

# BULK DISTRIBUTOR

INTERNATIONAL NEWS • PEOPLE • PRODUCTS

January/February 2010

## New China tank plant ready

CXIC Group has completed the construction of its tank container plant in Tianjin, China. Tianjin Xinhuachang Int'l Containers Co., Ltd (TXIC) is a joint venture between CXIC and Bendix Transport Corporation.

TXIC will manufacture stainless steel tank containers, utilising technology from Trenchor Containers of Cape Town, South Africa. With supplements and modifications the new factory in TXIC will have an annual production capacity of 5,000 TEU.

The plant is located in Ninghe Economic Development Zone, Tianjin. The company claims to have superior geographical advantage in that it is only 60 km from the centre of Tianjin, 210 km from Beijing, 45 km away from Tangshan, and 35 km from Tianjin Development Zone. In addition it is just 35 km from Tianjin Port.

The company was registered in October 2007 with a total project investment of almost US\$50m including fixed assets of RMB300m.

The first phase of the construction site just for the tank container workshop covers 24,000 sqm, with a stock yard of a further 30,000 sqm. The designed annual manufacturing capacity is estimated at around 5,000 TEU. When running at capacity, there will be over 250 employees including over 60 certified engineers. The latest Real Time X-ray system has been installed along with an acid pickling plant and the chemicals



supplied by Tianchang Huarun Clean Technology Co. Ltd.

The build quality is obtained by the use of precision parts coupled with automated equipment. The shell plates are precision cut and

squared in an 8m long guillotine and fused together on a 6m long strip clamp plasma/tig seam welder then rolled in an 8m long roll. The dish plates are also precision cut and fused together on a 3m long strip clamp plasma/tig seam welder, fully x-rayed and formed in an automated press. The heads are then polished to a 2B finish on one of various in-house dish polishing machines. The heads and shell are mated in a one of a kind multi-cylinder alignment clamp, ensuring perfect fit-up. The circ welds are completed on an automated plasma/tig rotational welder. The vessel is then ready for real time x-ray.

Stainless steel is supplied by Taiyuan Iron & Steel (Group) Co, Ltd (TISCO). The alternative supplier is Columbus Stainless (Pty) Ltd, a well established producer in South Africa, owned by Acerinox.SA Group of Spain.

[www.cxic.com](http://www.cxic.com)

### IN THIS ISSUE

Tank & ISO Containers	2
Components	4
Flexitanks	8
Logistics	10
Explosion Protection	12
FIBCs	14
Dry Bulk Logistics	16
Terminals & Storage	18

Managing Editor Neil Madden  
neil.madden@wanadoo.fr  
Tel: +33 (0)3 88 60 30 68

Editor Patrick Hicks  
pwh@oakhillmedia.com  
Tel: +44 (0)20 8398 9048

Dry Bulk Editor Richard Miller  
richard.miller@oakhillmedia.com  
Tel: +44 (0)1424 446003

Advertisement Director Anne Williams  
anne.bulkd@btinternet.com  
Tel: +44 (0)1932 225632

Associate Editor Katarzyna Marszalek  
kate@oakhillmedia.com

Overseas representative  
Russia, CIS, Baltic States: Dars Consulting  
Tel: +7 (495) 775 07 35  
Email: consulting@dars.ru

© Oakhill Media Ltd

Bulk Distributor is published by  
Oakhill Media Ltd, Oakhill House, 22 Williams Grove,  
Surbiton, KT6 5RN, United Kingdom.  
[www.oakhillmedia.com](http://www.oakhillmedia.com)  
Fax: +44 (0)870 762 0434

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

## Simon wins Hocem contract

Simon Storage is to provide dedicated base oil storage for Hocem Haase Oil Chemical GmbH under a new three-year contract. Hocem product arrives at Simon's Immingham West Terminal by ship from the oil company's transit terminal in Latvia, for onward distribution by road. The terminal has dedicated three tanks with a combined capacity of 4,000 cbm to this contract.

Simon is handling two grades of mineral base oil for Hocem at the terminal. A light base oil is stored at ambient temperature in a tank recently constructed by Simon as part of its ongoing investment in its infrastructure, and two heated tanks are allocated to the storage of heavy base oil. The heating systems can increase the temperature inside the tanks to 50 degs C if product requires 'drying' on receipt into storage, to ensure product quality.

Simon has upgraded the existing road loading systems and gantries at the terminal to meet the customer's requirements and to ensure full compliance with specific safety and environmental standards. This includes fully integrated road tanker overfill detection and prevention systems, and emergency shutdown facilities. Metering systems are in use as a guide to load quantity, and delivered weight is confirmed by the Terminal's approved weighbridge.

Stock and transaction processing of Hocem product at the terminal is managed by TASCs, Simon's exclusive terminal automation and stock control software. TASCs offers clients instant access to account data from any computer via a web browser over the internet. Customers can place dispatch and delivery requests remotely and access accurate product reconciliation information in real time. Account information can also be accessed via PDA or smart phone.

With 20 years of petrochemical trading experience, Hocem is one of Europe's premium service suppliers of base and lube oil products for industrial, automotive and transport applications. The group has offices in Hamburg, Lille and Moscow, and, with its logistics partners, it operates transit terminals in Estonia and Latvia. Simon says the new contract reflects Hocem's

commitment to maintaining product stocks in a strategic location on England's East Coast to meet customer demand. Hocem's Michael Raue commented: "With its deepwater jetty and East Coast location, Simon's Immingham facility is ideally placed for receiving product shipments from our east European transit terminal. The location also offers easy access to the motorway network, resulting in efficient transport links to UK customers of our distribution partner, H&R ChemPharm (UK) Ltd. One strategic hub at Immingham ensures better service, even in the West of England, than the longer sea route to West Coast facilities."

[www.hocem.de](http://www.hocem.de)  
[www.simonstorage.com](http://www.simonstorage.com)



The Simon terminal has dedicated three tanks with a combined capacity of 4,000 cbm to the contract

## Greif set to acquire Storsack Group

Storsack Group headquartered in Viernheim, Germany, the world's foremost producer of bulk bags, seems likely to be purchased before end of February by Greif, Delaware, OH, a global leader in industrial packaging products and services. An application is reported to have been submitted to the German Federal Cartel Office in early January which was subsequently granted on 22 January. Storsack operates manufacturing plants throughout the world, and notably in South East Asia, with a combined capability to produce well in excess of 25 million bulk bags annually.

Thomas Noor, Storsack Group's founder and CEO, is one of the FIBC industry's pioneering figures. He was among the first to appreciate the huge potential of the bulk bag concept in the early 1970s, at a time when there were just a small number of manufacturers mostly located in Western Europe. During the 1990s he seized the opportunity to expand FIBC sales into Eastern Europe and the former Soviet Union, mainly for handling fertiliser materials.

At that time International Polysacks, as his company was then known, was already a key player and respected name in the industry, though generally considered to be not quite on the same level as competitors such as Mulox and Rosenlew in terms of technical innovation. Few would have guessed then that within less than 10 years Noor would own both these companies. To be strictly accurate, his company acquired Mulox interests in North America, but what remains of the former British company, now Irish owned, is just a tiny

Continued on page 14

## SPECIAL TANK CONTAINERS AND SWAP BODIES FROM UBH INTERNATIONAL

EXPERIENCE AND INNOVATION IN TANK DESIGN AND MANUFACTURE



UBH International Ltd

- SINGLE OR MULTI-COMPARTMENT TANKS
- ELECTRIC HEATED TANKS
- LINED TANKS
- REEFER TANKS
- CRYOGENIC TANK CONTAINERS AND ROAD TANKERS
- DOT 51 / ASME U STAMP VESSELS
- OFFSHORE CHEMICAL TANKS TO DNV 2 7-1/EN12079
- HIGH PRESSURE GAS TANKS



Tel: +44 (0)1704 898500 • Fax: +44 (0)1704 898518 • Email: tanks@ubh.co.uk • Web: www.ubh.co.uk

# Hoyer completes 20% stake in Interbulk

At the end of December, the Hoyer Group signed a share purchase agreement with a number of shareholders, representing a stake of about 20% of InterBulk Group plc, which is listed on the London AIM market.

Further to the announcement on 17 December 2009, InterBulk has confirmed that the agreed acquisition of 60,794,330 ordinary shares, which had been subject to the applicable consents and approvals of the German regulatory authorities, has now completed.

Hoyer believes that the approach to

certain shareholders offered a good opportunity to buy a stake in a global player in the international bulk logistics market, especially chemical logistics, as well as gaining a leading role in intermodal operations and a respected management team.

InterBulk provides a range of bulk logistics services worldwide, including dry and liquid bulks, tank containers, dry freight containers, flexitanks and bulk liners. The UK-based company has 7,600 tank containers and 11,200 box containers. Turnover in the year ended 30 September 2009 was £232m.

"We have a common interest with

InterBulk in chemical logistics, particularly tank containers for liquid bulk products," said Hoyer CEO Ortwin Nast. "We became aware that there were shareholders in InterBulk who would like to sell and so we seized the opportunity."

"Buying this 20% stake is a very attractive investment, from our point of view. We believe in the attractiveness of this market and its prospects. We will be a supportive and responsible shareholder," added Hoyer CFO Gerd Peters.

In the meantime, Guenter-Friedrich Maas (39) has taken over the management of the Hoyer business unit Chemilog as from the beginning of this year. The unit not only manages the entire flow of goods for customers in the chemical industry, but also the corresponding flow of information throughout. Maas takes over from Ortwin Nast, who had been in charge of the unit in addition to his duties as Hoyer CEO over the past few years. Maas joined Hoyer three years ago as director region central and most recently was also responsible for intermodal transport and sales. In addition, he is the managing director of Hoyer Nederland BV, Rotterdam.

Maas previously worked at Rhenus Logistics and the Den Hartogh Group.

[www.hoyer-group.com](http://www.hoyer-group.com)



Hoyer has a common interest with InterBulk in chemical logistics, according to Hoyer CEO Ortwin Nast



# Cronos to manage most of UES fleet

Cronos Ltd one of the world's largest third-party fleet managers, will take over management of the majority of UES Intermodal AG's 220,000 TEU unit standard operational container fleet. After this transaction, Cronos will operate a diversified fleet of over 650,000 TEU representing the seventh largest fleet of leased containers in the world.

Cronos and UES entered into the agreement to allow UES to focus on the leasing of specialised equipment, which is in line with its long-term

strategy. "This is an excellent opportunity to grow our fleet in a capital efficient manner and to work with UES and its container investors. This transaction is a testament to Cronos' 30-plus years track record of delivering attractive returns to container investors as a responsible manager of their capital," stated Peter Younger, CEO of Cronos.

Klaus Koencke, CEO of UES, stated: "We look forward to working closely with Cronos on this transaction. We believe that it will be beneficial for our

container investors based on Cronos' reputation as an equipment manager, its global operating and financial infrastructure, and its financial strength. Notwithstanding this transaction, we remain committed to the transport equipment leasing business and serving the needs of our long-time customers."

Cronos operates a diversified fleet of dry, refrigerated, tank and dry freight special equipment and provides leasing, design and sales to customers in the transportation industry.

[www.cronos.com](http://www.cronos.com)

# TC operators course returns to Singapore

New Alchemy Tank Container Operators Training Course Week 23 – Monday 7 June to Friday 11 June 2010

The New Alchemy Tank Container Operators Course is returning to Singapore for the first time since 2006. Led by Roy Boneham with experience in tank containers going back to the 1970s, the five-day course, specially designed for tank container operators, is now in its twenty-third year. As BD went to press already three places had been taken by one client meaning there were only nine places remaining.

The course examines dangerous goods regulations, the classification of chemicals, design and construction of tanks and finally operating requirements, whereby the previous parts of the course are all brought together. It will provide an in-depth introduction to operating conditions.

Roy Boneham participated in the work of the United Nations Committee of Experts Portable Tank Working Group which led to the provisions for the second generation of tank containers where T-codes replace IMO types for tank container descriptions. He assisted in the development of Chapters 4.2 and 6.7 of the IMDG Code and also produced the first draft of the Circular from the IMO which

seeks to explain more fully the transitional arrangements. Trainees will receive a copy of this important document. Trainees will also receive a copy of the recently revised United Nations Guidelines for assigning T-codes as well as details of the changes to T-codes which took effect on 01.01.09 and forthcoming substantial changes to some of the T-codes due to take effect from 01.01.2011.

It will also be of benefit to other sectors of the industry, such as truckers, lessors, tank constructors etc, as well as those with a general interest in the transport of dangerous goods. It will be of interest to shippers of chemicals in tank containers, who can gain an insight into the problems and requirements for tank operating.

This is a non-residential course and so trainees requiring accommodation should make their own arrangements. The working language will be English and the course costs US\$1,600. Trainees registering by 23 April 2010 may claim an earlybird discount of 5%. Trainees who bring with them their own 2008 edition of the two-volume IMDG Code also gain a further 15% – it must be this edition and not any earlier one.

Please email applications to [rboneham@premiumuk.com](mailto:rboneham@premiumuk.com)

# ITCO AGM

Arrangements are progressing well for the ITCO General Meeting on 2-3 March. The Meeting Programme has now been finalised and is available on the ITCO website. The Programme will comprise both plenary sessions and break-outs, with the following items on the Agenda: Programme of Activities for 2010; Technical Report; Flexitanks - Opportunities or Challenges for the Tank Container Industry (with Guest Speaker); Break-out sessions for Membership Divisions; ITCO Container Pavilion at Transport Logistic China;

ITCO DVD Project: Study on the Sustainability of the Tank Container; ITCO Project: Working at Height; ITCO Project: Tank Containers and Shipping Lines.

There will be a dinner on Tuesday 2 March for all participants, where Willy Freson and his wife Christiane will be the Guests of Honour. Prior to dinner, there will be a drinks reception, generously sponsored by Perolo.

The General Meeting will take place at Le Meridien Hotel, 1 Promenade des Anglais, Nice.

[www.itco.be](http://www.itco.be)

Advertisement

## TAL International Ordering Tank Containers Again

After a twelve-month moratorium on the purchasing of new units during 2009, container leasing company TAL International has announced details of its renewed plans for investment in specialist tank equipment. TAL has confirmed an order for 250 25,000 litre standard ISO tanks for delivery from the manufacturer CIMC in China by the end of March this year. A further tranche of 250, making up an as yet unplaced order, is planned for the first half and the lessor is expecting to take delivery of a total of 1,000 similar units by the end of 2010.

Commenting on the move, TAL VP for Tank Containers, Mike Broadhurst said: "Last year's economic downturn precluded us from expanding our fleet but recent signs of an up-turn in trade have been encouraging. We are always looking to up-grade our equipment and while we are unlikely to return to the purchasing levels of 2008, when we invested in around 1,400 units, we will have significant additions to the TAL fleet during 2010."

For more information and to contact TAL International:

### ASIA / PACIFIC

Mike Broadhurst, Vice President  
78 Shenton Way  
#15-01A  
Singapore 79120  
Tel: +65-9152-8057

[Mike.broadhurst@talinternational.com](mailto:Mike.broadhurst@talinternational.com)

### EUROPE / MIDDLE EAST

Alasdair Voisey, Director of Marketing  
Gramayestraat 4/Bus 8  
Antwerp 1, Belgium  
Tel: +32-475-520281

[Alasdair.voisey@talinternational.com](mailto:Alasdair.voisey@talinternational.com)

### AMERICAS

John Walter, Director of Marketing  
379 Diablo Rd, Suite #100  
Danville, CA 94526, USA  
Tel: +1-925-831-6100

[John.walter@talinternational.com](mailto:John.walter@talinternational.com)



# Adami expands

Verona-based liquid foodstuffs transport specialist Adami SpA is boosting its intermodal transport fleet to compete on more routes. "We are building up our German operation at Beilngrie, near Ingolstadt and close to the Kombiverkehr sorting centre there," explained Adami's managing director Giorgio Adami. "We already operate for Cemac on the Brenner route and with Hupac for Swiss transit."

Adami's core business is liquid foodgrade products and it operates a fleet of 100 stainless steel tank containers with capacities ranging from 30,000 to 35,000 litres, all equipped with cooling and heating systems. It is also building up its fleet of Euro 5 drayage trucks. Its scope of business covers southern Italy as far as Sicily and as far north as Scandinavia.



Adami's core business is liquid foodgrade products

# Stolt revenue up, profit down

Stolt Tank Containers reported fourth quarter operating revenue of US\$111.4m, up from \$110m in the third quarter of 2009. Growth in revenue for the quarter reflected higher freight rates, partially offset by a slight seasonal decrease in shipments. The decline in shipments followed two consecutive quarterly increases and reflected in part efforts of customers to adjust their year-end inventories.

