



## NOTES FROM THE SECRETARIAT

Welcome to the latest edition of ABTO News. I can confirm that, as announced in the last edition, we have now published the first edition of *Bulk Terminals International*. We hope that you all find it an interesting read and are already anticipating the next edition. For those of you that have not received it yet, please do get in touch.



Another development is our latest safety campaign, led by Professor Mike Bradley from the Wolfson Centre for solid bulk handling at the University of Greenwich and a member of the ABTO Member's Advisory Panel. As you will read in this edition of *ABTONEWS*, he has identified a very important issue which we at ABTO feel needs to be raised. Everyone involved in the transportation of dry bulk cargoes is aware of the dangers presented by certain materials about liquefaction.

In 2015, we saw the loss of *MV Bulk Jupiter*, which was carrying bauxite, a cargo well known for its propensity to liquefy, and which the marine safety investigation concluded had been the reason for the loss.

Most recently, in April 2017, the loss of very large ore carrier (VLOC) *Stellar Daisy* while travelling between Brazil and China is suspected to have been caused by the liquefaction of its iron ore cargo.

Professor Bradley has raised several concerns, the two main ones being the effectiveness of the tests available to ships masters when assessing a cargo for loading and the ability to obtain a representative sample from a stockpile.

While these concerns have been raised before, we at ABTO do feel that the time has come to act. We will therefore be putting pressure on the authorities to look again at this issue and, with the help of the Wolfson Centre, hopefully we can find a solution that will prevent the unnecessary loss of life that this problem causes.

This topic will be one of many that will be explored at Bulk Terminals 2017 – the inaugural ABTO Conference, which will be held in London between 31 October and 1 November 2017.

Ian Adams, CE

## NEWS IN BRIEF

### COAL AND ALLIED SALE TO YANCOAL

The Rio Tinto board has reconfirmed its recommendation that shareholders vote in favour of the sale of its wholly-owned subsidiary Coal & Allied Industries to Yancoal Australia.

The recommendation follows consideration by the board of a counter proposal from Glencore and a proposal from Yancoal comprising improved terms to the transaction previously announced.

The board expects the transaction to complete in the third quarter of 2017.

### ABP HUMBER JOINS ABTO

ABP Humber has joined the Association of Bulk Terminal Operators (ABTO) as a full member, in what marks a significant milestone for the Association.

Associated British Ports' terminals in Hull, Grimsby, Goole and Immingham join a growing ABTO membership-base that includes operators in the Americas, Europe and Asia.

The Association's Members' Advisory Panel is also strengthened with representatives from Ragged Edge Consulting, Armstrong Energy, Wolfson Centre, Cooper Consolidated, and Hargreaves Industrial Services.

# BULK TERMINALS 2017

## ACHIEVING EFFICIENCY AND COMPLIANCE

The Inaugural Conference of the Association of Bulk Terminal Operators (ABTO)

31 October - 1 November 2017 - London

More details at:  
[www.bulkterminals.org/events.html](http://www.bulkterminals.org/events.html)



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### KEY SPEAKERS INCLUDE

Susan Oatway, Associate,  
**Drewry Shipping Consultants**

Professor Mike Bradley,  
Director, **The Wolfson Centre**

Aron Frank Sørensen,  
Head of Maritime Technology  
and Regulation, **BIMCO**

David Wragg, Business  
Development Director,  
**Hargreaves Industrial Services**

Organised by

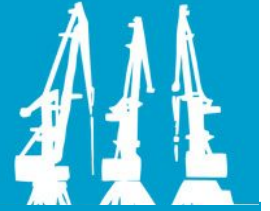
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Bulk Terminal Operators (ABTO)





## NEWS IN BRIEF

### DSI CONVEYORS FOR YARA SLUISKI

Dos Santos International has been awarded a contract to provide its DSI Sandwich belt high angle conveyor to Bedeschi S.p.A. for the Yara Sluiskil project in the Netherlands.

The conveyor will transfer urea and amidas prills at a rate of 600 t/h at a 40° angle from the tripped dock conveyor and elevated to the shiploader boom conveyor.

Each conveyor uses two standard, smooth-surfaced conveyor belts, face-to-face, to gently but firmly contain the product being carried. This not only makes steep angles possible, it also offers a spillage free, environmentally sound operation because the material remains secured between the carrying and cover belts.

