer reviews.

With flexibility in mind, the flanged valve was manufactured to be compatible with both 1.5ins DIN and 2ins ANSI flanged connections. It is fitted with a 200 micron stainless steel mesh gauze that helps protect the tank from possible contamination. The gauze filter may be changed in-situ. The valve is also available in a dual port model and traditional 1.5ins BSP or NPT standard models.



ITCO depot-client meeting

A s part of its Depot Efficiency project, ITCO is organising a one day meeting in Rotterdam on Tuesday 10 September 2013. The aim of the meeting is to permit all sectors of the tank container industry to discuss better ways for clients to interact with depots.

It is intended to investigate ways of improving depot efficiency, provide a platform to structure efficiency initiatives, highlight issues (that may not be apparent from a remote office location) and act as a training reference for new operational recruits.

The project will work to achieve a document that will assist stakeholders to seek the most efficient operational procedures. It also aims to ensure all parties are aware of the others' constraints and organise procedures to alleviate inefficiencies with partner companies. The end result will be non-obligatory, but should act as a benchmark and structure to individual discussion.

In effect it aims to achieve not a "how to" procedure but a code of practice setting out the issues and highlighting "an efficient path of consensus".

NTC opens own cleaning facility

NTC Tankcontainer Services has commissioned its new tank cleaning plant in Rotterdam's Botlek area.

The Schiedam-based company has been repairing and providing additional cleaning services for tank containers in port of Rotterdam for almost 25 years. However, because cleaning was outsourced to a third party it had for long been a desire of NTC to have its own cleaning station such that the company could have full control of the one-stop shop concept.

In December 2010 the decision was taken to build its own cleaning station at the company's site in Botlek. This site covering 50,000 sqm is situated just 1km from the A15 motorway and also has access by water. In the near future rail access will also be available.

NTC's Tank Cleaning manager Michel Bosch explained: "In the Netherlands, we are coping with an economic recession, while the transport in tank containers is growing worldwide. More and more basic chemicals are produced in the BRIC countries and the Middle East. This development gives us the motivation for this long-term investment. Next to the cleaning of tank ISO containers, we also have possibilities for road transport, both for food and chemicals. There are a lot of opportunities with this form of transport as well."

Some 14 cleaning positions have already been established and NTC says it can expand to 16 positions if necessary. This makes it one of the larger operations in Europe. By separating supervised and unsupervised cleaning, in combination with the large number of cleaning positions, NTC says it can guarantee good turnaround without scrimping on cleaning time or quality. A team of trained and experienced cleaners carry out the operations. Besides the core team, there is also a shadow team of multifunctional employees who can assist with cleaning in extremely busy periods. This team has also been trained and is experienced.

During the cleaning operation, drivers have a cup of coffee and a snack in a comfortable waiting area, which also has showering facilities. After the tank container has been cleaned, the cleaner dries it with air back to 30degC and the driver can inspect his tank container from the platform immediately above the cleaning lane.

When the decision was taken to develop the tank cleaning facility, Gröninger Cleaning Systems became involved in the project right at the start, in close co-operation with construction company De Vries & Verburg and other subcontractors.

"There are eight cleaning bays for tank containers, two food cleaning bays, four chemical cleaning bays (including two bays with 200 bar cleaning), a large number of steam heating points, external cleaning bays and facility for latex cleaning," said Joost Kasbergen, group business development manager of Gröninger. "The NTC tank cleaning project has given us the unique opportunity to put a lot of our capabilities into practice on one single plant site."

The cleaning of food products is strictly separated from the chemical areas, to prevent contamination. Through the PLC, automatic washing programmes are run to guarantee the quality of the cleaning process through validation. After cleaning, the tank can be sterilised or disinfected. Kosher cleaning is also one of the possibilities.

All chemical cleaning bays are protected against explosion, which enables the handling and cleaning of explosive products. The removal of hard to clean residues can be tackled with washing heads that go up to 200 bar on some of the cleaning bays. High-pressure pumps are partially fed with water pre-heated from excess energy. High-pressure heat exchangers then heat the water to 90degC.

Apart from drive-through bays with double positions for food, chemical and heavy duty



NTC previously outsourced to a third party but had long desired its own cleaning station

chemical cleaning, the installation also has eight bays dedicated to tank containers only. The tanks are put on a mobile chassis for easy on site handling.

NTC and Gröninger have made the necessary technical design provisions to be able to perform up to 300 cleanings per day in the future. At this number of cleaning operations, the energy use will be a dominant cost factor. For this reason, energy saving measures have been put in place where possible, for example, through the recovery of heat from wastewater and exhaust from the steam boiler and through equipping all pumps with variable-frequency drives.

The installation has a vertically aligned air treatment system, consisting of two scrubbers and an activated carbon filter for capturing and cleaning hazardous vapours. Before and during the cleaning process, vapours can escape through the manhole and outlet. To make sure all vapours are captured, vapours from every tank are extracted at the top and bottom. For this purpose, a special washing head cover has been developed, which integrates the supply of steam and water and the extraction of vapours. The polluted rinsing water is collected in a drain tube and transported to the water treatment. This drain tube is also connected to the air treatment system. This enables acrylate, ammonia and other odorous vapours to be cleaned without problems.

Polluted water is transported through a network of drains to a collection tank. From here, the water is pumped to the wastewater treatment system. This system consists of a dissolved air flotation (DAF) in combination with a bioreactor wastewater treatment system. This system will make sure that all water can be discharged to the municipal sewage system without problems. Every washing bay has a wastewater pump. Residual products that cannot or are not allowed to be treated in the water treatment system are pumped into the special tank using these pumps.