Fleet utilisation rose to 69.4% from 66.4% in the prior quarter, as STC continued to reduce the size of its fleet through its ongoing off-hire programme. STC off hired approximately 400 leased tanks in the fourth quarter, as the division continued efforts reduce its fixed costs. STC reported an operating profit of

\$9.7m in the fourth quarter, down from \$13.2m in the third quarter. Results for the quarter included a 6.1% increase in operating expenses driven primarily by a significant increase in ocean and inland freight costs, which were only partially offset by higher freight rates to customers, and by the negative impact of the weak US dollar on operating expenses. Pressure on margins due to increased price competition and rising freight costs — caused mainly by the withdrawal of excess container ship capacity — is expected to continue into 2010.

The news was released as part of the group's financial results for the fourth quarter and full year ended 30 November 2009. Stolt-Nielsen Group reported unaudited net profit for the

full year of \$95.2m on turnover of \$1.6bn.

In the group's other divisions Stolt Tankers reported a Q4 operating profit of \$11.3m, down from \$14.2m, primarily as a result of higher bunker costs and a reduction in deepsea operating days. Stolthaven Terminals reported an operating profit of \$14.5m, up from \$14m, primarily due to lower operating expenses and higher equity income from its joint-venture terminals.

Commenting on the results, CEO Niels G Stolt-Nielsen, said: "Considering the challenging circumstances in our industry in 2009, I am pleased with SNSA's full-year results. In the fourth quarter, results in tankers were held down by a surge in bunker fuel prices and our tank container margins continued to be squeezed by rising freight costs and keen competition. Despite lower throughput, Stolthaven's operating profit was up due to lower operating costs and increased equity income from joint ventures. Overall, SNSA has emerged from 2009 relatively well positioned, with a strong balance sheet."

"The economic outlook for 2010 remains uncertain. While government stimulus packages have helped to revive the financial markets, their impact on the fundamentals of global demand, production and supply are less clear. Therefore, we expect 2010 to be another challenging year and we intend to continue operating our businesses in the conservative manner that has served us well to date."

[www.stolt-nielsen.com](http://www.stolt-nielsen.com)



Fleet utilisation rose to 69.4% as STC continued to reduce the size of its fleet through its ongoing off-hire programme

# Singamas posts profits warning



Singamas has implemented cost control measures and continued to focus in expanding its product mix with higher-margin specialised containers

Container manufacturer Singamas Container Holdings has warned of a "significant loss" in its 2009 results compared to the US\$4.5m profit the company made the previous year.

Singamas is the world's second largest manufacturer of ISO containers after CIMC, and in recent years has diversified into producing tank containers. However, Singamas said it had suffered severely in the global economic downturn. "The financial and economic turmoil continued from the second half of 2008 into 2009. The global financial and economic

downturn has affected export trade from China, which has affected container demand, revenue and profit," said a company statement.

"Nevertheless, the group's specialised container and logistics businesses are on track. Also, the Peoples Republic of China export market has been improving, especially in the fourth quarter. The group has implemented cost control measures and continued its focus in expanding its product mix by developing more higher-margin specialised containers," the statement added.



FLEXIBLE LEASES

CUSTOM DESIGN

DIRECT SALES

CERTIFICATION SUPPORT ONLINE

## CONTAINER TYPE

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

CAPACITY	TARE WEIGHT	MAX GROSS WEIGHT
26,000 L	4,150 KG	36,000 KG
25,000 L	3,970 KG	36,000 KG
24,000 L	3,375 KG	36,000 KG
21,000 L	3,237 KG	30,480 KG

## GENERAL SPECIFICATIONS

WORKING PRESSURE: 4 Bar // MAXIMUM CARGO TEMP: 100°–130°c

## STANDARD FITTINGS

MANLID: 500mm (20") diameter  
 AIR LINE: 1.5" stainless steel ball valve, 1.5" BSP cap. Provision for pressure gauge  
 RELIEF VALVE: 2.5" stainless steel maxi highflow. Provision for second valve  
 TOP DISCHARGE: Provision for 3" valve and siphon tube  
 BOTTOM DISCHARGE: 3" stainless foot / butterfly valve assembly. Blank flange or 3" cap  
 STEAM-HEATING: 7.5m<sup>2</sup> effective surface area. 0.75" inlet/outlet

## APPROVALS

LLOYDS CONSTRUCTION CERT, UIC, CSC, TIR, IM101, UK(DOT), RID/ADR, AAR600, FRA, TC, UN PORTABLE TANK

# CRONOS TANKS

GLOBAL COVERAGE FROM YOUR LOCAL CRONOS OFFICE



[www.cronos.com](http://www.cronos.com)

ANTWERP CHENNAI DUBAI GENOA GOTHENBURG HAMBURG HONG KONG LISBON LONDON NEW YORK RIO DE JANEIRO SAN FRANCISCO SEOUL SHANGHAI SINGAPORE SYDNEY TAIPEI TOKYO  
 DRYS REEFERS TANKS ROLLTRAILERS CPC'S 45' PALLETWIDES OPEN TOPS FLAT RACKS BULKERS EQUIPMENT SERVICES CEMENT TANKS CAR RACKS

## Emerson provides wireless monitoring solution

Emerson Process Management's Smart Wireless technology has been installed by Nynas AB to upgrade an underground storage tank monitoring system, creating an online integrated solution and reducing installation costs by 10,000 compared to a wired alternative.

Nynas is an international group that refines heavy crude oil to produce bitumen and naphthenic speciality oil products. The company owns four refineries, one of which is located at Nynashamn in Sweden. The underground storage tanks at Nynashamn are monitored for unequal vapour pressures which can indicate potential blockages in the pipes that connect the tanks. The existing pressure switches are ageing and due to be replaced. They were not continuous, only indicating when set levels had

been exceeded.

"When a signal cable on one of the switches failed we decided to upgrade to an online solution that would bring storage tank measurement data directly into the plant's control system and help identify blockages much earlier," said Morten Hansen, senior instrument engineer, Nynas. "We were also interested in trialling wireless technology and this application presented the perfect opportunity."

The underground storage tanks are located a considerable distance from the control room and if Nynas had installed conventional instrumentation, new cabling would have been required to connect to the remote devices. The cost of this was prohibitive so Nynas looked at the benefits of using wireless.

With no line of sight between the location of the pressure transmitters



Rosemount wireless transmitters installed on large vessels act as repeaters

and the ideal position for the gateway, Nynas selected Emerson's Smart Wireless products, which use self-organising technology, to connect the devices. With this technology, each wireless device can act as a router for other nearby devices, passing messages along until they reach their destination. If there is an obstruction, transmissions are simply re-routed along the network until a clear path to the Smart Wireless Gateway is found. The technology also offers redundant communication via two or three routes ensuring greater than 99% communication reliability.

Two additional Rosemount wireless pressure transmitters provide measurements from the very large underground storage rooms (bunkers) containing crude oil. Measurements are taken to identify unequal vapour pressures in the different sections of the bunker. Data is transmitted every 60 seconds to a Smart Wireless Gateway located 650m from the pressure transmitters. The Gateway is

connected to Emerson's DeltaV digital automation system using Modbus communications.

A further two Rosemount wireless transmitters installed on large vessels within the facility act as repeaters providing additional routes for the data and ensuring reliability of connection. Additional wireless measurement devices can be easily added as required and, by increasing the number of routes available to send data back to the gateway, they make the network even more reliable.

"Using Emerson's wireless solution we have been able to reduce significantly the cost of upgrading the pressure measurement to an online system. Installing new cabling would have cost 10,000 more than the wireless solution," said Hansen.

"Installing the Emerson devices onsite was relatively easy and it took less than a day to complete the configuration and start-up procedure," said Hansen. "We have also found the technology

easy to use with the ability to manage the devices using Emerson's AMS Suite predictive maintenance software."

Having successfully trialled the Smart Wireless technology, Nynas has expanded the wireless network at the site. Rosemount Rex radar level gauges, equipped with Smart Wireless THUM adapters have been installed, replacing two existing mechanical servo gauges. A technology change of this type would normally require the replacement of the signal cables, but by using a THUM adapter wireless communication is added to the instrument, thereby avoiding the need for expensive cable installation.

The THUM adapter is a WirelessHART device that can retrofit on almost any two or four wire HART device, without special power requirements, to enable wireless transmission of measurement and diagnostic information. Devices with the THUM adapter operate as components of the Smart Wireless self-organising field network.

Smart Wireless is an extension of PlantWeb digital architecture that offers solutions for field instrumentation and plant operations. In addition to the products installed at Nynas, other Smart Wireless products available include Fisher position monitors, Rosemount Analytical devices and Machinery Health Management transmitters, and native wireless interfaces to Ovation digital automation systems, and SmartStart services.

[www.EmersonProcess.com/SmartWireless](http://www.EmersonProcess.com/SmartWireless)



Rosemount Rex radar level gauges, equipped with Smart Wireless THUM adapters have been installed to replace existing mechanical servo gauges

## Sea Box relocates

Sea Box, Inc, a supplier of military and specially-designed containers, has completed the purchase of a 378,000 sq ft facility located on 51 acres in East Riverton, New Jersey, as the group's new world headquarters.

The building has over 330,000 sq ft of manufacturing space, 18,000 sq ft of warehousing, and 30,000 sq ft of office space. The property also offers a rail spur for additional logistics capability. The site has over 20 acres available (plus another 20 acres available for future development) for storage of 20ft and 40ft ISO containers utilised in its custom modification efforts as well as its growing rental fleet.

Effective February 2010, Sea Box, Inc will relocate its manufacturing plant

and engineering office to this new location. The office operations of Sea Box, along with the container finishing department, will remain at its current location (802 Industrial Highway, East Riverton, New Jersey) until renovations have been completed sometime near the end of 2010.

According to Jim Brennan Jr, president of Sea Box, the relocation was necessary due to the unprecedented growth of the company in recent years: "The move will enable Sea Box to develop our distinction as the country's leading provider of ISO containers to the US military."

The address of the new facility is 1 Sea Box Drive, Cinnaminson, New Jersey, 08077. Tel: +1 (856) 303-1101. Fax +1 (856) 303-1501.

# Tank containers

for the transport and storage of liquids and gases

Full frame super light T12 tank container  
tara 3300 kg



WEW Westerwälder Eisenwerk GmbH  
Ringstraße 65a  
D-57586 Weitfeld Germany  
Phone: +49 (0) 2743 9222-0  
Fax: +49 (0) 2743 3411  
E-Mail: [wew@wew-tankcontainer.de](mailto:wew@wew-tankcontainer.de)

A COMPANY OF



Forward Motion



## Safety

Intermodal liquid bulk logistics for hazardous chemicals



www.InterBulkGroup.com

# SiteSentinel helps Dead River head into its second century

Not many companies can "luck" their way into celebrating a 100th anniversary. To reach that level of success, they must be able to adjust to an ever-changing market and willing to try new technologies in order to keep the business moving forward. For example, Dead River Company, of Portland, ME was founded in 1909 by Charles Hutchins as a timber harvester along a branch of the Dead River in western Maine, USA.

A century later, the company, still family-owned, has become one of the largest retailers of home-heating oil and propane in northern New England.

This didn't happen by accident, but was the result of sensing a shift in existing market dynamics, identifying new opportunities, and then having the fortitude and wherewithal to create a new direction for the company.

Since buying its first fuel station in 1936 and then initiating a home-heating programme in the 1940s, Dead River has grown to become one of the top suppliers of home-heating products, fuel oil and propane in northern New England, particularly throughout the states of Maine, New Hampshire and Vermont. As such, it now operates a network of 56 bulk

plants or bulk distribution facilities spread out among the communities in which it retails. A typical Dead River Company bulk facility has four to six vertical aboveground storage tanks (ASTs) that are used for storing No. 2 fuel oil, kerosene and on- and off-road diesel. The plants generally range in capacity from 20,000 to 60,000 gallons, though there are some as large as 1m gallons.

"We buy the product, distribute it to our bulk facilities, then our trucks pick it up from those locations and go home to house to deliver the product," explained Levi Ross, manager of supply and logistics for Dead River Company. "The re-supply of product coming into the distribution facilities is a 24-hour operation, while our delivery trucks typically load during normal working hours."

With that much product moving that rapidly through the system, tank gauging and monitoring at every bulk-distribution facility is man-hour intensive. "The majority of our locations have tape gauges that have to be read manually on a daily basis, which means that somebody physically goes out and reads the tanks once a day and then anticipates reorders based on the supply levels in the tank," said Ross.

Knowing that this tank-checking system was impacting manpower and cost-efficiencies, Ross approached Dave Blanchette, his distributor contact at The John W Kennedy Company, East Providence, RI. JW Kennedy has been a leader in supplying petroleum

equipment in New England for more than 75 years. From Blanchette, Ross learned about advancements that were being made in automatic tank monitoring and gauging, including the SiteSentinel iSite Automatic Tank-Gauging System from OPW Fuel Management Systems. Selecting a group of three bulk facilities that made the most logistical sense, Ross began having the iSite and OPW's Petro Vend FSC3000 Site Controller equipment installed in July 2008.

"We had three facets we wanted to accomplish at these upgraded locations," said Ross. "First, we wanted to be able to authorise sales with a chip-key system. Second, we wanted the ability to temperature compensate our inventory and distribution. Finally, we wanted remote access to the gauging and inventory information."

The iSite was able to meet all of these requirements because it provides the accuracy and versatility that bulk-plant operators are looking for and that isn't available in older, legacy fuel-management systems. The system is built on Windows technology that provides the horsepower that site operators need to ensure that their sites are being managed as efficiently and effectively as possible. The iSite has been developed to offer easy, low-cost installation; easy-to-manage user interfaces; highly accurate and precise tank-monitoring peripherals; easy reconciliation of inventories and deliveries; a variety of probe and sensor options; tracking of regulatory-compliance reporting; an easy-to-read

LCD touch-screen with an icon-based menu structure; and the latest in communications technology that allows access to the system from anywhere in the world.

"We were also looking for a complete solution with the fewest number of vendors involved," said Ross. "The nice part of OPW's hardware is that it accommodates some of the older legacy technology and does not require us to replace every module that we have been using when we upgrade a site. Also, the security and spill regulations are becoming more rigorous with each passing season and the technology we're now using as provided by OPW can help us meet those stricter regulations."

www.opwglobal.com



Dead River Company recently upgraded the automatic tank monitoring and gauging systems on its storage tanks at three of its bulk plants to the SiteSentinel iSite Automatic Tank-Gauging System from OPW Fuel Management Systems



The OPW SiteSentinel iSite console and Petro Vend FSC3000 site controller located in one of Dead River's bulk plant facilities

## Tank Watch for accurate stocks

Fuel management specialist Fueltek has released an updated version of Tank Watch, a system that allows managers to have a more accurate picture of fuel stocks. Tank Watch provides managers with accurate information on current stock, available tank capacity (ullage) and deliveries, making it easy to assess any problem areas.

Tank Watch is accurate to 0.3% with automatic compensation for temperature. "Most of our fuel management systems manage and monitor fuel dispensing, but Tank Watch specifically monitors the bulk tank contents, rate of extraction and accuracy of deliveries," explained Fueltek managing director Martin Devine. "A permissible variation on fuel delivery of plus or minus 1% should balance out over time, but Tank Watch will quickly identify any pattern of repeated under-delivery."

An audible and visible alarm is given if the system detects an abnormal or dangerous condition, such as low fuel stock or danger of over filling. This low stock alarm links to the fuel management software and will send an email alert to the manager's PC or post a text message reminder to a mobile phone. If unaccountable reductions in tank contents are recorded, this may indicate tank leakage and the system will provide an early warning.

With a heavy duty enclosure and a bright display, that is easy to read in

daylight, Tank Watch is built for use in harsh industrial environments. Tank measurement is by a high accuracy pressure sensor that is individually calibrated to take account of tank geometry. Systems can be specified for new installations but are also easily retro fitted to existing tanks and tank farms.

Tank Watch can be used in its own right to manage fuel stocks or it can interface with other Fueltek fuel management systems that monitor pump throughput and stop unauthorised use of fuel. In either mode, Tank Watch provides a powerful reporting and management tool. For management and reporting purposes the software is user friendly and can provide information to the manager's PC via LAN/WAN, Internet, GPRS or hardwired link.

www.fueltek.co.uk



Tank Watch is accurate to 0.3% with automatic compensation for temperature

## 'Elite' safety stairs



This latest addition provides a stronger engineered connection point that increases the stability of an attached fall protection enclosure

Benko Products has launched its Elite Series Safety Stairs, delivering enhanced rigidity and longer-lasting tread for safe access from a loading rack or dock to an elevated walkway.