The use of all conventional conveyor parts ensures high availability and low maintenance costs, as well as interchangeability of components and fast delivery of replacement parts.

A DSI sandwich conveyor is capable of higher conveying speeds and greater capacity than other high angle conveying methods.

The availability of wide belts and hardware makes capacities greater than 10,000 t/h easily achieved with a DSI Sandwich conveyor. High angles of 90° are typical and lifts of 300m are easily accomplished.

DSI was founded on its extensive worldwide experience in sales, engineering, and construction of bulk materials handling systems and equipment.

Most notably, advances in sandwich belt high angle conveyors have led to their worldwide utilisation.

## WOLFSON CENTRE DEVELOPS NEW CARGO LIQUEFACTION TEST

Professor Mike Bradley, a member of the advisory panel to the Association of Bulk Terminal Operators (ABTO) and head of Greenwich University's Wolfson Centre for Bulk Solids Handling Technology, has called for a complete overhaul of the cargo sampling and liquefaction testing protocols, suggesting current measures are inadequate. Raw ores and variable materials being loaded in ports where conditions are inclement are of particular concern.

Current methods available to a ship's master for identifying the dangers of cargo liquefaction – the so-called "splash" and "can" tests – are very rudimentary, said Bradley.

"The 'can test' consists of nothing more than a 'baked beans tin' filled with a sample of the cargo, which is then vigorously tapped on the table. If a liquid film forms on the sample surface, the cargo is deemed dangerous and must be rejected; if not, it may be either safe or dangerous!

"Such rudimentary testing is inadequate. We have seen that dangerous cargoes can pass these tests, with moisture content exceeding the allowable limits, liquefying at a later stage. The efficacy of existing testing and sampling protocols does need to be addressed, especially when assessing terminal stock piles where obtaining a decent sample is difficult.

"Ultimately the master has to take responsibility for whether a cargo is loaded or not, and he is under commercial pressure not to reject it – so in cases where he has suspicions he really needs a better, more reliable shipboard test he can use to protect both his employer's business and the lives of his crew."

Bradley explained that the Wolfson Centre has completed some preliminary research work in the development of a more effective, accurate cargo liquefaction test kit for shipboard use.

The proposed test is based on a practical approach that can be done using low-cost equipment that can be replicated easily. It doesn't replace the current system of TML and MC certification, but provides the ship's master with an opportunity to make his own check, in any case where there is some doubt over change in the condition of the cargo, the quality of sampling, the veracity of the certification, or the effect of bad weather on moisture during loading.

The Wolfson Centre is currently in discussions with ABTO members, P&I Clubs and Classification Societies to take the initiative forward.



## NEWS IN BRIEF

### ESSENTIAL FORKLIFTS FOR ALL CARGOES

Kalmar has launched a completely new range of forklifts. The new Kalmar Essential Range of forklifts can be used for a diverse range of demanding applications including container, steel and wood handling.

The Essential range comprises 12 models with capacities ranging from 10 to 18t that can be customised with a variety of power, mast, cabin and safety options.

Compatibility with Kalmar SmartFleet, a powerful equipment monitoring and optimisation tool that makes it easy to analyse performance data, helps to further improve efficiency and productivity.

### SHIPPING BODIES UNITE ON CARBON

BIMCO, INTERCARGO, the International Chamber of Shipping and INTERTANKO have made a joint proposal to the International Maritime Organisation concerning ambitious CO2 reductions by the international shipping sector.

The industry bodies propose that IMO Member States should immediately adopt two "Aspirational Objectives": to maintain international shipping's annual total CO2 emissions below 2008 levels; and to reduce CO2 emissions per tonne of cargo transported one kilometre, as an average across international shipping, by at least 50% by 2050, compared to 2008.

The industry associations also highlight that dramatic in-sector CO2 reductions alongside increasing trade would require substantial and sustained research into the development of alternative fossil-free fuels and new technologies – something which they say needs to be identified by the IMO strategy.

## SUPPLY CHAIN SLOW TO EMBRACE THE DIGITAL REVOLUTION

**T**he maritime industry and broader ocean supply chain are suffering from costly inefficiencies due to ineffective data sharing and poor cross-industry collaboration, according to a new report.