Loaded tanks can be kept at temperature using steam or electric heating. A real-time temperature measurement system can keep the temperature stable, also during the night and during weekends.



20 • BulkDistributor

Dry Bulk Systems



A quick word with... **Christian Hanses,** Director, Westerwaldtrucks

Please tell us something of the background to Siloadmaxx?

Siloadmaxx is a process patented worldwide for the pneumatic loading and unloading of freight storage compartments. Its applications begin with the biggest market of standard sea containers but it is capable of being extended to other markets due to the process patent.

Large numbers of experts and surveys have assessed the markets and say that both systems have huge potential. Using the ISO marine container means that 1.9 billion tons could become accessible for powder materials at favourable rates as extensive economies are made regarding packaging costs, process steps and time. The reduced number of empty return

Christian Hanses, Director, Westerwaldtrucks

containers could also assist the realisation of 'green logistics' and a decrease in transport costs for producers, customers and for the environment.

What services does Siloadmaxx provide and what are the benefits of using the system?

As far as we know, no one has ever succeeded before in pairing standard containers with the properties of pressurised tank containers. Siloadmaxx will handle compacting materials like cement, talcum, titanium dioxide, PVC powder, and chronochrome in and out of containers at speed.

Our technique enables loading and unloading, free of contamination and keeps packaging to the minimum number of liner bags.

These are dustproof and offer the highest protection for both the material (against contamination) and for the environment (against the material). One loading machine for a 25-ton ISO container is reusable for more than 20 years.

What are the key differences between using this method and more conventional methods of distribution?

Tank containers mostly have to be returned empty. Freight charges for standard sea containers are much lower and, in addition, they do not need to be cleaned up. Compared to FIBCs, we save on pallets and packaging and handling costs.

Before this system was introduced, what restrictions did shippers of bulk products have in transporting their goods?

For our customers, it is now more favourable to bring products from UK to Singapore than from the south to the north of the UK.

Our customers have become global players and have started to define their markets with regard to logistics costs. The system can be used worldwide. Our mobile systems follow their applications, literally.

Loading and unloading of bulk products carries with it health and safety risks, how safe is the operation of your system?

Our machines are explosion proof. It is a closed process and thus we work free of contamination. Appliances and the environment are never exposed to hazardous materials.

Please explain more about the recent link between Schmidt-Heilbronn and Siloadmaxx.

After some loose contacts in 2012 and following tests in September 2012, both parties decided to join forces supported by a co-operation agreement. Due to strong growing demand for international bulk transport, especially powders and other compacting products, the partners identified an ideal fit. Whereas Westerwaldtrucks has developed the technical innovation and equipment design, Schmidt provides its international network and expertise in dry bulk handling to offer a 'door-to-door' concept including logistics operations wherever needed. Customers now have the opportunity to not only buy a loading or unloading device, but to receive an individual concept which allows simulation and calculation of possible cost savings.

If required, we can sell the process indicated as 'price per ton' calculated from the production site to the consignee's silo.

How do you see your system being used in say, five, years?

Available market studies have shown a huge demand in various applications and regions of the world. The Siloadmaxx and CQF-system will enable their users to optimise their supply chain, avoid packaging and handling, save valuable resources and increase their market penetration in various regions. Besides the discharge system for standard 20ft and 40ft boxes, a new modified version for 30ft bulk containers is jointly under construction and will be used for intra-European flows.

Dacro Container Liners. Your Solution in Container Bulk Packaging.











Dacro B.V. The Container Liner Company Sydneystraat 11 - 3047 BP Rotterdam, The Netherlands

Tel.: +31-10-2383880 Fax: +31-10-2383888 e-mail: dacro@dacro.nl web: www.dacro.nl

Flexitanks/Liners

BULKDISTRIBUTOR • 21

As tested by*

Boxing goes with the grain

ontainerisation of grain has taken off in Australia and rapid growth is expected in Canada with most of it going to SE Asia and China where flour mills find bulk shipments too large to process.

According to Grain Council of Australia CEO, Geoff Honey, many Vietnamese flour millers cannot handle bulk shipments but they can handle a few containers. In Australia, the change is attributed to deregulation, representing a big shift from bulk shipping. A container can carry 20 tons compared with about 40,000-50,000 tons which may be shipped as bulk cargo.

Canada has followed Australia in deregulating grain exports, so a rise in container traffic is expected. but as initial demand is from SE Asia growth is expected to be less spectacular as the region is not one of Canada's traditional grain markets.

It is also thought that many customers in Asia prefer using containers because it allows them to manage inventory via a steady flow instead a large mass bulk shipment.

One beneficiary seems to be Emerald Grain, which runs Melbourne's grain export terminal, is celebrating a year of records following its first full financial year of operations. Annual port throughput hit a 10-year high of 1.4 million tonnes in the period July 2012–June 2013.

Besides the record level of bulk wheat, barley, canola and corn exports amounting to some 1.3 million tonnes, there was also a record figure of 100,000 tonnes of containerised grain. Operating within the port precinct Emerald can maximise the amount packed into a container, with more than 25 tonnes of wheat per 20ft dry van regularly achieved.

Plans are in place to expand the terminal's capacity over the next three years. Subject to the Port of Melbourne Corporation's agreement, Emerald proposes to build additional storage and road intake facilities to improve throughput. Once these works are complete, the terminal will be capable of exporting around 2.4 million tonnes a year.