This latest addition to the company's Green Access & Fall Protection line provides a stronger engineered connection point that eliminates shakiness and increases the stability of an attached fall protection enclosure. Elite Safety Stairs further improve personnel safety in loading/unloading processes through larger handrails, combined with galvanised steel back box sections and back uprights on aluminium models.

With customisable options including dimensions, safety enclosure specifications and construction

materials — including carbon steel, aluminium and fibreglass, or a combination of each — Elite Safety Stairs meet widely varying application needs in chemical, dry bulk, petroleum and many other industries. Their non-skid, self-levelling grip strut tread is extended to provide better footing and ideal access to isotainers. The stairs additionally offer a new telescopic midrail for simplified installation.

For ease of manoeuvrability, the stairs offer a simple and compact tension spring balance method. A slight push or pull by hand positions the stair for safe access to the vehicle. Plus, each unit is equipped with a locking mechanism for storage in the vertical position.

www.green-mfg.com

## Civacon adds ground verification wire

Civacon has enhanced its Optic and Thermistor Sockets with the addition of the new GS1001 Ground Verification Wire. The GS1001 Ground Wire assembly, now installed inside every new socket, replaces the need for a traditional ground bolt installed in the tanker's frame and performs the same ground verification function required by many loading terminals.

The most common industry method of installing a ground bolt in the tanker's frame often results in a poor connection over time after being exposed to the elements. The majority of tanker 'non-permissives' at the rack each day is due to these poor ground bolt connections. The new GS1001 Ground Verification Wire is a moulded assembly, installed completely inside the socket box, providing superior protection from the environment.

Key benefits and features include:  
No added cost – GS1001 assembly included in every socket  
Easy to install – no extra drilling into tanker's frame

Longer life – design offers greater protection from the environment (rain, corrosion, road chemicals, etc)  
Provides the same ground verification signal and function as a traditional ground bolt at the terminal

www.civacon.com

# GIRARD

Introducing Girard Tankflo  
The New Gold Standard



## Features:

A unique "spring/cam" cylinder is guaranteed for life (GFL™). Simply stated, if you break it, we will send you a new one free of charge.

A completely unrestricted 3" flow path with "zero retain" discharge arrangement.

Built-in Butterfly Valve with a cleaning position that exposes both sides of valve disc.

Seal and O-Rings are made from PTFE and perfluoroelastomeric material.

## Benefits:

Never pay for repair parts again.

Reduces discharge time by more than 30%. "Product traps" have been eliminated making it easier to clean.

Intermediate gaskets are eliminated. Cleaned and repaired in place. Repair parts are interchangeable with other manufacturers parts.

Sealing Technology matched with the widest range of industrial chemicals transported in ISO tank containers. The main PTFE Seal is interchangeable with the Girard Megaflo pressure/vacuum relief vent pressure seal.

**Reliability  
Performance  
Trust**



**Girard Equipment, USA**  
[www.girardequip.com](http://www.girardequip.com)  
[gsales@girardequip.com](mailto:gsales@girardequip.com)  
+1-908-862-6300

## Flexibility

Intermodal dry bulk logistics for cement &amp; minerals



InterBulk GROUP

www.interbulkgroup.com

## Checking for ballast made easy

Mitsui OSK Lines and Musashino Co, Ltd have jointly developed what is claimed to be the world's first portable liquid-level gauge for vessel ballast tanks. The gauge measures the level of ballast water (seawater) in a tank by dropping a portable measuring tube into the sounding tube of the ballast tank. A sensor detects air pressure changes in the tube and quickly measures the ballast water level.

Conventional measurement using a sounding tape is complex and time-consuming, requiring several crew members. Whereas MOL says the new liquid-level gauge makes it quick and easy to check the levels of many ballast tanks, improving efficiency and enhancing the safety of loading/discharging operations.

Vessels add seawater to their ballast tanks when discharging cargo, and pump it out when loading cargo. This helps to control the balance of the hull and ensure its stability. To prevent air from entering the ballast pump during the final stages of discharging ballast water, it is essential to measure the



The liquid-level gauge main body

level of water remaining in the tank.

The main characteristics of the liquid-level gauge are: seafarers can easily carry the gauge's main unit thanks to

its compact size (35cm x 33cm x 23cm) and light weight (about 5kg); it takes only 10 to 15 seconds to measure the liquid level in each ballast tank; it is compatible with most vessels because the gauge uses the vessel's air compressor system; the main unit can be connected with the air hose with a one-touch system; the pressure sensor automatically adjusts for changes in temperature and atmospheric pressure; finally a 9V battery is used for power source of the main unit.

Measurements are displayed in digital format and it also has an auto-off function to maximise battery life.

For further information, please contact: Masanobu Mochizuki, General Manager, Dry Bulk Carrier Supervising Office, Mitsui OSK Lines, Ltd.

[bcsmo@mail.mol.co.jp](mailto:bcsmo@mail.mol.co.jp)



Measurement using the liquid-level gauge

## TLGLF Pumps for LPG bobtails and transports

Blackmer has announced its TLGLF flange-mounted pumps are available for LPG bobtail and transport trucks. TLGLF pumps flange mounting directly to commercial internal control valves, eliminating the need for inlet pipes, shutoff valves and external strainers that can restrict flow and cause vaporisation problems, resulting in smoother operation and longer pump life.

TLGLF3 pump capacities range from 60 to 129 US gpm (227 to 488 lpm) with a 3ins ANSI intake flange. For maximum output and fast turns on transport loading, the TLGLF4 pump powers 200 to 350 gpm (757 to 1,325 lpm), with a 4ins ANSI intake flange. Maximum differential pressure for both units is 125 psi (8.62 Bar).

Both models are equipped with a double-ended drive shaft for clockwise or counter clockwise rotation by simply changing the pump position. Each provides an auxiliary intake port, which can be used for emergency unloading of another tank or transport. Along with an internal relief valve, Blackmer's UL-listed TLGLF pumps feature patented noise suppression liners to reduce cavitation,

noise, vibration and wear.

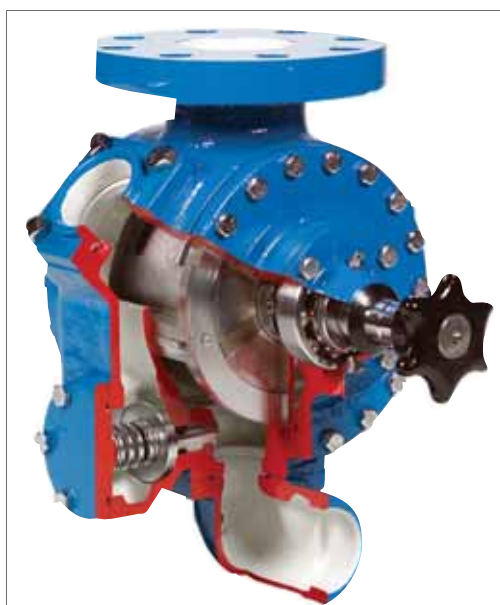
Standard Buna-N mechanical seals and Duravanes on the TLGLF pumps handle both LPG and anhydrous ammonia. Replaceable casing liner and end disks mean easy rebuilding of the pump chamber if ever required.

Blackmer has also created a new brochure specifically for the liquid terminals market. The new brochure describes how the incorporation of Blackmer's rotary sliding vane and centrifugal pumping technologies can help liquid-terminal operators improve the efficiencies and reliability of their transfer, blending/mixing and transportation applications.

More specifically, the brochure highlights the features and benefits Blackmer pumps bring to the handling of a wide array of liquid-terminal commodities, from petroleum products like motor fuels and asphalt, to

chemicals, caustics, sulphates and acids, and all types of vegetable oils and animal fats.

[www.blackmer.com](http://www.blackmer.com)



Flange mounting directly to commercial internal control valves eliminates the need for inlet pipes, shutoff valves and external strainers

## Girard enhances Megaflo foot valves



Girard's enhanced Megaflo composite foot valve

Girard Equipment, USA has announced its new line of enhanced "Megaflo" composite foot valves to the tank container industry. Changes include the quick release cage/spring mechanism. This new open cage design allows for greater flow rate and good access when cleaning.

All Girard valves are made from rugged stainless steel investment castings and are designed with all the latest advancements in valve technology. The new "Megaflo" valve promises a low cost of ownership and ease of use.

The butterfly valve handle has a new ergonomic shape and simple design. The height profile has been lowered to

accommodate even the tightest workspace. There is a new "Lock-Out" security feature and forward facing TIR location for easy access. The composite valve terminates to a Spigot flange with an eccentric 3ins BSP discharge connection. The flow path is offset from centre to control the retention of liquid after discharge.

Last year, Girard submitted the design to Bureau Veritas and received approval under the latest testing requirements of British Standard: EN 14433:2006.

The entire valve is completely electrochemically-polished to ensure resilience and easy cleaning.

[www.girardequip.com](http://www.girardequip.com)

## UWT in the UK

German bulk goods level measurement specialist, UWT Level Control, has opened its first sales office in the United Kingdom.

Based in the historic Shropshire town of Shrewsbury Graeme Hughes has been supporting UWT clients since October 2009. His objective is to increase the profile of the UWT range of products such as the Rotonivo, Vibranivo, Nivobob and Nivowave in the UK.

Hughes has extensive knowledge of industries including quarrying, steel/paper manufacturing and mining following a successful career in technical sales. The Shrewsbury office joins the other subsidiaries of UWT Germany, Memphis (USA) and Shanghai (China), a group which is tasked with supplying the UWT products into all applications where it is



Graeme Hughes, UWT (UK) Limited

vital that a level point or content is measurable.

[www.uwtuk.com](http://www.uwtuk.com)

## Newson Gale nominated

Newson Gale's new Earth-Rite RTR has been nominated for the Technical Innovation of the Year award at this year's annual HazardEx conference.

Designed and manufactured in the United Kingdom, Newson Gale says the Earth-Rite RTR is the most advanced static earthing system to ensure that people, plant and product are protected from the uncontrolled release of incendive static spark discharges from road tankers undergoing product transfers in potentially flammable and combustible atmospheres.

Three independent system checks ensure the Earth-Rite RTR will only permit interlocked flow control systems to operate when it has been confirmed that the road tanker has a proven connection to earth.

Road Tanker Recognition: based on

the unique electrical properties of road tankers, the RTR measures and confirms connection to a road tanker, thereby ensuring the earthing clamp has not been connected to parts of the tanker (eg. mud-guard) not electrically continuous with the tank container.

Static Earth Verification: ensures a low resistance connection to true earth is in place to provide a direct path for electrostatic charges that would otherwise accumulate to hazardous levels on the road tanker's container.

Continuous Earth Loop Monitoring: continuously monitors the connections established in checks 1 and 2 ensuring the overall resistance in the static earthing circuit never rises above 10 ohms during product transfer (as recommended by the Cenelec, NFPA and API standards for static control in hazardous areas).

[www.newson-gale.co.uk](http://www.newson-gale.co.uk)

## Purac underlines value of the flexitank code

The value of the COAs Flexitank Code of Practice to cargo owners was underlined in a presentation to the COA meeting in Rotterdam by Yvonne de Jong, global buyer logistics, of Purac.

Purac is the market leader in lactic acid, derivatives and lactides. Founded in 1935, the company is part of the CSM Group with some 1,000 employees and revenue in 2008 of 325m. Customers are in many sectors - food & beverages, feed, pharmaceutical and cosmetics - and Purac's products are also used in industrial



Yvonne de Jong (at podium) said flexitanks can offer lower supply chain costs

applications in the bio-plastics field, oil, electronics and cleaning industries.

Comparing flexitanks to foodgrade tank containers, Purac sees that flexis offer lower supply chain costs, due to lower freight, demurrage and repositioning costs. It also means increased availability of equipment, a larger number of suppliers and greater flexibility.

For Purac, the value of the Flexitank Code of Practice is that it will offer greater consistency in quality and service, enabling it to maintain the quality of its product, create a smoother supply chain, reduce supply risk, reduce stocks and avoid extra costs.

Before 2009, Purac's production sites were in Holland, Spain, Brazil and USA, with production of lactic acid in each plant. As from 2009, production has been established in: Thailand (producing lactic acid for Holland and Spain); USA (lactic acid mainly for the USA); Brazil (lactic acid mainly for South America); and Spain and Holland (specialties out of lactic acid from Thailand).

This more complicated supply chain results in annual shipping volumes in the region of 2,000 containers from Thailand to Holland, 1,100 containers Thailand-Spain, 150 containers Thailand-USA, and 110 containers Spain-Holland. These flows are complemented by 150-300 containers to customers and distributors.

To meet Purac's requirements, de Jong said transport service suppliers must offer: reliable transit time/order lead time; on-time delivery and in full; equipment availability; quality equipment; consistency in service; low total supply chain costs; assistance in claims handling; correct shipping information.

## LAF's mechanical advantage

China's Qingdao LAF Packaging claims its food grade flexitank offers superior performance for because the stainless steel flange is mechanically fitted to the flexitank which the company says is an improvement on welded systems.

The LAF unit is composed of 4 inner layers of food-grade polyethylene and 1 outer layer of woven polypropylene fabric. A 3ins butterfly valve is fixed firmly in to the stainless steel flange, "improving safety and removing the risk of leakage from the valve when loading or discharging," said LAF.

The specially designed sleeve provides a clean and secure containment area around the valve and is designed to ensure that any seepage or small spillages that might result from filling or discharge do not become incidents during transit.

LAF manufactures flexitanks in sizes from 14cbm up to 24cbm in order to maximise the capacity of a 20ft container depending on the specific gravity of the product to be carried.

Using LAF Flexitank will reduce packaging, storage and transportation costs by a sizeable margin. This is due to its relatively low unit cost and the convenience of positioning, speed of loading and exploitation of loading weights.

[www.flexitank.net.cn](http://www.flexitank.net.cn)  
[www.flexiblebag.cn](http://www.flexiblebag.cn)



LAF manufactures flexitanks in sizes from 14cbm up to 24cbm in order to maximise the capacity of a 20ft container

## Braid signs Jordan agency agreement

Braid Logistics has signed an agency agreement the Naouri Group of Companies, one of the largest transport groups in Jordan. The agreement aims to promote and distribute its premium quality flexitank for bulk liquid logistics in the Levant region.

The deal was signed between Ibrahim Naouri, chairman of Naouri Group of Companies, and Braid regional sales manager Gordon Ker.

Braid operates multi-ply and single membrane, single trip disposable flexitanks developed from the latest ultra high tensile ethylene co-polymers. Tube construction eliminates longitudinal seams thus reducing the risks of defects or failures. Ethylene co-polymer materials provide stretch and energy absorption properties, which means enhanced physical strength, durability and safety resulting with improved containment.

All materials used in the construction of Braid flexitanks are food-grade quality and comply with US FDA, German BGA, and EEC

directive standards and approvals. Latest construction techniques maintain consistent flexitank quality and ongoing R&D ensures up to latest designs.

A press release issued by Naouri Group said the flexitank will offer a new means to transport fluids and powders, reducing the cost, volume and weight of transporting bulk liquids by up to 50%, compared with traditional containers and vessels such as drums, cans and bottles.

Established in 1994, Naouri Group represents a number of global companies in Jordan and the Levant, and providing differentiated services in freight forwarding, shipping, Customs clearing, cargo and vessel inspection, ISO certification, trading, security, travel and tourism.

[www.naouri.com](http://www.naouri.com)  
[www.braidco.com](http://www.braidco.com)

## Hillebrand lands two major contracts



The M&S deal extends JF Hillebrand's existing relationship with the UK supermarket

JF Hillebrand has been awarded new contracts from two of the UK's largest retail chains. Marks & Spencer (M&S) has selected JF Hillebrand to manage imports of its European beers, wines and spirits (BWS) range to the UK, extending the relationship it currently enjoys with the handling of M&S BWS import operations from the New World covering both freight and supply chain management.

Roger Preston, sales director of JF Hillebrand UK Ltd, said: "This opportunity of a new two-year agreement will allow us to build further on our collaboration and to refine M&S BWS supply chain across all trade lanes."

At the same time, Hillebrand has won a new contract with Wm Morrison, being awarded the majority of the supermarket chain's inbound wine logistics business. "We are obviously delighted that M&S and Wm Morrison should have the confidence in the quality and value of our services to their businesses, to make this level of commitment," added Tom Yusef, chairman of JF Hillebrand UK. "It is very rare for us to publicise the winning of new business, but we are especially proud to report these significant recent successes."

The company also strengthened its capability to provide dedicated wine and beverage logistics with the acquisition of another specialist beverage forwarder, ABV Logistics Ltd. "With this acquisition, we are able to augment our global range of services using ABV Logistics' particular strength in Iberia and Italy, where their service coverage is impressive," said Tom Yusef.