The study, entitled "Competitive Gain in the Ocean Supply Chain: Innovation That's Driving Maritime Operational Transformation," finds huge opportunities to improve performance and customer service through better use of technology across the ocean supply chain.

The study, developed in partnership with Navis and XVELA and which can be downloaded at [www.bpinetwork.org/competitive-gain](http://www.bpinetwork.org/competitive-gain), is based on a global survey of more than 200 executives and professionals from terminal operators, carriers, logistics providers, vessel owners, port authorities, shippers, consignees and other members of the global ocean supply chain. It indicates that importers, exporters, container carriers, terminal operators, vessel owners and other stakeholders suffer from poor visibility and predictability around shipments and are losing money due to a lack of partner synchronisation and insufficient data insight.

However, there is recognition, particularly among industry leaders interviewed, that digitisation and mindset shifts are afoot, and will be a boon to all players in the industry. 90 per cent of survey participants said real-time data access and information sharing was important to increasing the efficiency and performance of the shipping industry. Some 80 percent said the industry needs to improve supply chain visibility.

On average, surveyed executives estimated that each of a wide range of ocean supply chain processes could be improved by as much as 66 per cent and no less than 55 per cent if the industry updated its IT systems and improved its ability to share data with other members of the supply chain.

According to respondents, the areas most in need of improvement are: 1) carrier to terminal coordination, 2) supply chain visibility and information sharing, 3) terminal operations, 4) cargo flow visibility and predictability, and 5) coordination across carrier alliances.

The report indicates that industry resistance to change, coupled with the industry's aging and inflexible IT systems, are key impediments to improving visibility and collaboration. Some 54 percent of respondents said the industry being "slow to change".

# BULK TERMINALS

SPRING/SUMMER 2017

*international*

THE OFFICIAL MAGAZINE OF ASSOCIATION OF BULK TERMINAL OPERATORS

## COMPETITIVE ADVANTAGE

Why trading commodities in an anti-trade world is good for shipping

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## NEWS IN BRIEF

### VLADIVOSTOCK ATTRACTS CHINESE FIRMS

Several Chinese companies are reported to have become residents of Russia's Free Port of Vladivostok.

The Free Port of Vladivostok is a special economic zone established in October 2015, which comprises the city of Vladivostok, as well as a range of Primorsky Territory ports and municipalities. Companies with resident status enjoy tax benefits, simplified bureaucratic procedures and visa regime liberalisation.

### VERACRUZ PA TO BUILD AGRI-TERMINAL

Mexico's Veracruz port authority has opened two technical and economic bids for the construction of an agricultural bulk terminal, which is one of four facilities to be built as part of the port's US\$1.65bn expansion.

### TYNE READIES FOR MORE BIOMASS

The Port of Tyne has taken delivery of two new eco-hoppers. The fully automated hoppers are integral to the import of wood pellet for Lynemouth Power Station, in south Northumberland, which by the end of 2017 will have been converted from coal-fired to biomass power generation.

To meet demand, the Port of Tyne is upgrading quay capacity and extending its main Riverside Quay by 125m. Three 36m high silos and 1300m of enclosed conveyors are currently under construction.

The Port of Tyne was the first UK port to handle wood pellet for power stations and in 2016 it handled 1.1 million tonnes of wood pellets and from 2017 will handle a further 1.8 million tonnes per year for Lynemouth Power.

## METRO TO OPERATE INDIANA-BURNS

**T**he Ports of Indiana have announced that the country's oldest stevedoring company – Metro Ports – will become the new bulk terminal operator at the Port of Indiana-Burns Harbour.

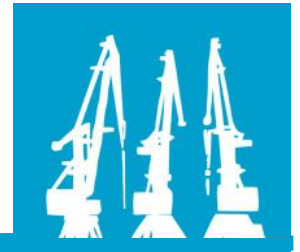
Starting in July 2017, Metro Ports will manage the loading and unloading of shipments along the port's East Harbour for port tenants and outside companies shipping bulk cargoes, including products for the steelmaking, agricultural, manufacturing, energy and construction industries.