FLEXITANKS



Now Available in **Australia & New Zealand!**



- Innovative rectangular, perfect fit design for easy fitting, filling and discharge.
- 95% reduction in film stress and cracking issues compared with traditional flexitank designs.
- European designed and automated manufacturing ensures. consistent quality.
- Advancement in PE film technology allows for integrated EvOH Barrier, combating oxygen transmission and taint migration issues*.
- Represented in AU/ NZ by trusted and former Wine Industry Suppliers Australia Inc. – Supplier of the Year Award Winner.

*Full AWRI Taint Migration and Oxygen Transmission report available from JMP Holdings

www.jmpholdings.com.au

COA meeting outlines key flexi issues

number of key issues relating to flexitanks were discussed at the recently organised eighth COA Flexitank Meeting.

A number of key issues relating to nextrains, were discussed at the recently organized eigenvelocity o further information about flexitank incidents. This was followed by analytics of the CINS data by Peregrine Storrs-Fox, risk management director of the TT Club.

The important topic of the marking of flexitanks and containers was considered by Jörn Springer, of Hapag Lloyd. The discussion focused on what information should be shown on the container and what should be on the flexitank

Materials thickness compatibility was reviewed by Andrew Sangster, quality director, Braid Group, who discussed the issue of what constitutes "equivalent construction".

There have been a number of proposals for a minimum standard for untested bulkheads. Chris Thornton, COA flexitank manager, reviewed the issues relating to this. The general consensus at the meeting was that the COA should not support this concept, and that all flexitank systems should be impact-tested as specified in the COA Flexitank Code of Practice.

The day before the meeting, there had been a meeting of the steering group established by BSI Standards to develop PAS 1008 for Flexitanks. Brendan McKenna, Hillebrand Group, reported to delegates the key points that had been discussed and explained the next steps in the process.

New guidelines for the packing of CTUs are being prepared by the IMO/ILO. Bill Brassington, ETS Consulting, gave the latest status of the project, advising participants that one of the key points under review is the recommended maximum capacity for flexitanks in containers.



Flexitank Valve Solutions

- FULL BORE for maximum flow rate
- ROBUST monoblock (one piece) design
- SAFETY with lockable handle
- COMPACT design (outlet: 110mm)
- UNIQUE offset disc for FAST loading/discharge
- NO CAVITIES for clean and contamination free application
- FOOD GRADE Compliant Materials: FDA §177 of the CFR21

Created, Produced and Distributed by SAFI Goup www.safi-valve.com / info@safi-valves.com



Thermoplastic Valve Solutions





Flexitanks/Liners

July/August 2013

A Trustworthy package down under

Australia JMP Holdings launched the Trust flexitank to the Australian and New Zealand wine market.

Matthew Moate, JMP's regional sales manager said the launch was in recognition of the ever increasing shift from packaged to bulk exports in the wine industry. "We recognised a need to provide a product that would allay the warranted industry concerns relating to impacts on wine quality and the associated loss of value for consumers that can be caused by shipping in this method," he said.

The co-operation between JMP and Trust will provide a new level of support for exporters in the region and a higher level of confidence for importers able to access a competitive, reliable and independently tested packaging solution, the partners added.

"The establishment of the relationship with JMP is a pivotal step forward in the growth of Trust Flexitanks," commented Raf Herman, Trust Flexitank director. "We are confident that the company will successfully operate and deliver our product to the Australian and New Zealand markets. JMP has demonstrated a sound understanding of the bulk wine market in the region. Given its global success with products such as the Envirotuff Thermal Liner, we are positive that it will achieve similar success for Trust Flexitanks; especially with our leading integrated EvOH single layer barrier film tanks."

JMP said that the Trust Flexitank presents several advantages and advancements in structural design, manufacturing processes, quality control and film technology. "We were impressed with the R&D focus of Trust Flexitanks. They have worked long and hard to deliver a flexitank to the market that improves on existing available technologies. Their patent-pending rectangular shape, perfect fit design, is such a simple yet effective evolution for flexitanks," continued Moate.

"Many of the issues the industry has witnessed to date have been failures caused by forcing pillow shape tanks to conform to the rectangular profile of the shipping container. Trust's design, coupled with its patent-pending automated manufacturing process that largely eliminates human intervention – and so error – delivers exceptional consistency, quality and performance. Automated manufacturing also means Trust doesn't rely on cheap labour to maintain competitiveness."

As part of their product assessment process, JMP and Trust also commissioned the Australian Wine Research Institute (AWRI) to conduct a trial on the one-layer Trust barrier film. Testing compared the film in areas of relative taint migration and oxygen transfer rate (OTR). AWRI technical manager Warren Roget summarised in the report that: "Overall it is clear that the EvOH flexitank film provides the clear benefits of reducing both the migration of taint compounds and the transmission of oxygen. Ultimately, the performance advantage demonstrated by the EvOH film has the potential to provide winemakers with significantly increased confidence that their wine (and brand) is adequately protected once the wine has left their custody." The full report is available through JMP Holdings.

Big Accolade for Hillebrand

F Hillebrand has signed a five year worldwide freight services contract with Accolade Wines, the world's fourth largest wine producer.

The contract will see JF Hillebrand providing complete end-to-end freight logistics services to the Accolade Wines Group, covering both cased and bulk movements. Using sea, road and rail services the wines will be moving from various origin sites across the globe to Accolade Park in Bristol, UK.

Tom Yusef, chairman of JF Hillebrand UK, said: "We are delighted to build on the partnership we have with Accolade Wines. Our relationship continues to grow, and their commitment to this five year deal is a testament to the service quality provided by the specialist JF Hillebrand team."

Accolade is a global wine company whose portfolio includes brands such as, Hardys, Banrock Station from Australia, Flagstone and Kumala from South Africa and Geyser Peak from the Napa Valley in the US.