"There is also great synergy in terms of the culture of the two specialist teams. Both are founded on an ethos of a totally customer-focused approach and, by combining, we have created a much stronger and capable organisation to serve our customers' existing and future requirements."

It is intended that in due course the ABV Logistics team, currently based in Wickford, will relocate to JF Hillebrand UK's West Thurrock offices.

Hillebrand's has also added several new routes and trade lanes to its Carbon Calculator. The list now includes: Argentina to Europe; Australia to Europe/New Zealand/Russia/Singapore/USA; Belgium to Australia/China/Europe/USA; Chile to Europe/Canada/China/Columbia/Mexico/Russia/South Korea/USA; France to Far East/USA; Germany to Far East/USA; Italy to Australia/Far East/USA; Japan to USA; Mexico to USA; New Zealand to Australia/Europe/Russia/USA; South Africa to Angola/Europe/NZ/Russia/USA; Spain to Far East/USA; Netherlands to Australia/Finland/USA; Uruguay to Europe/Russia/Latvia; USA to European/Russia

## Hocem's first flexi year

For one year now Hocem Haase Oil Chemical GmbH has been delivering its premium oil products in flexitanks.

Hocem has 20 years experience in trading with Eastern Europe and the CIS countries, specialising in the supply of high quality base oils, mineral oil products and chemicals. Headquartered in Hamburg, Germany, Hocem also an accredited representative office in Moscow, and a sales office in Bondues, France.

The transport of base oil in flexitanks offers a number of advantages, the company says. As loads can be shipped in smaller volumes this allows door-to-door delivery to customers. In addition, flexitanks require neither storage nor cleaning, and customers benefit from the one trip use. Compared to other means of transportation it allows a maximum flexibility, claims Hocem.

Loading ports for its oil products are two of the main Baltic ports, Klaipeda, in Lithuania, and Riga, Latvia. An experienced teams installs, fills and transports flexitanks by road to the load port. From the destination port the flexitank is delivered by again road to the customer's doorstep. After discharge the empty container is returned to the storage site of the shipping company.

In all flexitanks the installation of a heating system based on steam or hot water is possible. Temperature resistance ranges from -12deg C to +70deg C. Specific multilayered flexitanks can be used for storage and multiple refills, avoiding the need a shore tank at the client's site.

[www.hocem.com](http://www.hocem.com)

## Sun Logistics flexitank

In the November-December 2009 issue of *Bulk Distributor* we published an article concerning the rail impact testing of Sun Logistics' flexitank design, at TUEV Sued's testing facility in Goerlitz, Germany.

In the article it was stated that the flexitank "managed to sustain all four impacts as per the (COA Flexitank) Code of Practice". It has been pointed out that the use of the word "sustain" should not be taken necessarily to mean that the flexitank passed all four tests.

NOW AVAILABLE

NEW CONDUCTIVE LINER FOR DUST PRODUCTS:

- Transparent PE FILM
- Certified for food contact

The best solution for bulk sugar in container!

ECEPLAST LINER AND FLEXITANK MANUFACTURER SINCE 1995

QUALITY  
COMPETENCE  
SERVICE  
RELIABILITY



ECEPLAST S.r.l.  
s.s. 546 15 050 - 71029 Troia (FG) - Italy  
tel. +39 0881 978080; fax +39 0881 979100  
info@eceptlast.it; www.eceptlast.it

COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV ISO 9001/2000  
CERTIFIED ENVIRONMENTAL MANAGEMENT SYSTEM ISO 14001:2004





## Durability

Intermodal liquid FlexiTank for non-hazardous chemicals & food



www.InterBulkGroup.com

# Minority of UK palm oil buyers pass sustainability test

A handful of companies are showing real progress in their commitments to buy and use sustainable palm oil, yet the majority, contrary to their commitments, are failing to buy the product in spite of its availability, claims environmental pressure group WWF.

WWF's Palm Oil Buyers' Scorecard assessed the performance of 59 of the most prominent European retailers and manufacturers that buy and use palm oil in products ranging from chocolate bars and ice-cream to soaps and shampoos. No company achieved the maximum score of 29 points.

Nearly half of the European companies assessed (25) are UK-based, and their performance varied considerably. Seven UK retailers and manufacturers scored above 20 points, "each showing they have the right policies in place, are monitoring their purchases of palm oil and starting to make good on the commitments that most of them have made to buy certified sustainable palm oil (CSPO)", said WWF. Each is also a member of the Roundtable on Sustainable Palm Oil (RSPO).

The majority (17) scored between five and 20 points. Those at the top end of this scale are showing "encouraging signs", yet 12 of the 17 companies scored under 50% (14 points or less out of 29), suggesting they have yet to start dealing with palm oil consistently. One UK company scored zero. Companies scoring zero are either showing no action on palm oil or even declined to respond to requests for information. "These companies really need to up their game, and WWF is willing to help them do so," said the WWF report.

WWF opted to grade palm oil buyers after releasing figures in May last year which showed that only a small percentage of the

sustainable palm oil available on the market had been bought. The situation is starting to improve slowly. Over the last year, RSPO certified plantations have produced over 1.3m tonnes of certified sustainable palm oil, over 196,000 tonnes of which has been sold to date. While this still represents only 15% of the available supply, the RSPO has reported that CSPO sales have been growing – during the last four months, market uptake has seen a 34% increase.

Adam Harrison, WWF's senior policy officer for food and agriculture, commented: "We welcome the action of those companies that have moved toward buying certified palm oil – several of which are UK companies. But commitments are one thing, what's needed now is action from all of them."

"The top-scoring companies have shown what's possible, with some buying fairly substantial quantities of CSPO, but now it's a question of whether the majority will follow. If they do, it will transform the market, giving producers the confidence to grow more sustainable palm oil. If they don't, there will be grave consequences for the environment."

The growing demand for palm oil is adding to the already severe pressure on remaining rainforest areas of the world. The loss of forest in Indonesia is claimed to threaten the survival of species such as the orang-utan, the Sumatran tiger, rhino and elephant. Forest loss and the draining of peatlands for palm oil plantations is also contributing to climate change and displacing local people who rely on the forest for food and shelter. Palm oil is one of the world's fastest expanding crops in Southeast Asia as well as West Africa and South America.

The European Scorecard is just the start of a process to bring more

transparency to the global market for sustainable palm oil. In years to come, the scorecard will set higher benchmarks – including more attention on the purchase of CSPO – and include countries like the US, China and India.

A summary of the Scorecard and results are available at:

[www.divshare.com/download/9023365-76c](http://www.divshare.com/download/9023365-76c)



WWF was a founding member of the Roundtable on Sustainable Palm Oil (RSPO) and has worked since 2002 with the palm oil industry to ensure that the RSPO standards contain robust social and environmental criteria, including a prohibition on the conversion of valuable forests

Advertisement



## PHILTON Success TÜV Süd - GÖRLITZ CRASH TEST

**Philton Polythene Converters (PPC) are pleased to announce that their UK manufactured Single-ply flexitank came through the TÜV Süd crash testing unscathed.**

The COA TÜV Süd - Görlitz test calls for 4 separate impact tests, 3 of which are at door end at 5km/h, 9.5km/h and 12km/h, with one final impact at 12km/h on the opposite end.

PPC's flexitank passed all of these impact tests as well as a further 2 impacts at the opposite end (6 in total) with the last being at 14km/h, without the flexitank leaking.

This is a massive achievement considering that to date there have been over 15 tests from some of the worlds most prominent flexitank producers, with most failing due to leakage in their Flexitanks at the second test or third tests of 9.5 and 12 km/h.

PPC have always been proud of their quality record built up over the last 40 years of manufacturing liners for the bulk transportation industry. Their ongoing commitment to product and material development, as well as implementing their own testing equipment, has been the key to their success. PPC Managing Director Andrew Tisi says, "We took the decision to design and build our own testing simulator as we felt it was necessary to further understand the forces and stresses that flexitanks are subjected to during normal operating conditions. I firmly believe that the lessons that we have learnt through having the simulator have led to us being able to produce a product that can withstand the crash testing".

PPC have been involved with The COA Flexitank Working Party since it's inception and remain firmly behind the concept of bringing a Code of Practice to the industry. Tisi states, "For this industry to continue to grow we must have the confidence of the shipping lines. I believe that the best way of achieving this is to have a strict code of practice that will ensure properly regulated manufacturers and operators throughout the industry. Once the Code of Practice is established it will undoubtedly deter those who wish to make a quick buck from our industry without the commitment to quality. The sooner these companies are found out the better for those of us who are in it for the long haul".



PPC's Test Simulator at their UK site

**Philton Polythene Converters Ltd**  
Charfleets Road  
Canvey Island  
Essex SS8 0PQ  
United Kingdom  
Tel: +44 (0)1268 696331  
Fax: +44 (0)1268 510517  
sales@philton.co.uk  
www.philton.co.uk



PPC's Flexitank under-going testing in Görlitz

# Hupac opens Antwerp terminal

Swiss combined freight operator Hupac is opening a new transshipment terminal in Port of Antwerp. The facility has the capacity to handle 12 train pairs each day and will help shift freight traffic from road to rail. The construction was completed on time despite the economic crisis.

The HTA Hupac Terminal Antwerp is very close to the area of the Belgian port previously used by Hupac. The facility consists of a check-in area and a transshipment module with five craneable tracks as well as a number of traffic and parking lanes. Twelve 620m trains can be handled each day, which corresponds to a loading capacity of 600 road consignments per day. In the initial phase, HTA will handle five train pairs each day to Basel/Aarau and Busto Arsizio. The facility is owned by Belgian company Hupac Intermodal BVBA. The investment cost 22m and was partly financed by the Swiss Federation.

The terminal is an important prerequisite for the further development of combined transport, emphasised Hans-Joerg Bertschi, chairman of the board of Hupac, at the opening ceremony on 26 January in Antwerp, which was also attended by the transport minister for Flanders, Hilde Crevits. "Green logistics is a reality, despite the economic crisis," said Bertschi. "Companies that want to switch to environmentally friendly combined transport can now count on sufficient capacity and proven quality in the Antwerp area."

The new terminal is a central hub in Hupac's Europe-wide network. It serves both marine transport and continental transport for industries based in the harbour area. The facility is open to all rail

operators. Competition creates dynamics within the world of rail and ensures attractive offers, thus convincing the transport sector of the strengths of combined transport, according to Bertschi. "We



The new terminal is a central hub in Hupac's Europe-wide network serving both marine and continental transport for industries based in the Antwerp port area

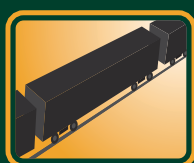
have a dream: to get long-distance transport in Europe onto the rails thanks to open rail markets by the year 2020. The HTA Hupac Terminal Antwerp is a strategic resource for the implementation of our Vision 2020."

During 2009, Hupac recorded a two-figure drop in traffic for the first time in its forty-odd year history. The volume of road consignments transported fell by 13.5% to 607,284. After around a 25% fall in traffic in the first quarter, the trend stabilised over the course of the year. In the last few months of 2009, the figures even rose slightly. "Overall, we fell back to 2006 volumes," explained Bertschi. Nevertheless, Hupac should be satisfied with the result. "In comparison with other modes of transport, we have got off lightly," he added.

Despite the crisis, Hupac continued to extend its transport network. A range of new connections between Antwerp and Spain/Portugal were incorporated in April 2009. Poland traffic was expanded at the end of July with a new link between Schwarzhilde (Dresden) and Katy Wroclawskie (Wroclaw). Romania was also a new addition to the Shuttle Net: August saw the start of a link with four weekly departures between Budapest and Curtici near Arad, which is soon to be extended into the Ploiesti industrial region. New products will also be added to the North-South axis in the coming months, such as the Cologne-Novara via Loetschberg for 4m containers and Antwerp-Verona and Rotterdam-Verona. Another innovation for Hupac is the Busto-Barcelona link planned for April this year.

[www.hupac.ch](http://www.hupac.ch)

## MULTIMODAL 2010



THE UK'S BIGGEST TRANSPORT AND LOGISTICS EVENT

NEC BIRMINGHAM

27-29 APRIL 2010

### The UK's only event dedicated to more efficient and cost effective freight transport & logistics and supply chain management

Launched in 2008, Multimodal in its second year recorded a 66% increase in visitor numbers, setting a new benchmark for the industry. Incorporating **free to attend seminars and briefings** Multimodal has continued to attract high calibre industry executives from the transport and logistics sector as well as key shippers, importers and exporters operating throughout the UK and Europe.

Returning and new exhibitors at Multimodal 2010 include **Associated British Ports, Dachser Ltd, DB Schenker, DSV, Ewals Cargo Care, PD Ports, The Malcolm Group, Transport Exchange Group, Woodland International Transport, Corporate Solutions Ltd and OOCL** to name but a few.

With over 3,000 attendees, companies sending representatives to Multimodal 2009 included **Panasonic, Argos, Homebase, Samsung Electronics, Toyota, Unilever, Jaguar Land Rover, Motorola, Whirlpool UK Ltd, Kraft Foods UK, BMW, ASDA/Wal-Mart, Ford Motor Company and Rolls Royce.**

See the website [www.multimodal.org.uk](http://www.multimodal.org.uk) for the list of current exhibitors and past attendee companies

"The show was tremendous. It's the first time we exhibited and we found it hugely busy and talked to the sort of customers and prospects we need to speak too. In general terms, Multimodal was a great exhibition for us"

**Keith Batterson, Director, Cosco Logistics UK**

"Met with existing suppliers and found some new ones. Found the seminars and informal talks on different stands to be informative"

**Sara Lee International**

"Very useful opportunity to compare the propositions from the leading logistics providers in one place"

**Unilever**

Register today at  
[www.multimodal.org.uk](http://www.multimodal.org.uk)  
quoting promotional code BLKA

FREE  
TO ATTEND  
SEMINARS  
AND BRIEFINGS



## Time for TIMO

A new intermodal terminal has been officially opened in Mortara, located in the Lombardy region of northern Italy.

The terminal, named TIMO, is strategically located between Milan, Turin, port of Genoa and the major railway hubs at Busto and Novara. Intermodal operator Shuttlewise has launched a service from Rotterdam via Venlo to Mortara. The new container-shuttle departs from Rotterdam RSC terminal, stops at TCT in Venlo, and ends at TIMO.

The service currently operates three times a week in both directions, although this is expected to increase to five times per week this quarter. According to Shuttlewise, Mortara is an interesting destination on the important Rotterdam-Milan-Genoa corridor, as it does not suffer from crowded tracks, lack of slots or queues for drivers.

The majority shareholder in the terminal is local Italian company, Polo Integrated Logistics, with 51% stake. Other shareholders include Cemate (25%), Den Hartogh (14%) and Argo Finanziaria (10%).

A ribbon was cut at the passing of the first locomotive pulling a container block train. Aldo Poli, chairman of Fondazione Banca del Monte di Lombardia, defined the Logistic Park as a genuine "locomotive" for the new economy and symbolically donated a stationmaster's cap to Andrea Astolfi, chairman of TIMO.

[www.poloimortara.it](http://www.poloimortara.it)



The terminal is strategically located between Milan, Turin, port of Genoa and the railway hubs at Busto and Novara

## Chemical logistics hub for Sing

Singapore's Yang Kee Logistics is to build a one-stop chemical logistics hub at Jurong Pier Road. The company is investing S\$45m into the first phase of the hub.

The five-storey hub, on a 4ha site, will centralise current operations from the company's six different warehouses and is expected to grow significantly the company's turnover by 2012.

Expected to be completed in early 2011, the new hub will feature specialised chemical storage capabilities. It will also incorporate new technologies to improve productivity and reduce its carbon footprint.

Yang Kee expects cost-savings to be significant. Ken Koh, deputy managing director, said: "We estimate to reduce our cost by S\$2.7m a year. This reduction comes from owning our facility, from reduction in costs of ownership, and also by synergising our operations."

Yang Kee currently employs about 180 workers, but expects the number to rise to 280 by 2012. The company is aiming to be the first logistics warehouse in Singapore to secure the Green Mark Platinum Award by the Building and Construction Authority. Some green measures that will be adopted include investing in solar panels, wind turbines, solar tubes to minimise the use of artificial light and recycling facilities.

Yang Kee is also in talks with a carbon credit company to buy credits to offset any remaining carbon emissions. Yang Kee is one of the SMEs which benefited from SPRING, Singapore's Business Upgrading Initiatives for Long-term Development (BUILD) package. BUILD was first launched in February last year. The package aims to help SMEs build new capabilities and strengthen existing operations.