Metro Ports is the brand used to collectively identify stevedoring affiliates of Metropolitan Stevedore Co. and its parent company, Nautilus International Holding Corp., both based in Long Beach, Calif. The company's roots date back to 1852 when its original parent corporation, California Stevedore and Ballast Co., was established during the Gold Rush era, and it has maintained continuous family ownership for 165 years. Metro Ports operates at 27 US ports on the East, West and Gulf Coasts in the states of Washington, New York, Massachusetts, South Carolina, Texas, Florida, Louisiana, California, North Carolina and Georgia. This is the company's only Great Lakes facility.

"Having a 165-year-old company like Metro Ports select Indiana to launch its Great Lakes operations is a tribute to our state's business climate and our extremely successful port system," said Rich Cooper, CEO for the Ports of Indiana. "Indiana's robust maritime economy leverages shipping connections to domestic and international markets through the Great Lakes and the inland river systems to support 155,000 Hoosier jobs and generate \$21.5 billion in annual economic activity. We're happy to see Metro Ports recognises tremendous economic opportunity in establishing a port terminal at the 'Crossroads' and 'Cross-waterways' of America."

Metro Ports handles a wide range of bulk and breakbulk cargoes around the country, including aggregates, potash, coke, coal, cement, fertilizer, borax, bauxite, RoRo, military, steel, wind energy, yachts and project cargo.

In 2016, the Port of Indiana-Burns Harbour handled nearly 2.6mt million tons of cargo, completing the highest three-year total in the port's history. In addition, the Ports of Indiana invested nearly \$2.5M into port infrastructure, including dredging and stabilisation of two ship berths to increase dock capacity for handling Seaway draft vessels as well as replacement of 2,000 feet of rail track and rehabilitation of multiple rail turnouts. Additional investments are planned by the Ports of Indiana and Metro Ports to upgrade the bulk terminal to increase the port's throughput capacity.



## THE OPERATOR'S VIEW



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**B**ulk Ports's Abbot Point terminal, a significant bulk port 25km north of Bowen, at the northern end of the Galilee and Bowen coal basins, is undergoing a major transformation into a port precinct of global importance.

Sprawling across a 16,320ha site, the port has a nominal export capacity of 50mtpa. It comprises rail in-loading facilities, coal handling and stockpiling areas and a single trestle jetty and conveyor connecting to two offshore berths and two shiploaders, all 2.8 kilometres offshore. NQBP owns and operates the newly refurbished Marine Offloading Facility (MOF), located just to the south of the existing T1 terminal. This was acquired by the Adani Group on a long-term lease in 2011 and is operated by Abbot Point BulkCoal.

However, capacity is expected increase substantially as NQBP has been working with Adani to develop new terminals. The nascent T0 terminals, under development to support the Adani's Carmichael Coal mine, include two inloading and outloading streams comprising dump stations, conveyors, stockpile areas, stacker reclaimers, jetty, wharves, shiploaders and the dredging of berth pockets. The initial stage has a 53mtpa capacity with one inloading and outloading stream, along with the required base infrastructure.

There are also plans to develop a third terminal and following a public Expression of Interest Process (EOI), NQBP entered into a Framework Agreement with Hancock Coal for the development of a coal terminal facility at Abbot Point, T3. Hancock Coal is planning to export 60mtpa through the terminal though initial capacity is likely to be 30mtpa.

Similar to the T0 development, the T3 terminal includes two inloading and two outloading streams comprising dump stations, conveyors, stockpile areas, stacker reclaimers, jetty, wharves, shiploaders and dredging of berth pockets.

NQBP is committed to developing the Port of Abbot point in a responsible and sustainable manner. The Abbot Point Growth Gateway Project involves dredging 1.1 million cubic metres of seabed and placing it to vacant industrial land at the port, next to the existing coal terminal. This will allow for the future expansion of the port, which could lead to the incremental increase in capacity from 50 to 120mtpa.

The Growth Gateway project received Commonwealth environmental approval on 21 December 2015 with 29 strict environmental conditions. The project is funded by Adani and will proceed when Adani progresses its port, rail and mine project. Conveyors will connect these facilities to two new ship loading berths around 3km offshore.

NQBP is currently completing a project to renew and revitalise the MOF at the Port of Abbot Point. Once completed, the project will improve emergency response capabilities, port operations and provide a multi-functional cargo offloading facility at the port.