Richard Anning, global planning & logistics director from Accolade Wines, added: "With wine production centres in Australia, South Africa and California and distribution across the globe, Accolade Wines has a very complex logistics task combined with challenging scheduling to meet customer demands. We're confident JF Hillebrand will be able to partner with us in providing the level of service our customers expect."



The contract will see JF Hillebrand providing end-to-end freight services to Accolade Wines, covering both cased and bulk movements.

Advertorial

T-FLEX TRAILER FLEXITANK, THE INDUSTRY LEADER IN TECHNOLOGY

- The only **certified flexitank** designed for transportation of liquids on standard truck trailers
- Provides considerable cost advantage over road tankers / tank containers, drums and IBCs
- Designed for transportation of liquids on standard truck trailers
- Certified by Dekra Germany according to European norms
- real The most hygiene transportation alternative available, with ISO 22000 certification
- Reallows return loads of liquids when conventional cargo is not available
- Robust design provides a stabilized load
- related wave breakers to minimize the movement of the liquid

T-Flex Trailer Flexitank





Liquatrans Industrial Packaging Materials Ltd. Atabey Cad. No 28 K1 Cekmekoy Istanbul, Turkey, Phone: +90 216 3128660 Fax : +90 216 3128661 Web : www.liquatrans.com E-mail: info@liquatrans.com

Road Tankers

BULKDISTRIBUTOR • 23

Record profits for Clugston

Clugston announced a return to prerecession turnover levels and record profits in its latest set of accounts.

Figures for the year, 2012/13, show turnover increased by 30 percent to £108.7 million from £83.8 million in the previous year and a threefold increase in pre-tax profit from £2 million to £6.1 million.

Despite the current economic climate, the group, which celebrated its 75th anniversary of continuous trading in 2012, can also look forward with even further confidence having already secured a forward order book in excess of £220 million.

The group's logistics business saw turnover increase by 11 percent to £10.9 million from £9.8 million, following the diversification into new markets, particularly the fuels sector. This combined with the continued growth of the curtain sider and the intermodal powder operations, are delivering positive results, countering the challenging conditions in some of Clugston's traditional heavy building materials sectors. The three new markets now account for 25 percent of the division's overall business. The distribution company plans to capitalise on its Scunthorpe base, close to the Humber refineries, by focusing on growing its fuels customer base.

Kicking the tyres ahead of Euro VI

Michelin has kicked off a 12-month trial comparing the wear rate of three key truck tyre sizes to determine the best fitment strategy for UK petroleum haulage contractor Suckling Transport, prior to its first Euro VI vehicles joining the fleet.

Based in West Thurrock, Essex, Suckling Transport currently specifies 295/80 R 22.5 Michelin tyres as original equipment on its steer and drive axles. However, with the introduction of Euro VI, the company expects a larger tyre size will be fitted as standard by manufacturers to cope with the increased weight – expected to be around 200kg per vehicle.



A Michelin Technical Manager performs a vehicle weighing exercise ahead of the trial to determine optimum inflation pressures.

Michelin will monitor the mileage performance of its latest X MultiWay 3D XZE (steer) and XDE (drive) tyres in the company's current fitment size as well as 315/70 R 22.5 and 315/80 R 22.5 to determine which option will provide the best results for its petroleum tanker fleet.

The tyres will be tested on three new 6x2 MAN TGS 440 tractor units, each of which underwent a vehicle weighing exercise conducted by a Michelin technical manager ahead of the trial, to determine optimum inflation pressures. The tyres were fitted by ATS Euromaster at MAN dealer, PCL, in Grays, Essex.

The data will be particularly important to Suckling to determine the company's future tyre strategy, as well as providing Michelin with vital performance data to share with other customers.

Dan Bauckham, Suckling Transport's director of engineering, said: "We decided to work with Michelin to trial all three tyre sizes as it's critical for us to have the optimum size and load rating for the liquids we are transporting.

"Although we have found the wear and fuel consumption of Michelin's 295/80 R 22.5 tyres impressive, when we start taking delivery of Euro VI vehicles we'll have to choose between 315/70 and 315/80 fitments. This trial will help us decide which, whilst providing an accurate benchmark against our existing 295/80 preference."

Suckling Transport operates a fleet of 60 tractor units and 64 tankers delivering petroleum products nationwide to customers including Shell and Phillips 66. Its vehicles are double shifted seven days a week, and collectively the fleet covers more than 10 million km every year.

Bauckham added: "It's important for us to operate the safest possible fleet which is why we fit Michelins. However, it's a fine balance in deciding precisely which tyre size will give us the best combination of tyre life, fuel-efficiency and payload potential. On paper we expect the 315/80 tyres will offer slightly increased longevity, but that carries a reduction in payload capacity of approximately 50kg compared with fitting a set of 315/70s. The results of the trial are going to prove very interesting."

Guy Heywood, commercial director of Michelin's truck division in the UK, commented: "We're widely expecting tyre sizes to change as manufacturers open up their order books for right-hand drive Euro VI trucks. 315/70s and 315/80s have long been the tyre of choice for operators on the Continent, while many UK fleets have tended to prefer 295/80 steer and drive tyres.

"Despite the changes with the new emissions legislation, the 295/80 will remain the top selling tyre in the UK for many years to come, driven by significant demand on the replacement market for pre-Euro VI vehicles."

Michelin's X MultiWay 3D range has three-dimensional tread sipes which generate grip in difficult driving conditions, locking together when needed to maintain the stability of the tread, while helping to provide safety and mobility on dry, damp and wet surfaces.