Freight • Transport • Logistics • Supply Chain Management

27-29 April 2010, NEC Birmingham, UK

[www.multimodal.org.uk](http://www.multimodal.org.uk)





## Capability



On-site value added logistics services for liquid & dry bulk materials

www.InterBulkGroup.com

# Lehnkering focuses on "2013 vision"

Despite the difficult market currently being experienced in the European chemical distribution market, German logistics service provider Lehnkering is continuing to expand its range of business activities.

With an annual turnover of some €600m and over 2,700 employees, the company's main business takes place in Central and Western Europe. It covers four main sectors: Shipping, Road Transport, Chemical Manufacturing Services and Warehousing & Distribution.

Acquired in 2004 by private equity group Triton, the company is presently implementing a five-year programme of growth - both organic and through acquisition - aimed at substantially repositioning itself in the chemical logistics market. This expansion is being driven by group CEO Cees van Gent, who joined Lehnkering from DHL in 2007. "The aim is for the company to reach its full potential by 2013," he explains.

Over 85% of Lehnkering's business is focused on chemicals, with steel representing the remaining 15%. The company currently offers a fleet of 200 barges, 337 road vehicles, 702 trailers, 19 hazardous goods warehouses, four tank cleaning stations and 89 production facilities in five sites.

**Road transport.** Chemical transport by road is one of Lehnkering's core activities. It is a specialist road transporter of hazardous liquids - including such products as: acids and bases; dispersions, suspensions and solvents; special products such as liquid sulphur; and liquid waste.

Its chemical road fleet comprises 195 road vehicles, 295 steel tank trailers. The tank fleet continues to grow organically, to ensure the company can meet its customer requirements.

**Inland transport.** Lehnkering's inland waterway operations are organised within its Shipping Logistics and Services (SLS) division. The company's fleet totals about 200 inland waterway vessels with various types and designs. Lehnkering transports bulk commodities such as coal and ore, part loads, semi-finished and finished manufactured goods and chemical and petrochemical products along inland waterways. The oil and steel industries are also SLS customers. In addition to Lehnkering Reederei GmbH, which operates the gas tanker fleet, Lehnkering Rhein-Fracht GmbH is one of the inland waterway shipping companies that belong to the company.

The company has 40 chemical tankers, including double-hull ships, together with contract shipping vessels.

Following the addition of a new double-hull vessel early 2009, the gas tanker fleet rose to 16. Named "LRG GAS 87", it is being used on the river Rhine. Meeting the rules and regulations in the Order to Transport Hazardous Substances on the River



Cees van Gent - The aim is for the company to reach its full potential by 2013



Chemical transport by road is one of Lehnkering's core activities

Rhine, the 110m long and 11.45m wide hull of the barge was built at the Orsova Shipyard in Romania. TeamCo Shipyard BV in the Netherlands handled the superstructure work. The double-hull barge is powered by two 860hp engines with low fuel consumption.

Lehnkering reports that the gas transportation sector in the Rhine area is growing steadily. The need for barges, which meet environmental and safety requirements, will continue to grow.

"This investment underlines our very strong market position in the gas inland waterways transport sector," says van Gent, "and provides a contribution towards safeguarding energy and raw materials for industry. The new gas tanker is part of our current programme to rejuvenate our fleet."

**Expanding hazardous goods warehouse logistics.** Lehnkering has extensive experience in operating warehouses for hazardous goods going back many years. The company already provides warehouse services for hazardous goods in Barendrecht, near Rotterdam. It has recently expanded its activities in Rotterdam - with the construction of a new warehouse - and also in Hamburg.

The new warehouse in Rotterdam for hazardous goods has been built on a 6,000 sqm site in a good location for ongoing transport services. Equipped with high shelf technology, the facility will provide storage space for more than 12,000 pallets.

"The site at the largest maritime port in Europe and the existing infrastructure with rail connections and the opportunity to tranship containers make our new business location the ideal starting point for our growth strategy in the Benelux countries," says Uwe Willhaus, COO at Lehnkering. "Despite the current economic situation, we continue to expect a growing need for warehouse logistics services for the chemical industry and we are aiming to capture a share of this work by using the new business location."

In addition, the company is growing in Hamburg. On 1 October this year, Buss Safelox GmbH joined Lehnkering. The Buss Group subsidiary with its regional focus in the Port of Hamburg merged with Lehnkering GmbH.

The service portfolio of Buss Safelox includes warehouse and logistics services for the chemical, pharmaceutical and cosmetics industries. Buss Safelox is considered to be one of the market leaders in Northern Germany. "This acquisition logically continues the growth strategy in order to expand our market position in warehouse logistics for the chemical industry in Germany and Central Europe," says Willhaus.

The 30,000 sqm of storage area spread over three locations and 70 qualified employees have been assigned to the company's Distribution Logistics & Services division.

Both companies point out that Lehnkering is not the legal successor of Buss Safelox GmbH. The merger is described as an "asset deal", with both parties preserving secrecy on the purchase price.

Overall, Lehnkering has storage space available for a total of 271,000 pallets and spread over 18 warehousing locations in Germany, the Netherlands as well as the USA.

**Manufacturing services.** But Lehnkering also offers advanced chemical services beyond traditional logistics activities. The Chemical Manufacturing Services division is represented by the 100% subsidiary Schirm GmbH which supports clients from the chemical industry in producing and packaging their goods. Schirm operates plants for refining chemical-technical products in Luebeck, Schoenebeck, Baar-Eberhausen and, jointly with Lehnkering, in Wolfenbuettel. The range of services covers synthesis of organic compounds, and formulation and packaging for the market segments of pesticides and fine chemicals. Through its subsidiary Schirm USA Inc, in Ennis, Texas, the company has also had a plant in the USA since 2005.

www.lehnkering.com



The new double-hull gas vessel LRG GAS 87. Gas transportation in the Rhine area is growing steadily



Schirm supports clients from the chemical industry in producing and packaging their goods

## Rugby terminal

UK Transport Minister Chris Mole MP opened Britain's newest rail freight terminal in Rugby. Created with £1m of private sector investment by DB Schenker, the former disused coal loading facility has been transformed into a modern rail freight container handling terminal. It is expected handle three trains per day and 50,000 containers a year by the end of 2010.

The location of the terminal provides strategic access to Central England and is immediately adjacent to the Rugby, Lutterworth, Daventry and Coventry logistics parks. The location is also electrified, enabling DB Schenker to operate longer, higher capacity freight trains.

Initial services commenced in early January, with one train per day supplying just-in-time deliveries to supermarkets in Scotland. Additional services will be introduced in the coming months, with a mix of domestic UK container services and trains to and from mainland Europe through the Channel Tunnel.

Chris Mole, Transport Minister, said: "I am pleased to open this freight facility which will help reduce congestion on our roads while allowing

longer, more efficient and more cost-effective freight trains to reach Central England from mainland Europe. Rail can be a quicker, greener, cheaper way for businesses to transport their goods, and the UK government is investing £350m in rail freight infrastructure - the most significant funding for many years."

David Kerr, commercial director for DB Schenker, said: "The new container terminal at Rugby is a significant addition to DB Schenker's national network of rail freight terminals. It will enable both domestic and international containers for retailers and manufacturers to be moved by rail on our network of national and international services."

"With the terminal having direct access to the electrified West Coast Mainline, it means we will be able to use electric locomotives resulting in significantly reduced

costs and CO<sub>2</sub> emissions, compared to the diesel locomotive services operated by our competitors."

With the opening of Rugby, DB Schenker now operates six inland terminals and also operates rail services to a further six independent terminals, thereby providing national coverage for intermodal traffic.

www.rail.dbschenker.co.uk



DB Schenker now operates six inland terminals and provides national coverage for intermodal traffic

## Silesia line

DB Schenker Rail Polska SA is offering a new through train - the Silesia Line - running twice a week between the city of Seddin in Brandenburg and central business locations in the south of Poland (Silesia). The new train will bundle previous products and reduce transport times in Poland roughly by half. Instead of the previous two weeks, the trains will now run on the basis of fixed timetables and will spend only seven days in Poland, where they will call, among others, Wrocław Gadow, Kedzierzyn Koźle, Gliwice and Jaworzno-Szczakowa.

"After a lead time of just six months since the takeover of our Polish company, this train proves that we are successfully co-operating on the development of new rail products. The Silesia Line is an important step towards developing an efficient rail network for our company in Poland," stressed Dr Alexander Hedderich, chairman of DB Schenker Rail. He explained that DB had made targeted investments in Poland to exploit the potential of this major economic and transport market and offer customers logistics services on an international network from one single source.

# Hazards of static electricity in powder handling

Michael O'Brien\* outlines the hidden electrostatic risks involved during many powder handling operations, including transloading to and from road tankers

In 2006 the US Chemical Safety Board (CSB) published the findings of a major study outlining the scale and devastating consequences of combustible dust cloud explosions that have occurred between 1980 and 2005 in US chemical processing operations.

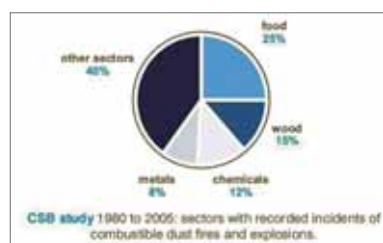
In that period 281 explosions were caused by ignitable combustible dust atmospheres, resulting in 199 fatalities and the injury of 718 workers. In the UK the HSE (Health & Safety Executive) recorded 303 dust explosions over a nine-year period and German records demonstrate 426 similar incidents over a 20-year period.

During one 10-year period a single insurer listed a total of 450 incidents across its client base that were attributed to dust fires and explosions. The total cost of damages amounted to \$580 million, with the average gross loss for dust explosions costing \$1.9 million and dust fires costing \$1.2 million.

Since its report was published the CSB has repeatedly requested that OSHA (Occupational Safety and Health

\* Michael O'Brien is product manager at Newson Gale Ltd, Omega House, Private Road 8, Colwick, Nottingham NG4 2JX, UK (tel: +44 115 940 7500; michael.obrien@newson-gale.co.uk)

Administration) take more action to regulate the safety of operations processing combustible and flammable powders. The 2008 sugar refinery explosion at the Port Wentworth plant of Imperial Sugar should be a warning to a broad range of industries just how risky and relevant dust explosions are. Approximately 70% of all chemical processing industry operations handle powders in a combustible form at some point in their manufacturing process.



Several contributing factors need to be present to support the ignition of a combustible dust cloud, comprising:

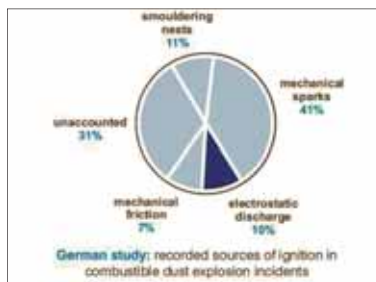
- A dispersed dust cloud-oxygen mixture that is above its Minimum Explosion Concentration (MEC).
- Physical containment of the dust cloud that will lead to rapid pressure build-up causing deflagrations out of process equipment and into open

workspaces.

- A heat source with enough energy to ignite the combustible atmosphere.

The locations of primary deflagrations normally occur within process equipment such as dust collectors and blending machines. Secondary explosions result from a containment breach, with the primary deflagration propagating through conveying systems or through mechanical breaches in the processing machinery. Secondary explosions cause the bulk of devastating damage to workers, buildings and equipment by unsettling and igniting layers of dust that have collected on surfaces. A 1.6mm layer of dust that gets dispersed from primary explosions is all that is required to initiate secondary deflagrations.

Three separate studies with collective data totaling 1100 dust explosions gathered in the US, UK and Germany highlight items of process equipment that have proven to be known sources of primary dust explosions. The main processes that suffer from explosions are dust collection, powder grinding and pulverising, powder conveying operations, silo and container filling and powder mixing and blending.



The German data, which totaled 426 incidents, provides a percentage breakdown of known primary sources of ignition. In this study electrostatic discharges make up 10% of known primary ignition sources. The "unaccounted" category accounts for incidents where no physical evidence has been detected. The prime suspect in the "unaccounted" category is very often electrostatic discharges, but as no witnesses can provide evidence of seeing or hearing a spark, ignition sources of this type go unreported and unaccounted for.

Even though the majority of combustible dusts have higher minimum ignition energies (MIEs) than flammable vapours the amount of energy available from electrostatic discharges within contained environments will ignite the vast majority of combustible dusts. This is because the rate of electrostatic charge generation and accumulation in powder processing operations is extremely high.

To prevent electrostatic discharges igniting combustible dust atmospheres companies should risk assess their processes and equipment to ensure any potential sources of ignition are identified and managed correctly. Incendive electrostatic sparks usually result from the lack of a thorough and detailed risk assessment, unintended changes to equipment during routine maintenance and unsafe operator working practices. All potential sources of internal and external static discharges from process equipment situated in zoned & classified areas must be accounted for and managed in the appropriate way.

Isolated components in conveying and dust collection systems are capable of storing large amounts of static charges if they are not sufficiently earthed.



FIBC being filled with earthing clamp attached

Isolated components usually result from design oversight or after maintenance teams reassemble fittings without re-establishing static bonding connections. Pipes, valves, blowers, hoppers and other components engaged in powder transfer processes can be isolated from each other due to the insulating properties of parts like rubber gaskets or through normal wear and tear. The most secure means of preventing charge build-up is to bond and ground components to a reliable high integrity ground point. The NFPA (National Fire Protection Association) and CENELEC (European Committee for Electrotechnical Standardisation) state these bonding connections should have a resistance to earth of less than 10 ohms.

To manage the uncertainty of knowing whether or not components can become isolated during processing operations, dedicated static earthing equipment can be specified to monitor all potentially isolated points in the conveying system. If a component loses its earth connection, or experiences a rise above 10 ohms resistance in the bonding circuit, operators can be alerted to the potential hazard immediately, either through automatic shut down of the operation or by hazard strobes and sounders.

Powder filling operations often produce clouds of combustible dusts that have the potential to disperse in oxygen above their MEC limit. Spark discharges and propagating brush discharges (PBDs) can ignite the

resulting dust cloud. It is critical to ensure that conductive and semi-conductive powders are not deposited into containers or bags that insulate the resulting charges. Type C FIBC bags can mitigate against these risks by conducting charge from the powder through conductive threads in the bag to the earth connection point on the bag. As charges are dissipated from the surface of the powder the risk of static spark discharges to nearby conductive objects and uncontrolled PBDs over the powder surface is reduced. To compensate for normal wear and tear on bags it is important to ensure the bag maintains its capacity to dissipate charge and also ensure the earth connection between the bag and known grounding point is functioning correctly. Dedicated grounding systems can be specified that ensure the resistance of the bag is compliant with the requirements of the CENELEC standard. Should the bag lose its ground connection, the system will draw the attention of operators to this potential hazard.

Vacuum truck operations are particularly vulnerable to incendive static spark discharges. The movement of charged powder from source to collection chamber can induce large charges on lances, hose connections, the hose itself and components within the collecting chamber. A range of deflagration incidents have been reported in vacuum truck operations, particularly in situations where



Back end of a vacuum powder tanker equipped with earthing system

## BULK DISTRIBUTOR

### SUBSCRIPTION FORM

To ensure that you receive every issue of *Bulk Distributor*, you need to take out a subscription. Complete this form (or attach your business card) and return to:

Subscription Dept, *Bulk Distributor*, 22 Williams Grove, Surbiton KT6 5RN, UK  
Fax: +44(0)870 762 0434 Email: [subscriptions@oakhillmedia.com](mailto:subscriptions@oakhillmedia.com)

#### Payment Method

- Please find enclosed my cheque for £/US\$/€.....payable to Oakhill Media Ltd  
 I wish to pay by Direct Bank Transfer – please send me an invoice/bank details.  
 Credit card payments (using PayPal) via our website: [www.bulkdistributor.co.uk](http://www.bulkdistributor.co.uk)

#### Yes! I would like to subscribe to *Bulk Distributor* magazine

**EITHER:** Full Subscription: 6 printed issues a year of *Bulk Distributor* and a PDF file of every issue of the magazine emailed to you

**OR:** Online Subscription : PDF file of *Bulk Distributor* emailed to you 6 times/yr

Please circle (a) Type of Subscription; and (b) number of issues/currency

#### Full Subscription

<b>1-Year (6 issues)</b>	<b>2-Years (12 issues)</b>
£150 US\$265 €220	£275 US\$485 €400

#### Online Subscription only

<b>1-Year (6 issues)</b>	<b>2-Years (12 issues)</b>
£100 US\$176 €146	£180 US\$320 €266

Name .....

Position .....

Organisation .....

Address .....

Tel .....

Email .....

Signed

components on hoses and lances have become isolated and discharged static sparks into the surrounding atmosphere or within the vacuuming system. The American Petroleum Institute recommends that all connecting metal parts of the vacuum collection system are conductive to less than 10 ohms and that the vacuum truck itself is connected to a fully verified ground point.