Designed for both national and regional operators, the tyre completed its 295/80 R 22.5 launch into the UK market in January 2013. The 315/70 and 315/80 X MultiWay 3D steer and drive tyres have already quickly established themselves amongst the top-selling Michelin commercial vehicle tyres in Europe, and have been on the market since 2011.

The trial is one of many joint projects between Suckling Transport and Michelin since the haulier re-signed its pence per kilometre (PPK) contract with Michelin in July 2008.



Feldbinder Spezialfahrzeugwerke GmbH Gutenbergstraße 12–26 · 21423 Winsen/Luhe (Germany) Phone +49 4171 695-0 · winsen@feldbinder.com · www.feldbinder.com



Experience the power of integrated freight **logistics** solutions

Invest in the perfect formula for the transport of liquid chemicals and petroleum products by road and sea. Our road transport division services all the fuel majors and is fully equipped to handle depot management and primary/secondary distribution operating in South Africa, Mozambique, Botswana and Namibia.

GRINDROD LIMITED



Integrated logistics solutions from a single provider

www.grindrod.co.za

STAL SHUTTE

Road Tankers

BULKDISTRIBUTOR • 25

Volvo, Shell in global gas agreement

Volvo Trucks and Shell have agreed to co-operate globally on the introduction of liquefied natural gas (LNG) as a fuel for commercial heavy duty trucks. Based on Volvo's new MethaneDiesel concept - whereby LNG can be used in diesel engines - and Shell's LNG expertise and infrastructure investments, the two companies will co-ordinate activities and actively support the wider use of LNG in the transport sector.

"Shell is a key player in this market and we are one of the leading truck manufacturers, with an energy-efficient gas truck already available on the market. Together we believe that we can enhance and speed up the introduction of LNG to the transport business. both through our own activities and by inspiring others." said Lennart Pilskog, director of public affairs at Volvo Trucks.

The collaboration agreement is underway and work has begun with the first stage focused on selected markets in central Europe and in the United States. The agreement is non-exclusive both ways. On-going or future co-operation and dialogues with other partners will not be affected by the agreement.

Natural gas is used today in compressed form (CNG) in city buses and smaller commercial vehicles. However, to be able to perform in long haul operations vehicles must be able to carry a larger amount of fuel on board. This is made possible if the engine can run on LNG since the gas has a smaller volume in liquefied form.

The Volvo FM MethaneDiesel is equipped with the new methanediesel technology and uses liquefied gas as its main fuel. The truck is already available in Sweden, Norway, Belgium, Spain, the Netherlands and the UK and at present the market roll-out is expanding into Italy and France.

"We see considerable potential for our gas truck and will continue the roll-out in more markets along with the development of our production capacity and gas infrastructure," added Pilskog. "Using LNG in a diesel engine is very energy-efficient; it is a new fuel option that could dominate heavy duty vehicles for the foreseeable future." Wider use of LNG will also facilitate the distribution of liquefied biogas (LBG) produced from renewable sources.

Meanwhile, Volvo Trucks UK has been steadily growing its presence at Qualitech Environmental Services, a waste management and industrial cleaning service.

Qualitech Director Roy Brunt is clear about why the company operates 'Classic' Volvo FHs: "We provide customers with a 'roundthe-clock' service so we can't afford vehicle breakdowns. As well as scheduled work, we provide an emergency service to companies, police forces and any nationwide organisation that needs our urgent intervention. This includes cleaning up all types of chemical spills, powders or liquids. That's all in addition to the regular work of tank, silo and interceptor cleaning at petroleum and oil refineries, factories and tank storage areas.



The Volvo FM MethaneDiesel truck is already available in Sweden, Norway, Belgium, Spain, the Netherlands and the UK

"When we get the call, and it 4am, we have to respond manage process industries need quickly, safely and efficiently to trucks have to be very reliable be just that so far.'

All the trucks are fully ADRincludes the D13C engine rated Globetrotter XL cabs. The trucks a year. The company is also telematics system with a view to by the use of fuel efficient

can come at any time, 3am or instantly. Customers who us to deal with their problems avoid costly shut-downs. Our and the Volvos have proven to

compliant and the specification at 460hp, I-Shift gearbox and each cover around 150,000 km trialling Volvo's Dynafleet reducing its vehicles' emissions driving techniques. Dynafleet

also produces an environmental report detailing emissions. Thomas Hardie Commercials, which supplied the Volvos, handles all the maintenance and the trucks are on Volvo's Gold Contract repair & maintenance package. "We like the dealer's flexibility and attitude," said Brunt. "The trucks are dropped off at the dealership at around 8pm and we pick them up early the following morning." A young company, incorporated only in March 2011, Qualitech Environmental Services Ltd took delivery of its first Volvo FH in August 2012. Since then, the waste management and industrial cleaning specialist - which has its base close to the M6 at Haydock, near St Helens - has purchased a fleet of Volvos, including several '13 plate' trucks from Thomas Hardie Commercials.

In addition to the Volvo FHs, Qualitech Environmental Services Ltd, which is IS09001 and ISO14001 certificated, operates a wide range of specialised equipment. This includes a trailer mounted DISAB Vacloader tank that can handle 8,000 cb ft per minute flows of heavy material and a number of Clayton rubber lined tankers for the transport of acid and other hazardous liquid cargo.



Oualitech Environmental Services has purchased a fleet of Volvos, including several '13 plate trucks from local dealer Thomas Hardie Commercials



rish and UK-based family-run logistics company Reynolds Logistics has reached the milestone of its 85th anniversary. Reynolds Logistics, which was named European Transport Company of the Year for 2012, is one of the leading bulk logistics companies involved in the distribution of bulk fuels, lubricants, bitumen, specialist liquids and hazardous goods throughout Ireland, the UK and Europe.

To coincide with the achievement Reynolds launched a new website and livery for its trucks - www. reynoldslogisitics.com

The company has two main operating bases in Dublin (Ireland) and Ellesmere Port (UK), with several strategically placed out-bases including a new base in East London to ensure a network of transport operations throughout Ireland, the UK and continental Europe. Now with the family in its third generation CEO Andrew Reynolds is shaping the company to continue growth into new markets with safety, innovation and customer satisfaction as the key drivers. Reynolds Logistics employ 260 people and has an annual turnover of €35 million

Reynold's new livery is intended to achieve brand presence for its road fleet along with clearer safety messages working in partnership with The Road Safety Authority



28th November 2013 Dusseldorf

We'll be there...Will you?

CUDDLY CHAI MIDDLE EAST

9th - 11th December 2013

Dubai

Contact anne@bulk-distributor.com or danny@bulk-distributor.com to advertise

Become a subscriber now to receive each issue of Bulk Distributor straight to your door

1 year (6 issues) £150 US\$230 €200

2 years (12 issues) £275 US\$420 €350

subs@bulk-distributor.com www.bulk-distributor.com

+44 (0)1565 653283

AD

© A&D Publishing Ltd



Logistics

Carriers propose P3 'operational' alliance

Maersk's, MSC's and CMA CGM's intention to provide jointly run schedules in the Asia/Europe, transpacific and transatlantic trade lanes promises much for the container industry.

The P3 east-west service network initiative to be implemented by the three carriers in Q2 2014 should be considered a positive development for the liner industry since it will help reduce carrier costs and stabilise the market, says Drewry's Weekly Container Insight. There are still more than 15 competing carriers on most trade routes, so the combination of the three largest shipping lines in an operating alliance should not damage competition.

But, it will contribute to the trend towards lack of service differentiation in container shipping, which is something that will continue to worry shippers, Drewry says. At this early stage, the Asian Shippers' Meeting (ASM) and European Shippers Council (ESC) have merely expressed deep concern over the alliance, stating that it should "in no way jeopardise or impair the free choice of shippers, and fair competition based on price, service level and routing".

The P3 network will be based on existing capacities of each member, and initially operate 255 vessels providing a capacity of 2.6 million TEU in 29 loops. Maersk Line will contribute 42 percent of the capacity, followed by MSC with 34 percent, and CMA CGM with 24 percent. Vessels provided by the lines will continue to be owned and chartered.

According to Drewry's records, the three carriers currently deploy 305 vessels offering a total capacity of 2.6 million TEU in 42 loops on the three routes, so some serious culling will have to take place somewhere. The analysis excludes the Mediterranean/East Coast North America trade lane where Maersk is phasing out its direct service, although it will eventually become part of the P3 network. Should the new initiative be fully approved by the regulatory authorities, it will mean 13 of the top 20 lines being in a structured alliance on the main east–west trades, leaving UASC, Evergreen, CSCL and Zim out on a limb.

According to Vincent Clerk, chief Trade and marketing officer in Maersk Line, all regulatory bodies, including the European Commission and FMC, have been approached, and are basically in agreement with the proposal providing there is no flow of information between the members' commercial departments and the independent operating centre that will be established to manage vessel schedules, allocations and utilisation. It is not yet a done deal, however. The operational firewall is unnecessary in other alliances and consortia as their market shares are below the EU's 30 percent ceiling.

Under EU antitrust rules, consortia are exempted up to this cargo market share level. Above this level, agreements can nevertheless be compatible if the efficiencies brought about by the co-operation outweigh the harm to competition. In principle, it is the responsibility of each company to assess whether an agreement complies with EU antitrust rules, although the European Commission may of course decide to examine the situation.

Maersk, MSC and CMA CGM had a combined vessel capacity market share of 37.6 percent in April across the Asia-Europe, transpacific and transatlantic routes, so could be interpreted to be in a dominant position. The position is most sensitive between Asia and the Mediterranean (55 percent), followed by Asia/Northern Europe (46 percent), transatlantic (35 percent) and transpacific (29 percent). The independent operating centre set up to manage the P3 network will be responsible for ensuring that each line's schedule integrity is maintained at a high level, according to the carriers. This will be necessary, as shippers supporting Maersk because of its good track record could find their cargo being shipped on the other partners' ships. Given the large tonnage at its disposal, it should be easier to adjust capacity up or down as demand changes, instead of through large additions or deletions of whole loops, thereby providing a more regular service.

Daily Maersk is to be maintained, and even improved, as there will be eight loops instead of five. Presumably both MSC and CMA CGM will want to offer something similar independently within this network. Shippers will, no doubt, be looking for other similar service initiatives, rather than just operational benefits evolving out of a common schedule network.

The port and terminal network that will be used within the P3 network has yet to be made public and will be interesting due to each member's separate terminal interests and port preferences. Where the three decide to call at the same terminals, it should provide a tremendous boost for selected intermodal transport service providers due to the economies of scale available. Like ships, trains and barges need cargo volume to work successfully, which a fragmented service does not provide as well.

Drewry's overall view is the P3 service network will be positive for the container industry providing the combined dominant position is not abused, or used as an excuse to postpone service innovation.