Truck-mounted bonding systems, containing flashing LEDs can be specified helping operators observe 10 ohm, or less, connections to pre-installed grounding points. Another system, currently in development, will enable operators to confirm a full ground connection using a truck-mounted mobile ground proving system. This groundbreaking system will eliminate the time and uncertainty of using meters to measure and establish safe ground connections in locations where pre-installed grounding points do not exist.

#### What to do

To prevent uncontrolled electrostatic discharges posing a fire and explosion hazard in powder handling operations, a thorough static audit conducted by qualified personnel should be carried out. The audit should focus on investigating and identifying situations where charge has the potential to accumulate on conductive and semi-conductive components. For situations where potentially isolated components are identified, dedicated static earthing equipment should be installed to monitor and control the release of static electricity, thereby removing a primary source of ignition in combustible dust atmospheres.

[www.newson-gale.co.uk](http://www.newson-gale.co.uk)

## Explosion isolation valve

Fike, Blue Springs, MO, has further extended its range of explosion protection systems with the introduction of a pneumatically operated explosion isolation pinch valve (EIPV). It consists of a heavy-duty cast valve body containing a rugged elastomeric sleeve. Immediately an explosion is detected, compressed air is released at high speed and within milliseconds the sleeve is pinched to full closure, preventing explosion propagation beyond the valve. Extensive testing has shown that the device can reliably block explosion pressures of 3 bar. To achieve this activation, the EIPV uses a new solenoid output version of the company's EPACO control system. Fike Europe is based in Herentals, Belgium.

[www.fike.com](http://www.fike.com)

# Ensuring correct grounding

As mentioned in the article on the previous page, before an explosion can occur three elements must be brought together in sufficient amounts - an ignition source, a fuel and oxygen. In absence of only one of these factors no explosion can occur. An effective solution to this invisible danger is therefore preventative explosion protection by

avoidance of electrostatic discharges and elimination of ignition sources.

The new Farado grounding system from Kersting Industrieausrustungen, Brilon, Germany, continuously monitors the correct grounding of road tankers and other vehicles or objects. It permits unloading only when grounding is given and no electrostatics may cause sparks.

The status is monitored by a highly efficient LED panel. Furthermore two relays can be used in order to control other functions, for example valves or pumps or even alarms. The system has two modes (resistive/capacitive and resistive only) and can be calibrated by any authorised operator using a transponder key.

A self-retracting cable reel holding 11m of chemical resistant cable is optional. The clamp is self-releasing and displays no danger as it is made from aluminium casting which does not cause sparks when hitting ground. The new Farado is now available and offers high performance at an attractive price.

[www.kersting-ind.de](http://www.kersting-ind.de)



Farado grounding system from Kersting



The Farado device is particularly applicable to road tankers

<b>Environmental features</b>	working temperature: -25°C - +55°C storage temperature: -40°C - +65°C moisture: 5 - 95%
<b>Mechanical characteristics</b>	housing: anodised aluminium alloy, left side hinges, hardened glass
<b>Display</b>	red/green high efficient LED matrix
<b>Protection</b>	ATEX II2 (1) GD EEx-d (ia) IIB T6 IP 66 wall mounting
<b>Approval</b>	INERIS 03 ATEX 0073
<b>Dimensions</b>	277 x 265 x 55mm
<b>Weight</b>	7kg
<b>Cable entrances</b>	two of 1/2" ISO 7/1 for power supply and permissive signals 1/2" ISO 7/1 with cable glands for connection to the clamp
<b>Electrical characteristics</b>	Power supply 115/230 VAC selectable
<b>Consumption</b>	10 VA
<b>Clamp output</b>	intrinsically safe (ia) with separate terminal block
<b>Calibration</b>	externally by transponder recognition device
<b>Bypass</b>	externally by transponder recognition device
<b>Permissive relays</b>	two SPDT contacts 250V/5A
<b>Communication line</b>	RS 485 towards remote control system (on request)
<b>Attachments</b>	cable reel CR-1 - aluminium alloy body - dimensions: 400x360x260mm - type of protection: IP42 including: cable 2x1,5mm <sup>2</sup> , oil resistant with textile core to increase traction resistance length 10 m wound + 1 m free to the clamp + 3 m free to the MT30 unit clamp SRC-2 two poles, aluminium alloy with neoprene handles stainless steel sharp contacts, 16 mm opening, self releasing

## Monitoring safe grounding of multiple items

Newson Gale, Colwick, Nottingham, UK, has introduced the new IECEx/ATEX-certified Bond-Rite REMOTE EP static earthing system which can simultaneously provide continuous monitoring of up to 10 separate items of plant equipment considered to be at risk of accumulating hazardous electrostatic charges in potentially flammable or

combustible atmospheres.

There is a choice of 240V or 110V AC power supply and the device has IECEx and ATEX approval for mounting in Zone 2/22 atmospheres. It provides the option of bonding equipment for processes that last six hours or longer, including processes that require continuous static earthing.

Newson Gale, a worldwide leader for static control in hazardous areas, also recently launched its next generation of Earth-Rite hazardous area static grounding systems which are likewise ATEX and IECEx certified (see p9 of the November/December 2009 Bulk Distributor for further details).

[www.newson-gale.com](http://www.newson-gale.com)



Newson Gale's Bond-Rite attached during drum filling

## A POWERFUL COMBINATION

**EuroBulkSystems** + **EuroBulkSystems Industry News**

Published six times a year

Published weekly on [www.eurobulksystems.com](http://www.eurobulksystems.com)

Together providing Europe's foremost source of information about in-plant handling & processing of powders, granulates, pastes and liquids... news, views, technical developments, interviews, in-depth features - and much more.

Email [subscriptions@oakhillmedia.com](mailto:subscriptions@oakhillmedia.com) for a sample copy of the magazine

# PORTABULK name helps Goodtech win new business

Goodtech Packaging Systems of Norway reports that the reputation of its well-known PORTABULK® brand has paid dividends for the company in recent months. It has been awarded a number of contracts for net and gross weight filling systems by producers within the fertiliser, salt, minerals and feed sectors, in both West and East European markets. Recent contracts have brought the total number of PORTABULK filling rigs supplied worldwide to well over 100. Associated handling and internal transport systems are invariably supplied in parallel with the filling equipment.

The company is currently engaged in negotiating similar contracts outside Europe.

In addition, Goodtech has in the past two years commissioned fully automated, robot-operated PORTABULK filling lines to Yara's technical ammonium nitrate line at Koepping (Sweden); to Felleskjøpet - the leading Norwegian agricultural cooperative - at its Norwegian seed plant at Holstad, and for fish feed at the Ewos AS plant in Florø, located on the Norwegian west coast. New projects, many of which also include fully integrated track and trace technology adapted to industrial IT solutions, are scheduled for implementation in the next 12 months. These include another Norwegian fish-feed major - Biomar - as part of its development at Myre; an extensive Felleskjøpet project, at the company's Kambo site, as well as contracts awarded by Ammophos, a Russian fertiliser conglomerate and the Romanian fertiliser supplier Azomures.

Further afield, Goodtech has progressed the development of PORTABULK FIBC supplies to a major Japanese federation within the fertiliser sector. "We are also actively developing international contacts with leading logistics providers and raw materials suppliers as a means of extending the scope of our business", said Tim Johnstone, general manager of Goodtech Packaging Systems, which is part of Goodtech ASA, a leading Norwegian supplier of engineering, technology and environmental solutions within a variety of industry disciplines, including materials handling and associated technologies.

He went on: "With our broad portfolio of high quality products, technologies and services, with our network and as part of a cutting-edge technology group, Goodtech Packaging Systems is committed to reproducible customer satisfaction throughout the world. Our future growth will be based on developing our current platform, enhancing our competencies, investing in existing and new partnerships and through acquisition".

Goodtech Packaging Systems has a good pedigree and a long association with the materials handling industry, including the fertiliser, minerals, cement and feed sectors and has in the past few years successfully extended the scope of its business into new markets and product segments, by adapting existing and new technologies to a variety of customer requirements.

Thanks to the respected PORTABULK name the company has steadily built up a leading network for FIBC technology, handling and packaging systems to customers throughout the world. The



Thanks to uniform and de-aerated filling these PORTABULK single point lift bags can be safely stacked three high

PORTABULK licensing concept remains a mainstay of the company's commercial activities and is the pathway for introducing innovative hardware and software systems to meet new market requirements.

Its current PORTABULK partners are: Flexituff International (India), Uritus (Estonia), Bangkok Polysack (Thailand), Chempack (Russia), Conterra (Romania), Cotesi (Portugal), Fairflex (Sweden), Lucky Star (Thailand), Kingpack (Venezuela), Lasheen (Egypt), Packaging Systems (Russia), Pithampur Poly Products (India), Plastchim (Bulgaria), Zakkentrale (Holland), the Cimbria Group (Denmark), Goodtech Germany and Haver & Boecker (Germany), TMT (Czech Republic), SGH Equipment (UK), Baobag (France) and Norensacados (USA/Venezuela).

[www.goodtech.no](http://www.goodtech.no)



The PORTABULK system can provide not just the FIBCs but an entire handling infrastructure



Three automated PORTABULK filling lines for fish feed installed at an Ewos plant in Norway

# Fully automated 4-loop bag filling to be shown at Powtech

Nordenia Deutschland Emsdetten together with Reis Robotics of Obernburg will be featuring their jointly developed revolutionary automatic filling technology for 4-loop FIBCs on Nordenia's stand at Powtech\*, Nuremberg, Germany, 27-29 April (Stand 746, Hall 7).

In the second half of 2008 the first of these robotic filling rigs had been bought by leading PVC producer Vinnolit of Gendorf, Germany. The system had been engineered and installed by GEL Verfahrenstechnik of Detmold, Germany, as described in detail in the November/December 2008 issue of Bulk Distributor.

The automatic filling sequence works as follows. First the flat, empty bag is scanned by an integral camera system to locate the precise centre of the bag. The robot then transfers the FIBC to the filling station, connects the filling spout, then attaches all four lifting loops to the suspension hooks and fills the bag to a predetermined weight. Then after closure has been automatically carried out the filled FIBC is deposited on to a pallet and conveyed away from the filling line. Where required it is possible to stack

the filled bags two high. Meanwhile the next empty FIBC is identified by the robot and the procedure starts again.

Norbert Kloppenborg, sales manager at Nordenia Deutschland Emsdetten, explains that a major advantage of the system is that the fully automatic operation means there is no need for personnel to come into close contact with hazardous materials and similarly there is no risk of sensitive products being contaminated by human proximity.

This unique system was jointly invented by Nordenia and Reis Robotics, both German companies being patent holders covering certain of its technical features.

[www.nordenia.com](http://www.nordenia.com)  
[www.reisrobotics.de](http://www.reisrobotics.de)

\* Bulk Distributor will also be displayed at Powtech along with its sister magazine EuroBulkSystems on the Oakhill Media stand.



Nordenia/Reis fully automatic 4-loop bag filling system, showing (clockwise from top left): the robot picks up an empty FIBC, brings it to the filling rig, connects filling spout and attaches loops, then ties off the spout after filling



## isbir means "BigBag" in all languages...

**isbir UK**  
Isbir Bulk Bag UK Ltd.

QUICK RESPONSE  
LOCAL SUPPORT  
HIGH QUALITY

The World's local supplier of Fibcs and Industrial Fabrics

G4 THE GRANARY COAL ROAD CUPAR FIFE KY15 5YQ - UK  
Tel: +44 1334 650 088 Fax: +44 1334 650 072 e-mail: [uksales@isbirsentetik.com](mailto:uksales@isbirsentetik.com)

Headquarters : Tel: +90 266 283 00 00 Fax: +90 266 283 00 01 [www.isbirsentetik.com](http://www.isbirsentetik.com)

member of **isbir Holding**

Continued from page 1

fragment of the earlier global Mulox organisation.

One of the first major breaks for Noor was his company's acquisition in 1994 of the Austrian FIBC producer Haberl. This gave him instant access to four-loop FIBC technology, since until then most of the company's efforts had concentrated on two-loop and single point lift bags.

However, the single most important advance in the company's history which spans some 40 years had been its acquisition in 2002 of the internationally respected Eurea Group which had a well established network of subsidiaries around the world and had developed advanced technology in static protection systems for FIBCs. In the three years from 2002 to 2005 Storsack had more or less tripled in size.

More recently the company has invested heavily in developing state-of-the-art FIBC production facilities in South East Asia, notably in China and Vietnam. In 2008 it consolidated its already strong presence in China by acquiring Humber China Ltd together with the assets of Humber Europe Ltd,

from the UK-based Andrew Industries Group. The newly acquired plant, renamed Storsack Shenzhen Company Ltd, together with Storsack Jianfeng Plastic Industry Co. provide a combined capacity in excess of 3.5 million bulk bags per annum.

Greif, which for the financial year ended 31 October 2009 reported net sales worth \$2.8 billion, operates from over 200 locations in more than 45 countries. Its activities are divided between three business groups: industrial packaging, paper packaging and land management.

Its industrial packaging production programme encompasses fibre drums, plastic drums, water bottles, steel containers, container closure systems and a wide range of intermediate bulk containers, including rigid IBCs and demountable fibreboard designs. If the Storsack acquisition goes ahead, Greif will have become an undisputed world leader in semi-bulk packaging, covering the complete spectrum from powders and granulates carried in FIBCs through to pastes and liquids transported in rigid IBCs.

[www.greif.com](http://www.greif.com)  
[www.storsack.com](http://www.storsack.com)

# Palletless and pallet replacement options



Storsack's palletless FIBC provides easy forklift entry while maximising available headroom

For several years Storsack has been experimenting with palletless FIBCs, an arrangement whereby the bag incorporates an integral pallet. This solution is expected to prove especially popular with food producers. This is an industry where stringent hygiene standards need to be maintained and consequently a wooden pallet represents a potential source of bacterial contamination and mould. For this reason they need to be regularly heat treated for sterilisation.

The Storsack palletless system is simple but very clever. An advantage of the super-light pallet is that it will not harbour contaminants such as bacteria. Weighing no more than about 5kg, it is also significantly lighter than its wooden or plastic counterparts which normally weigh 20-25kg. It can also be adjusted to fit the footprint of any FIBC, forming part of the bag's structure either provisionally or permanently. This type of FIBC can be handled with a conventional forklift from two or four sides. The novel design recently won a packaging award at the annual German Verpackungswettbewerb and is a recipient of a Worldstar 2008. One of these palletless FIBCs is said to cost less than a fumigated wooden pallet.

## Universal pallet



The universal pallet can be attached beneath FIBCs or other modes of packaging

Storsack has also recently introduced its universal pallet which is based on the same construction as the palletless bag and can be used with many different types of container and unitised loads. It can be temporarily attached beneath the load by a sling system.



Wooden pallets alongside the same number of Storsack universal pallets

[www.storsack.com](http://www.storsack.com)

## Closing the loop

Drader Manufacturing of Edmonton, Canada, in recent years has developed bulk bag pallet replacement systems which can either be detachable or form an integral part of the bag. More recently it has engineered and developed a line of BagPal channels

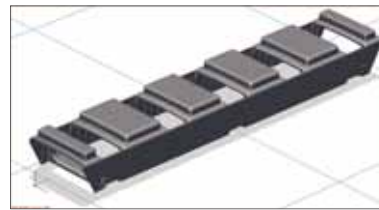


FIBCs fitted with the Drader BagPal pallet replacement system prior to being filled

made from recycled FIBCs. Now North American FIBC suppliers and their customers are in a position to close the loop on recycling their bags.

Sales manager Bruce Lecky explains that dealing with used FIBCs is a controversial issue, because there are only a few good environmental solutions. Some suppliers offer bag refurbishing services, and others may offer reuse options, but most used bags end up in landfills. With increased awareness focused on the environment, FIBC customers are now asking their suppliers to provide other alternative 'greener' answers. With BagPal channels manufactured from recycled FIBCs, another true environmental option exists. Suppliers and customers can feel comfortable knowing their used bags are being recycled into BagPal channels, and the channels replace wooden pallets, another environmental plus factor.

The recycling programme works as follows: Used FIBCs are bundled and transported to approved FIBC recyclers. There, the bags are ground up, mixed with other polypropylene resin streams, and pelletised. The recycled resin is



New BagPal channel made from recycled FIBCs

shipped to Drader Manufacturing, after which it is mixed and blended with resins, modifiers, and additives, then made into BagPal channels. The channels are sent off to the FIBC customers who use them to provide support for their bags. The BagPal channels provide an excellent wooden pallet replacement for filling, storing and shipping FIBCs.