Advertisers Index

Cronos	Back Cover
Dacro	20
Emmbi	11
FachPack	4
Feldbinder	23
Grayling	6
Greif	8
Grindrod	24
Isbir	9
ΙΤϹΟ	18
Liquatrans	22
Lohia	10
Neobags	7
NewPort Tank Container	17
Newson Gale	2
NTC	Front Cover
Perolo	3 & 27
Rishi	5
Safi	21

Events

FachPack

24-26 September 2013 Nuremberg, Germany www.fachpack.de

EPCA

4

16

21

13

5-9 October 2013 Berlin, Germany communications@epca.eu www.epca.eu

Intermodal Europe

8-10 October 2013 Hamburg, Germany www.intermodal-events.com

Duisport to help Jebel Ali connect

interland connectivity has become a buzz-phrase for ports around the world. In simple terms, however, it represents the means by which a port can develop effective transport links with its own hinterland.

However, it does not just mean the immediate surroundings within, say, 50km of the port. Many of Europe's larger gateways, such as Rotterdam and Antwerp, see themselves reaching hundreds of kilometres inland, influencing the development of multimodal logistics systems such as rail and inland waterways.

Now DP World, one of the world's largest container terminal operators, has commissioned Germany's Duisport to draw up an integrated port-hinterland concept for the Port of Jebel Ali, Dubai. Part of the planned master plan is a detailed market analysis as well as a feasibility study to optimise transport chains and to develop logistics areas.

Duisport is the company managing the port of Duisburg, the world's largest inland port sitting on the confluence of the Rhine and Ruhr rivers in the heart of Germany's biggest industrial conurbation, the Ruhrgebiet.

"The Port of Jebel Ali is seen to be the flagship project in the Middle East. With this assignment DP World is underlining its trust in our know-how and our many years of experience in intermodal transport concepts," said Erich Staake, CEO of Duisburger Hafen AG.

Juli	
Sinobangla	
Trifleet Leasing	
Trust	
Werit	

For information on advertising

contact us on: Tel: +44 (0)1565 653283 Fax: +44 (0)1565 755607

Published 6 times a year. Reproduction in whole or in part without written permission is strictly prohibited. ISSN 1462-0731

ECTA Annual Meeting

28 November 2013 Dusseldorf, Germany www.ecta.be

TOC Container Supply Chain: Middle East 9-11 December 2013 Dubai, UAE www.toc-events.com The Port of Jebel Ali is among the 10 largest container ports in the world and, as a distribution centre for the Arabian Peninsula and parts of Asia, serves a market of almost two billion people. In 2012 alone 13.3 million TEU were handled. But in order to prepare the overall performance for future growth, DP World tendered a concept to develop the hinterland of Jebel Ali. Due to its many years of practical expertise in drawing up hinterland concepts, duisport was able to win the tender against other consultancy companies. Staake said what proved decisive was, among other things, the fact that as the operator of the largest hinterland hub in the world, Duisport brings comprehensive operational expertise with it.

In the next four months Duisport will carry out a comprehensive market analysis in order to identify the necessary measures and infrastructure conditions to optimise the hinterland. In addition to the infrastructure, flows of goods and potential logistics areas will be investigated in particular. The target is to draw up a master plan whose implementation will strengthen the role of the Jebel Ali as a distribution centre and logistics hub. For this purpose particular attention is being paid to connecting the port by rail and associated networking with the fast growing industrial hinterland of Dubai.

As early as last year Duisport had prepared an integrated logistics and infrastructure concept on the 'Sao Paulo–Santos Logistics Corridor' for the Brazilian government.

Terminals & Storage

Felixstowe on the right track

Port of Felixstowe has officially opened a new rail terminal which doubles rail capacity at Britain's largest container port. The new North Rail Terminal was inaugurated in a ceremony attended by HRH The Duke of York, KG, local dignitaries and a large number of the port's customers.

Clemence Cheng, CEO of Hutchison Ports (UK) which owns the port, said: "Rail is becoming the mode of choice for an increasing number of shipping lines, forwarders and shippers to move goods to and from ports. It provides cost, environmental and reliability benefits for many customers and Port of Felixstowe offers more rail services, to more destinations, more often than any other UK port. Cheng also announced that the 60th daily rail service at Felixstowe will be operated by Freightliner. By allowing the port to run longer

trains, as well as more of them, it is claimed users will improve the efficiency of their supply chains and at the same time reduce costs. Speaking at the ceremony, the Duke of York said: "Coming here today and seeing how Felixstowe is taking the challenge of delivering

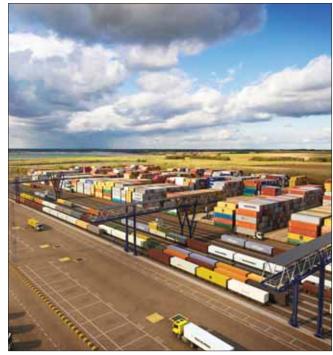
goods and services for British exporters and British importers to the next level is really encouraging." In addition, Stephen Hammond, Parliamentary Under Secretary of State at the Department for Transport, commented: "Felixstowe has long been at the forefront of efforts to promote the use of rail for container freight and thus to reduce congestion and environmental impact from (lorries). The investment in this terminal will also complement Network Rail's own investment in the Strategic Freight Network, which the Department for Transport is supporting."

"The Port of Felixstowe was Hutchison Ports Holdings' first investment outside Hong Kong," added Dr John Meredith, group managing director of Hutchison Port Holdings. "The North Rail Terminal is evidence of our continuing commitment to Felixstowe and the UK market. This new facility complements the recent investment we have made in Berths 8 & 9 and ensures that Felixstowe has a range of facilities unequalled anywhere else in the UK."

The £40 million investment in the new rail terminal is part of a scheme to increase capacity at Felixstowe that includes the new Berths 8&9, opened in November 2011. The terminal, co-financed by the European Union Trans-European Transport Network (TEN-T) programme, allows the port to accommodate trains of up to 35 wagons in length. Some 10 km of new track has been laid which provides nine additional tracks, making a total of 20 on the port.



HRH The Duke of York (left) was welcomed by Clemence Cheng, CEO of Hutchison Ports (UK,

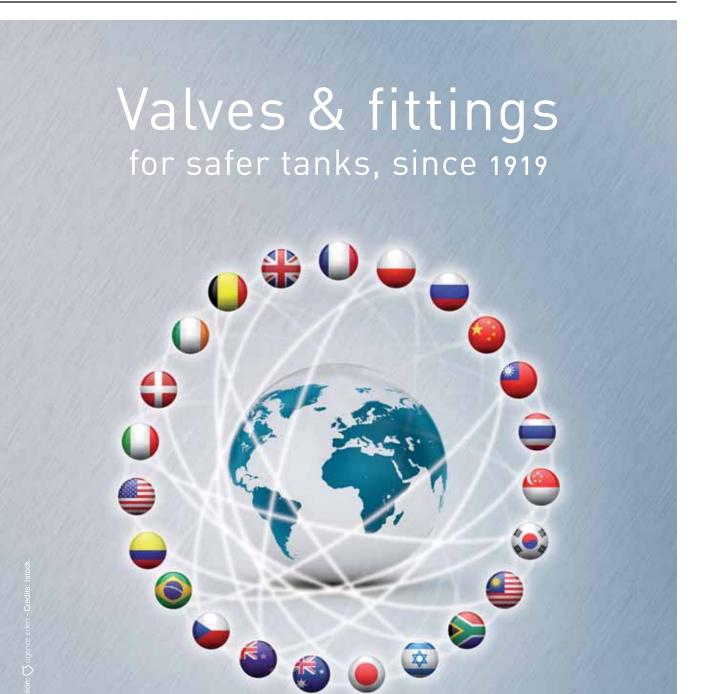


The terminal allows the port to accommodate trains of up to 35 wagons in length

Kinder's expanding Battleground

Kinder Morgan Energy Partners (KMEP) plans to expand on its joint-venture Battleground Oil Specialty Terminal Company facility, which is still under construction along the Houston Ship Channel.

The expansion is supported by a long-term leased storage and handling services contract with Morgan Stanley Capital Group



Inc.

Budgeted for US\$54 million, the company plans to begin this expansion project in the current quarter, and have that ready for commercial operations in the fourth quarter of 2014, KMEP said. This expansion would involve adding another 900,000 barrels of capacity to the terminal.

This expansion would also include the construction of six, 150,000-barrel, ultra-low-sulphur diesel tanks, extra pipeline and deepwater vessel dock access, and high-speed loading at a rate of 30,000 bph.

KMP has a 55 percent stake in BOSTCO while TransMontaigne Partners owns the rest of the equity. The BOSTCO oil terminal, located at mile marker 43 on the Houston Ship Channel, is expected to begin commercial operations in the third quarter of 2013. This project has been billed at \$485 million and will span 185 acres.

With the completion of this expansion, the terminal will be fully subscribed for the total capacity of 7.1 million barrels and would include the construction of 57 storage tanks to handle ultra-low-sulphur diesel, residual fuels and other black oil terminal services. For the best service around the world... PEROLO After Sales Support have got you covered!





Tel: +33 557 426 700 / sales@perolo.com / www.perolo.com

AMERICAS / EUROPE / AFRICA \ ASIA \ OCEANIA

CUSTOM DESIGN

FLEXIBLE LEASES

DIRECT SALES

CERTIFICATION SUPPORT ONLINE

CRONOS TANKS GLOBAL COVERAGE FROM YOUR LOCAL CRONOS OFFICE

TYPICAL SPECIFICATIONS

ISO TANK CONTAINER // SINGLE COMPARTMENT INSULATED AND STEAM-HEATED STAINLESS STEEL TANK CONTAINERS

CAPACITY	TARE WEIGHT	MAX GROSS WEIGHT
26,000 ltr	3,760 kg	36,000 kg
25,000 ltr	3,710 kg	36,000 kg
24,000 ltr	3,640 kg	36,000 kg

GENERAL SPECIFICATIONS

WORKING PRESSURE: 4.0 Bar **DESIGN TEMP:** - 40°c to 130°c

APPROVALS

UIC, CSC, TIR, IM101, UK-DOT, RID/ADR, AAR600, FRA, TC, UN PORTABLE TANK, IMDG, US-DOT, L4BN

STANDARD FITTINGS

0170 104957

MANLID: 500 mm (20") diameter, 8 point fixing

AIR LINE: 1.5["] with stainless steel ball valve and 1.5["] BSP cap

RELIEF VALVE: 2.5" SRV set at 4.4 Bar – provision to fit a second

TOP OUTLET: Provisions for 3["] butterfly valve and syphon tube

BOTTOM DISCHARGE: 3 point stainless steel closure

STEAM-HEATING: 10 m² effective surface area external steam tubes



WWW.CRONOS.com

ANTWERP DUBAI GOTHENBURG GRAND CAYMAN HAMBURG HONG KONG HOUSTON LISBON LONDON New York Rio de Janeiro San Francisco Seoul Shanghai Singapore Sydney Taipei Tokyo

DRYS REEFERS TANKS EQUIPMENT SERVICES DRY FREIGHT SPECIALS: Bulkers / Opentops / Flatracks / Half Heights / Rolltrailers / Slimwall CPC[®]s / Car Racks