Recycled FIBC BagPal channels are available in three models and there are six BagPal models in all. They are cost-competitive with wooden pallets and offer many benefits to FIBC suppliers and users. Since they become an integral part of the FIBC, these channels provide a stable shipping and storage platform for the bags. Regardless of model, BagPal channels do not need to be heat treated to be considered 'bug-free'. Unlike certified wooden pallets, these channels do not have a shelf life: they take up much less space, and are only a fraction the weight of a wooden pallet. Compared to pallets, BagPal channels offer savings on price, space, freight, and storage.

[www.bagpal.com](http://www.bagpal.com)

## Mechanised sleeve fabrication

Tellap of Australia, among the early pioneers of the palletless FIBC concept, reports that demand is rising for this type of bag, with many companies showing interest because of pallet costs, contamination issues and a better understanding of the potential for logistics savings. Tellap's David Tyler



Safer and stable stacking is another advantage of Tellap palletless bags

points out that the global slowdown has given companies time to review their operations and processes, assessing where savings and greater efficiency can be introduced, whilst when business was booming resources were often not available for this type of exercise. He suggests that a depressed economic climate has always helped nurture innovative products which are capable of providing increased efficiencies.

The company has recently mechanised its sleeve fabrication process in line with its corporate focus on consistency, quality and safety. This means that all sleeves are now of identical quality and strength. Tellap expects to see positive results from these efforts during 2010.

To complement the increased interest in palletless FIBCs, the company will soon be announcing an expansion of its global distributor network. An increasing number of customer demonstrations and trials means that the company requires more expertise in the field to educate future buyers, warehouse staff, transport companies and their customers. Tyler says that with more distributors his company will be able to work with more businesses without any reduction in the quality of its service.

[www.tellap.com.au](http://www.tellap.com.au)



Tellap palletless FIBCs inside a freight container: wooden pallets would have wasted valuable space



**Goodtech Packaging Systems AS** has a proud history of supplying leading materials handling technology, products and services to customers and markets throughout the world.

Under our PORTABULK® brand, our global network offers unique possibilities to distribution processes, including machinery supplies, bulk unloading projects, bag filling operations up to 150 mt/h as well as fully-integrated traceability and labelling systems.

You are welcome to contact us on our Norwegian number (+47) 35 92 48 50, on [packaging@goodtech.no](mailto:packaging@goodtech.no) or by visiting [www.goodtech.no](http://www.goodtech.no)



**Bags and Beyond!**



Handling



Storage



Bagging Plant



Robotised Filling



Conventional Filling

## LinerTech unveils new website

In the third week of February LinerTech Ltd, InterBulk Group's container liner division, launched its enhanced and revised website: [www.linertech.com](http://www.linertech.com).

The website provides features such as animations and economic business case-studies, with information relating to additional consultancy services required in making the leap from bags to bulk.

Linertech has pioneered several innovations in liner development during recent years. The safety liner was introduced to remove the need for personnel to climb on top of the container. Previously, a driver had to scale the walls of the container to access the roof hatch to take a sample, to vent and also to retrieve documents. The patented fluidising liner was developed to allow bag-in-box (BIB) operations to carry powders that previously were beyond the capability of the system. The fluidising method injects air into the powder, via special features in the liner, allowing the powder to flow freely into the silo. The liner is fully compatible with the BIB system and provides a capability for commodities such as starch, clays, minerals, and other cohesive products.

Foodgrade conductive liners were introduced last year in response to legislation forbidding the use of carbon black as a conductive additive in the packaging for foodstuffs. After considerable work and research, LinerTech established a solution and provided a film that satisfies all requirements. It is currently the mainstay of the company's sugar liner business. This technology has led to a number of successes relating to sugar industry applications. The company reports that it is also currently working on the development of new liners that will support bulk transport of lower-density products.

*For newcomers to dry bulk liner usage LinerTech can provide advice and consultancy in areas such as container filling to suit the needs of the customer as well as the nature of the bulk product, helping to locate suppliers of specialist equipment such as (from the top) loading screws, loading lances, direct silo-to-container gravity loadout systems, bulk throwers, and pneumatic special delivery units*



## New director of communications at Beumer



Regina Schnathmann

Beumer Group of Beckum, Germany, the leading international manufacturer of intralogistic systems in the fields of conveying, loading, palletising, packaging and sortation, has recently appointed Regina Schnathmann as director of communications and public relations. She holds a degree in economics from the University of Bamberg and has previous experience of global marketing communications and PR with major international companies. Beumer has around 2000 staff and a turnover of some €350M.

[www.beumer.com](http://www.beumer.com)

## Solids level radar gauge does not need maintenance

Krohne Messtechnik, Duisburg, Germany, has launched a new, non-contact FMCW radar level measuring device called OPTIWAVE 6300 C which has been designed for use with bulk solids. It measures distance and volume as well as level. Thanks to its continuous wave generation and the small radar beam angle, the device does not require antenna aiming. Its innovative drop antenna made of plastic (PP or PTFE) makes purging systems obsolete and ensures that the unit is maintenance free.

[www.krohne.de](http://www.krohne.de)

## Dust suppression during railcar loading controlled by ultrasonics

Pulsar Process Measurement of Malvern, UK, has supplied non-contacting ultrasonic equipment to initiate and switch off dust suppression systems at a rail loadout site and nearby conveyor transfer point operated by Lafarge Aggregates in Leicestershire. A number of methods had been tried previously, ranging from

load sensors on the conveyor to optical systems on the railcars. None had proved sufficiently reliable or accurate. On the railcars Pulsar supplied a blackbox control unit with a dB10 transducer providing a measurement range of up to 10m. During loading, as soon as a railcar has reached the "full" level a relay signal initiates the spray

system and the top layer of stone is doused with the liquid dust suppressant formulation. The ultrasonic unit will not allow the stone to be sprayed until it sees a full level, and it also switches off the spray between cars.

[www.pulsar-pm.com](http://www.pulsar-pm.com)

## Launch of Pelletroneurope

Pelletron Corp of Lancaster, PA, a world leader in dedusting systems, has set up Pelletroneurope GmbH in Vogt/Allgäu, Germany. Peter Siebentritt, a former representative of the Pelletron agency MoMaTech GmbH, has been appointed managing director of the new company. Further managing directors include Heinz Schneider and Paul Wagner. MoMaTech will remain sales representative for Pelletron in southern Germany, Switzerland and parts of Austria. Pelletroneurope will assume responsibility for sales and service in Europe and will assemble DeDusters, components and Pellbow abrasion-resistant pneumatic conveying pipe elbows at its new facility which is currently under construction.

[www.pelletroncorp.com](http://www.pelletroncorp.com);  
[www.pelletroneurope.com](http://www.pelletroneurope.com)



Pulsar ultrasonic device (right) controls railcar dust-suppressant spray

## SCE sets up British Isles distributorship

Lincolnshire-based GAME Engineering has been appointed UK and Ireland distributor for SCE NV, Silo Construction and Engineering of Lichtervelde, Belgium. Its rectangular, modular, self-supporting steel silo systems are supplied worldwide for storage of a wide range of bulk materials, including animal feeds and foodstuffs. Advantages include highly efficient use of available space, the

possibility to house administration/control rooms within the total silo structure and capability for inexpensive expansion at a later date. GAME, established in 1986, has turnkey plant engineering experience with special reference to animal feed, pet food and grain industries.

[www.sce.be](http://www.sce.be);  
[www.game-engineering.com](http://www.game-engineering.com)



Working with GAME Engineering, SCE in 2009 installed this silo system for Waggs Foods in the UK

## Force calibration for silos and vessels mounted on load cells

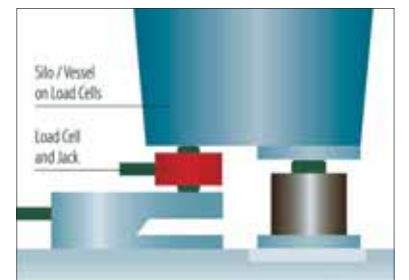
Avery Weigh-Tronix of Smethwick, UK, has introduced force calibration as a quicker and more convenient method to test approve silos which are mounted on load cells. Traditional vessel calibration involves one of two methods: either a minimum of 500kg of test weights need to be delivered to the customer's site, or the vessel is filled with a measured material using a flow meter to achieve a precise

weight. Both options are disruptive and involve significant downtime. Force calibration uses hydraulic pressure instead of weights and normally there is no need to empty the vessel. The method involves applying force to the installed load cells and measuring that force with an independent set of high accuracy reference load cells.

[www.averyweigh-tronix.com](http://www.averyweigh-tronix.com)



Avery Weigh-Tronix's force calibration for vessels mounted on load cells



## Broader applicational scope for GWR level transmitters

Emerson Process Management of St. Louis, Mo, and with European headquarters in Baar, Switzerland, has introduced enhancements to the single-probe versions of its Rosemount 5300 series guided wave radar (GWR) level transmitters suitable for use with liquids, slurries and solids. New options include a thicker rod for longer

measurement lengths and a Hastelloy C-276 probe and wetted parts for applications in corrosive, hot and high-pressure environments. The device features Emerson's patented direct switch technology, making it possible to use a single lead probe for particularly challenging applications.

[www.emersonprocess.com](http://www.emersonprocess.com)



# Bag palletisers with servo control



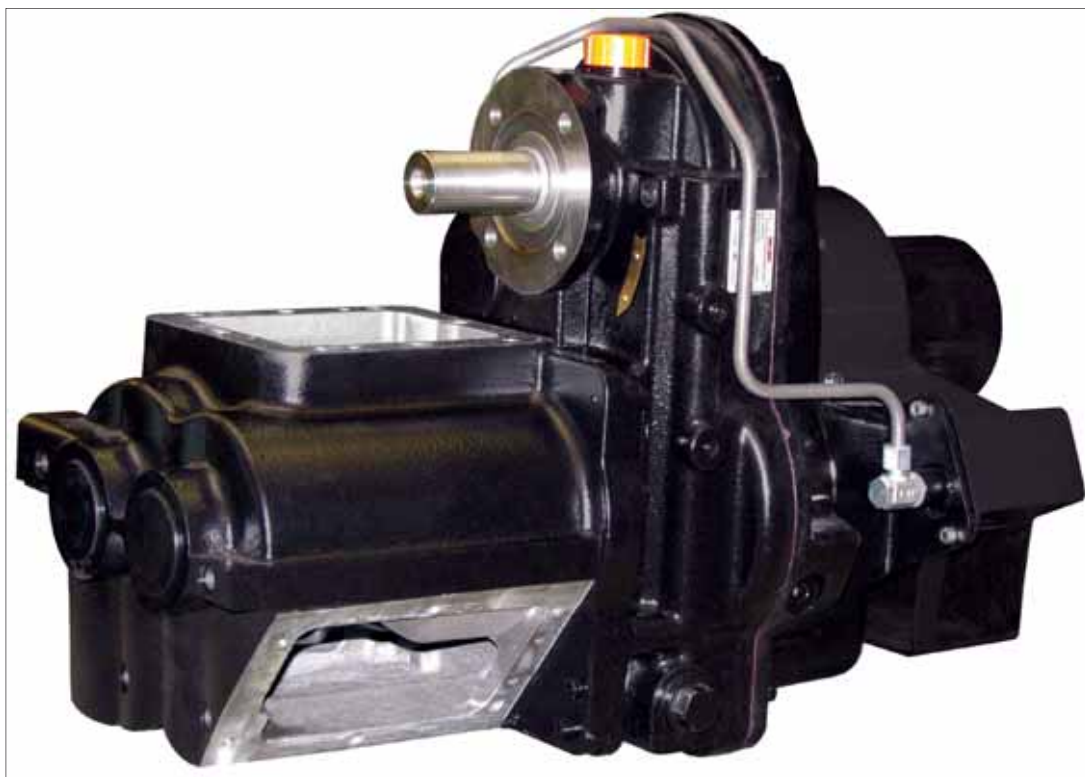
Ehcolo bag palletiser with servo control

Ehcolo, Fovling, Denmark, is now offering what are believed to be the world's first bag palletisers with servo control. The system features easily generated pattern software by means of a 15in colour PC touch screen which is very easy to operate. As a result these palletisers are faster and more accurate, although their price has not increased. Thanks to the soft stop and

start feature on all equipment, wear problems have been eliminated and two year warranty is provided as standard. An important green feature is that all braking energy is reused, resulting in significant reduction in overall power consumption.

[www.ehcolo.com](http://www.ehcolo.com)

# In-chassis compressor for dry bulk applications



GHH Rand's InChassis screw compressor package with its innovative drive shaft position helps reduce the shaft angle and also increases its length

GHH Rand of Oberhausen, Germany, has launched the CS1200 InChassis compressor kit which allows a wide margin of installation flexibility to suit most European tractor units used in association with road powder tankers for transport of dry bulk products.

Special features of the CS1200 include a unique and newly developed SILU oil-free screw compressor, the capability to be direct driven in most European three-axle tractors, an ingenious driveline configuration to reduce drive shaft angle, an optimised rotor profile offering low frequency and low noise operation, a narrow and self-contained air-end with integral oil cooler, corrosion-free rotors which are food industry compliant, and a shear coupling for gearbox protection. As a further protective measure, GHH Rand is able to offer for dry bulk food transport requirements a Silol FG food-grade lubricant which meets the NSF H1 compliance regulation.

"The optimised driveline design configuration results in a fast, efficient and well engineered installation. The small integrated oil cooler perfects the compact design," commented Paul Cutter, area sales manager for GHH Rand, UK.

For more than 50 years GHH Rand has been globally

recognised as among the most innovative and reliable rotary screw compressor manufacturers for dry bulk discharge requirements in the road haulage business.

[www.ghhrand.com](http://www.ghhrand.com)

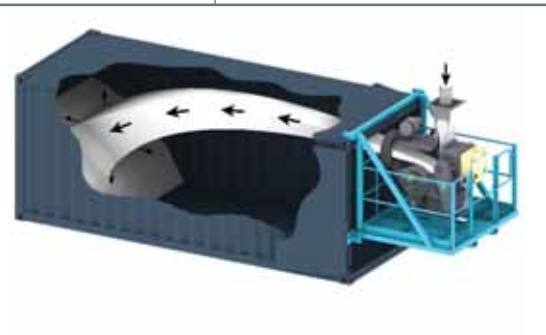


A dry bulk tanker discharges its load using the new CS1200 compressor kit

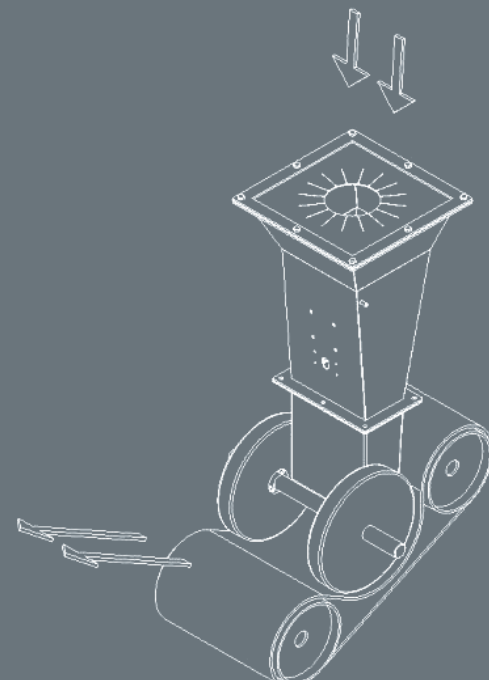


## FulFiller® Container Loader System

Filling the space with reliable performance...



- ❖ High Speed Filling of Containers
- ❖ Fast Vehicle Turn Around Time
- ❖ Maximises Container Load
- ❖ Ex-Stock Delivery of Standard Units
- ❖ Cost Effective Lease Options Available



Stock Redler Limited  
Redler House, Dudbridge, Stroud,  
Gloucestershire GL5 3EY England  
Tel: +44 (0) 1453 763611  
Fax: +44 (0) 1453 762602 / 763582  
email: [sales@redler.com](mailto:sales@redler.com)  
Website: [www.redler.com](http://www.redler.com)

we make processes work

## Rotterdam sees signs of recovery

Volumes of liquid bulk handled at Port of Rotterdam during 2009 rose by 1% to 196m tonnes. Imports of crude oil fell by close on 6% to 95m tonnes, while demand for oil products was down and refining margins fell, as a result of which it became unavoidable to limit production. In comparison with other regions, however, Rotterdam says it did noticeably better thanks to the strength of the petrochemical cluster. This and the anticipated increase in the refining margins counterbalance the high commodity stocks and the slow increase in demand in the OECD countries. In 2010, therefore, slightly higher throughput figures for crude oil (96m tonnes) are expected.

Imports of oil products increased by 17% to 42 million tonnes, exports by 32% to 30m tonnes. In total, a record quantity of 72m tonnes (+23%) was handled. Comparable growth percentages have already been seen four times since 2000, but the absolute growth of 13m tonnes is the largest

ever. This is attributable for about two-thirds to gas oil/diesel throughput. Forward prices for this commodity were higher throughout the year than the spot prices - a contango market - so that storage paid off. Up to the end of the summer, there was also good arbitrage opportunities between regions which attracted cargo from Asia, Russia and America to Europe. Thirdly, extra jetty and tank capacity was created, as a result of which the port was able to handle more cargo. A little more fuel oil - in absolute terms the most important product - was handled: around 36m tonnes. Naphtha throughput fell slightly and kerosene was up by about 10%.

There was a 16% decline in other liquid bulk throughput, to 30m tonnes. The main cause was the 20-30% fall in production in the chemical industry. The handling of vegetable oils was up again, thanks to imports of crude palm oil for the refineries. However, there was a substantial decline in the handling of soybean oil, sunflower oil

and rapeseed oil. Biofuels (biodiesel, ethanol and ETBE) were also down. The moderate sugar harvest put pressure on Brazilian exports of ethanol. This was compensated for partly by imports of ethanol from Spain and France via Rotterdam. Imports of biodiesel fell due to the European measures taken against the American B99 mix. This made way for the import of more biodiesel from Argentina, however.

Hans Smits, Port of Rotterdam Authority CEO, commented: "Considering the circumstances, we cannot be dissatisfied. After hitting rock bottom in the second quarter, throughput has been improving slightly every month and virtually all the investments are going ahead. Moreover, Rotterdam is doing better than its main rivals. But I am not unconcerned. Many of our clients are having a difficult time and that will not be much different in 2010."

Total goods throughput at Rotterdam fell to 385m tonnes. This was 8.5% down on 2008.



The contango oil market encouraged exploitation of Rotterdam's storage capacity. Pic: Freek van Arkel

## Seacor, WIN to restore Haiti terminal

Seacor Holdings and Haiti's WIN Group have come together to restore Terminal Varreux in Port-au-Prince, Haiti's main bulk liquids import facility.

WIN Group, a Haitian conglomerate that owns and operates Terminal Varreux, situated just five miles from the epicentre of the 12 January earthquake, and Seacor launched an emergency response project to enable the crucial marine terminal to resume receiving bulk fuel and containerised cargoes, thereby replenishing the stricken country's rapidly dwindling supplies of gasoline, diesel fuel, fuel oil, propane gas and edible oils used for cooking.

Terminal Varreux has a minimum of 18 large storage tanks with a total capacity of approximately 45 million gallons. The earthquake destroyed the marine docking facilities and damaged a complex network of steel pipes connecting the marine operation to the tank storage area.

"Seacor has agreed to provide the emergency support we need to return Terminal Varreux to operation in order to help us keep Haiti supplied with

critically needed fuel. Their assistance in getting our marine operation stabilised and back to work, constructing a new temporary section of piping to connect Terminal Varreux's mooring facilities and the usable storage tanks and insuring the safe return of our storage tank operations is invaluable," said Youri Mevs, managing partner of WIN Group.

"Haiti needs to receive fuel supplies rapidly in order to avoid a shortage that would create panic and hamper the ongoing relief effort. The Haitian government asked us to secure repairs of the facility as rapidly as possible in order to enable Terminal Varreux to receive supplies and equipment urgently needed in Haiti. While supplies and equipment are crucial, at the end of the day this is about saving lives first, and taking care of business later," Mevs concluded.

Under the agreement WIN and Seacor began using a combination of Seacor's diverse maritime, aviation and emergency response resources to support the restoration of the marine operations, repair and construction of the new temporary 200 yard-long

section of piping and the resumption of the storage tank operations.

The project was daunting: earthquake-damaged structures and debris had to be removed from the dock area; debris removed from vessel traffic areas; collapsed mooring infrastructure replaced with temporary capability; a new series of piping to bypass and temporarily replace an equal length of the piping from the dock area to the tank farm; collapsed walls in the tank farm area to be removed from critical piping and the piping repaired; critically damaged tanks to be inspected and shifted from service; and the overall terminal operation to be restored in time to accept marine fuel transfers before Terminal Varreux and the country ran out of fuel. The estimated cost of the project was not disclosed.

"We are pleased to collaborate with the WIN Group and are confident that with Seacor's diverse capabilities Terminal Varreux will return to operation promptly," said Eric Fabrikant, vice president of Seacor Holdings.

[www.seacorholdings.com](http://www.seacorholdings.com)

## Kinder Morgan in \$98m acquisition

Kinder Morgan Energy Partners has purchased four terminals from Slay Industries for approximately \$98m. The facilities include a marine terminal in Sauget, Ill, a transload liquid operation in Muscatine, Iowa, a liquid bulk terminal in St Louis, Mo, and a warehousing distribution centre in St Louis.

This acquisition, which gives KMP a foothold into the strategic St Louis terminal market, complements the company's terminal network by adding a diverse mix of liquid and bulk capabilities. The terminals being purchased have long-term contracts with large credit worthy shippers.

As part of the transaction, KMP and Slay Industries have entered into a joint venture agreement at the Kellogg Dock coal bulk terminal, in Modoc, Ill, and the newly created North Cahokia terminal in Sauget, which has 175 acres to develop. All of the assets in Sauget have access to the Mississippi River and five rail carriers.

"This acquisition, along with the joint venture we have entered into with Slay, will give customers unparalleled access to major markets via rail and waterway," said KMP Terminals

president Jeff Armstrong.

Eugene P. Slay, chairman and CEO of Slay Industries, added, "We look forward to a long term partnership with Kinder Morgan in developing the joint ventures. Both companies share the same vision in realizing the full potential of these strategic waterfront properties."

Slay Industries is a privately held, St Louis-based group of transportation and distribution service companies. In addition to the two new joint ventures, Slay Industries will continue to own and operate Slay Transportation Co, Inc, SI Warehousing Co, Inc and Archway Fleeting and Harbor Service. Slay Transportation is a bulk truck carrier that operates 1,500 tractors and trailers at 19 locations throughout North America and is an American Chemistry Council Certified Partner Member. SI Warehousing provides full service warehousing, automated packaging, drumming and transload services to and from the Houston Ship Channel. Archway Fleeting and Harbor Service provides various related services on the inland waterways.

[www.kindermorgan.com](http://www.kindermorgan.com)

## Vopak, Zamil sign MENA MoU

Royal Vopak and the Zamil Group of Saudi Arabia have signed a Memorandum of Understanding to develop a joint venture company for the Middle East and North Africa (MENA) region. This joint venture aims to develop independent bulk liquid and liquefied natural gas terminal facilities across the MENA region, in order to provide tank storage services to oil and chemical majors, trading companies and natural gas suppliers.

The MENA area is one of the world's foremost locations for oil and petrochemicals. The next stage of the region's development will be the large scale manufacture and distribution of intermediate and specialty chemicals and high quality oil products. The production of these value added goods is expected to generate new growth in the industrial base of the Middle East. Vopak and Zamil Group believe that developing world class independent bulk liquid storage terminals at strategic locations will be a significant contributing factor in providing the high quality logistic services required for the region's continuing development.

Headquartered in Saudi Arabia, Zamil group has diverse interests in over 60 countries ranging from air conditioning, structural, steel production, port operations and services, petrochemical & plastics production and ship building.

At the end of 2009, Vopak announces that it had reached agreement with Fluvia Holding BV (Fluvia) and North Sea Petroleum Holding BV (NSPH) on the sale of its terminal in Basle, Switzerland to Fluvia and NSPH. The terminal, which currently operates under the name Vopak Terminal Basle, has 62 tanks offering storage capacity of 345,600 cbm and was 100% owned by Vopak. The river based inland terminal has a limited strategic fit with Vopak's global network strategy focused on owning and operating marine based tank storage terminals in key locations with deep water access facilities.

The transaction will be in the form of an acquisition of all of Vopak's shares in Vopak Schweiz AG by Fluvia and NSPH. The activities of the Swiss terminal now go under the name Rhytank.

Acquiring Vopak Terminal Basle will allow Fluvia, an operator for the inland

tanker shipping and storage of edible and mineral oils and chemical products, and NSPH, a logistics services provider with trading and sales activities in the downstream oil market, to expand activities and strengthen their position in Switzerland, which has been defined as one of their key (growth) markets. Fluvia and NSPH are both established in the Netherlands.

Peter Nohlmans, chairman of North Sea Petroleum, commented: "Switzerland is an important growth market. Therefore, the acquisition of the Basle terminal is a logical part of our international expansion strategy. Our storage capacity increases to a total well above 700,000 cbm. This expansion provides advantages of scale and a strengthening of our market position. The aforesaid translates into more security about deliverance and more flexibility towards our customers."

Rick van Westenbrugge, CEO of Fluvia, added: "The tank terminal in Basle strengthens the strong market position of Fluvia in the logistics of oil imports into Switzerland. The combination of our tankers, tank containers and this terminal provides us new logistic possibilities for our Swiss customers."

Meanwhile, the management of Vopak's Dutch chemicals terminals has informed employees about the intention to restructure certain activities in the Netherlands. A plan is currently being developed to further improve safety and to increase efficiency and the overall service level through significant investments in the Dutch chemicals terminals. The foreseen investments will lead to a reduction of "several tens of jobs" for which the management sees opportunities to prevent forced redundancies.

"Owing to uncertainties in the Dutch chemicals market the intended investments and the restructuring resulting from it are deemed necessary to bring the Dutch chemicals terminals to a structurally better competitive position. The works councils and labour unions have also been informed and will be involved in the further process," read a company statement.

[www.vopak.com](http://www.vopak.com)  
[www.zamil.com](http://www.zamil.com)

# Prax renews TDG contract

Prax Petroleum, a UK-based importer of diesel, gas oil, kerosene and petrol, and logistics services provider TDG have signed a storage contract to extend Prax Petroleum's present contract, to store and blend fuels at TDG's Dagenham terminal, by a minimum of 10 years.

Prax Petroleum has had its own dedicated area at the terminal since 2007 and since then TDG has invested large sums to upgrade its loading facilities and another large investment is expected in 2010 to complete the program of installing radar gauges on all of Prax's tanks. David Heath, sector operations director at TDG, said: "This is probably the single biggest deal in terms of commitment that TDG has

ever made at Dagenham and we look forward to helping Prax grow through this long term partnership."

In 2009 Prax appeared in the *Sunday Times* 'Fast Track 100' as the 19th fastest growing company in the country. It is now one of the UK's largest importers of fuel oils and its customers include NATO, the Ministry of Defense, The Royal Mail and P&O.

"We have been impressed and encouraged by the way in which TDG has worked hard and shown flexibility to help us accommodate our remarkable growth," said Don Camillo, trading and marketing director at Prax. "We look forward to enjoying a continued close working relationship with TDG over the next 10 years."



The Dagenham site offers the company bulk storage adjacent to the Thames complete with its own jetty

## Delfzijl storage capacity

FMC, a diversified chemicals company, has been upgrading its chemical production facilities in Delfzijl, The Netherlands. The latest project is the building and installation of an aluminum storage tank. The increased storage will improve customer service by enabling FMC to respond quicker to

market changes, said the company.

The investment in the tank installation represents 1m. As well as the engineering department of FMC, several local contractors participated in the project. Port of Delfzijl is of Groningen Seaports Group on the north Dutch coast.



## Aegis expands

Mumbai-based Aegis Logistics Ltd is to set up three new import terminals at different ports along the Indian coast to handle petroleum, oil and lubricants.

Aegis is expected to invest around US\$40m to set up the terminals. "On an average, each import terminal, with a capacity to handle petroleum and chemicals, would cost around \$13m, said Anish Chandaria, managing director and chief executive officer of Aegis.

Of the proposed three terminals, one will be at Haldia Port in West Bengal where the Calcutta Port Trust has allotted land, he was quoted in an

Indian newspaper. "For the remaining two, we are in talks with various ports," he said without disclosing further details about the locations.

At present, Aegis is operates two import terminals in Mumbai and Cochin to handle petroleum and chemicals. In Mumbai, the company has a capacity of 272,000 cbm for products like A, B and C class chemicals, petroleum products and liquefied gases. In Kochi, its capacity stands at 51,000 cbm. The company's customers include Reliance and government-owned oil market companies Bharat Petroleum and Hindustan Petroleum.

## logichem2010

The 9th Annual European Bulk and Specialty Chemical Supply Chain Conference

### What Are Your 2010 Supply Chain Objectives?

LogiChem 2010 will be in its 9th year and is the chemical industry's annual supply chain management conference, each year attracting over 250 senior logistics and supply chain executives from bulk and specialty chemical manufacturers, as well as logistics service providers.

The conference addresses every critical concern to chemical supply chain professionals and their LSP's, from the current shortage of transport and storage capacity to topics including demand planning, collaboration and growing markets such as the Middle East, through case studies by the industry's leading and most innovative shippers. LogiChem is the only event that brings together all the key suppliers and logistics practitioners in Europe, so if your business is supply chain management in the chemicals industry, then this is the one event in your calendar that is an absolute must.



### This year's key topics include:

- Improving forecasting to rapidly respond to changing demand levels in an uncertain market
- Driving a financial supply chain to **increase your competitive advantage** and **impact your bottom line**
- How will increased production capacity in the **Middle East** impact European markets?
- Optimising supply chain performance through **global collaboration**
- **The future of specialty chemicals:** examining key trends and exploring growth opportunities
- Key strategies to **lower inventory levels** and increase cash flow

**LARGE DISCOUNTS FOR EARLY BOOKINGS!**

Visit [www.logichemeurope.com](http://www.logichemeurope.com) Today

20 – 22 April 2010  
Hilton Hotel, Dusseldorf, Germany

### Key Confirmed Speakers

MONSANTO	Peter Devos, Supply Chain Excellence Director, <b>Monsanto</b>
BASF The Chemical Company	Andreas Claussen, Director Global SC and Information Management Intermediates, <b>BASF</b>
INEOSNOVA	Roger Moore, Supply Chain Manager Europe, <b>Ineos Nova</b>
BOREALIS Sustainable by Design	Danny Van Gansen, Supply Chain Development Manager, <b>Borealis</b>
AkzoNobel	Laurent Hanssen, European Supply Chain Manager, <b>Akzo Nobel</b>
DOW	Niklas Meintrup, Director Business Services and Supply Chain, Global Supply Chain - Dow Polyurethanes Business Group, <b>Dow</b>
BASF The Chemical Company	Robert Blackburn, Senior VP and Head of Global Supply Chain Operations, <b>BASF</b>
Henkel	Thomas Mueller Kirschbaum, Senior Vice President for R&D, Technology and Supply Chain, <b>Henkel</b>
INEOSNOVA	Pierre Minguet, Business Director - Polystyrenes, <b>Ineos Nova</b>
Clariant	Guillermo Fumero, Head of Supply Chain Division, TLP, <b>Clariant International</b>
LyondellBasell	Jean Gadbois, Divisional VP - Polymers, <b>Lyondell Basell</b>
DU PONT	An D'Haensens, Sourcing and Logistics Manager, <b>DuPont</b>
SOLVIN The Solution in Storage	Christian Backaert, European Supply Chain Director, <b>Solvvin</b>
SunChemical	Mathias Dollak, Director Supply Chain, Europe, <b>Sun Chemical</b>
mondi	Klaus Venus, Logistics & Order Process Director Europe and International - Uncoated Fine Paper, <b>Mondi</b>

Call: +44 (0) 20 7368 9465 Email: [logichem@wbr.co.uk](mailto:logichem@wbr.co.uk)  
Visit: [www.logichemeurope.com](http://www.logichemeurope.com)

# BIG RED ENGINEERING

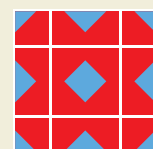


EPT's **BIG Red Flexitank™** is the perfect solution to transport your bulk liquid cargo. Our unique engineering controls liquid motion and sidewall deflection.

Our BIG Red brand flexitank is the only flexitank that has been approved by several North American Class I railroads. With access to all forms of intermodal transportation, EPT can plan the most economical route for your bulk liquid products.

#### The BIG Red Difference -

- Only flexitank to pass both the Association of American Railroads (AAR) Rail Impact Test & Rail Simulation Test
- Approved by Class I Railroads of North America
- Only flexitank with documented Terminal Handling Policy to ensure safety of cargo and safety of personnel
- Covered by \$20 million in product liability insurance
- Documented EPT Recycle Service Plan helps customers reclaim and recycle



**Environmental  
Packaging  
Technologies**

**+1.713.961.2795**

**Toll Free U.S. 1.877.8.BIG RED**

**Visit our website: [www.eptpac.com](http://www.eptpac.com)**