

REASONS TO BE CHEERFUL

Shipping faces some significant challenges over the coming years, but the industry has a number of reasons to be cheerful as it enters a new decade, according to accountancy and business advisory firm BDO.

Shipping and transport partner Richard Greiner says: "Last year marked the 150th anniversary of the opening of the Suez Canal, which in many ways helped to revolutionise the conduct of global shipping markets. While there is nothing comparable in prospect, there are nevertheless a number of very important fundamental changes in the offing and, moreover, a number of reasons to be optimistic about the fortunes of the industry over the coming decade.

"At the end of 2019, confidence in the industry was as high as it has been at any time in the past six years. Despite a general slowdown in global GDP, demand for the industry's services remains strong, while a contraction in the number of newbuildings on order and a steady stream of recycling has brought supply under stricter control. If supply and demand are in harmony, much good will inevitably follow," he says.

Shipping has faced a number of challenges, not least as far as regulation compliance is concerned. Environmental Social Governance will assume increasing importance. With IMO 2020 in effect, the fuel price differential has become a significant factor, and "it will be instructive to see whether freight rates will cover the increased costs thus incurred," Greiner says.

"IMO 2020 scrubber retrofits in dry dock will continue to keep tonnage off the water, although shipments of low-sulphur fuel will boost the product tanker trades. New fuel solutions will doubtless continue to be trialled, while it will become clearer whether the Poseidon Principles can be the new global framework for responsible ship finance," says Greiner.

"Elsewhere, operating costs are forecast to go up, while geopolitics and trade wars and sanctions will continue to exert their customary influence. The first full financial reporting season with the new lease accounting standards in force will no doubt see bigger balance sheets for some in the industry.

"We now know that Brexit really does mean Brexit, but what does Brexit itself really mean? There are a number of presidential and parliamentary elections scheduled for 2020, including those in the US, Egypt, Greece, Hong Kong, New Zealand, Poland, Singapore and Venezuela. Each has the potential to impact shipping in a positive and/or negative way.

"Other issues facing the shipping industry at the dawn of a new decade include exchange rate volatility and the question of whether US interest rates will continue to fall. LIBOR will not be replaced until the end of 2021, but the time to prepare is now.

"Perhaps the biggest challenge of all, however, is the need to maintain and increase technical innovation in ship and engine design, and to harness the

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SUPERIOR ADVANCES

US-based Superior Industries, which supplies bulk material processing and handling systems, has launched a brand new conveyor drum pulley. Known as the Prime Mine Duty Pulley, this drum-style conveyor pulley is manufactured in diameters from 4in to 30in and face widths of 12in to 78in. It's designed and built with a solid steel end disc, which eliminates welding at the hub of the pulley. Applications for the new pulley include aggregate and mine duty conveyors using fabric belts, which start and stop under full loads frequently.

The Prime Mine Duty Pulley is one of four standard, pre-engineered conveyor pulley models available from Superior. Other designs include CEMA, Mine Duty 2.0 and Super Duty. Superior offers custom-engineered pulleys from its Core Systems® Design team.

In addition, the company aims to revolutionise the conveyor idler market when it introduces its new application-specific idlers seals, it says.

"These next-generation SpinGuard Idler Seals will offer greater protection in applications known to expose bearings to fugitive material prematurely," says Paul Schmidgall, chief engineer at Superior's conveyor components division. "We tested dozens of seal iterations over more than five years of and we think we have some pretty robust options."

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required technology through the likes of Big Data and Artificial Intelligence – and then not to forget to plan for the seafarer of the future.

“Over decades, most markets historically rise as often as they fall. Shipping has weathered the past decade better than many predicted and so enters the new one all the stronger for that,” says Greiner. “If it can meet the financial, technological and regulatory challenges that it faces, it will continue to be attractive to existing and new investors alike.”

PAPER AIMS TO IMPROVE PORT SAFETY PROCESSES

Preventing collisions in ports and terminals is the driver behind new advice provided by insurers TT Club, along with the International Cargo Handling Co-ordination Association (ICHCA) and the Port Equipment Manufacturers Association (PEMA).

The three bodies have joined together to produce *Collision Prevention At Ports & Terminals*.

While there is a growing number of non-contact, state-of-the-art technologies for collision prevention that can dramatically improve equipment safety and reduce accidents, many of these are not currently included in national or international standards, the organisations say.

The paper suggests that such technologies should be installed on new and existing equipment, and covers major features and types of non-contact technology for collision prevention at ports and terminals. The new advisory is now available free from the websites of TT Club, PEMA and ICHCA.

The organisations stress that the advice does not carry any binding obligations and is independent of the

various local, national and international regulatory regimes on the safe design, manufacture, specification and operation of various equipment types, which must also be satisfied. Adoption of equipment technologies to enhance risk reduction and safety, which is the primary focus of this document, must also go together with the development of robust operational safety processes.

Another organisation providing safety information is Port Skills and Safety, which has brought out guidance on managing non-permanent employees. This guidance has been collectively produced by the ports industry with the support of the Health and Safety Executive.

It is intended for companies operating in the UK ports industry with a duty of care and responsibility for the safe design, construction, operation, management and maintenance of ports and terminal facilities and management of port and terminal activities. It will also be useful to employees and their representatives.

Following the guidance is not compulsory, Port Skills and Safety says. However those following it will normally be doing enough to comply with the law.

ttclub.com ichca.com pema.org

DRY BULK DOOM

Dry bulk carrier owners are set for a dismal 2020 first quarter, according to the latest Dry Bulk Freight Forecaster from Maritime Strategies International.

Despite the IMO 2020 regulations beginning from 1 January, increased fuel costs impacted vessel earnings in December 2019 as owners loaded up on compliant fuel ahead of the deadline.

This was reflected in market assessments reported to the Baltic Exchange, which saw \$/tonne spot freight rates increase in December for all major Capesize routes apart from Australia to China. However, the Baltic's Capesize 5TC average timecharter equivalent (TCE) measure declined by 7.8% month on month. This dynamic has been magnified early in 2020: while C5 and C3 \$/tonne rates have fallen by less than 5% so far this year (to 13 January), the 5TC assessment has dropped by 35%.

A combination of demand and supply issues will continue to shake and stir the market in the early part of the year, MSI reports. Further problems with Vale's iron ore production in Brazil have squeezed the supply of iron ore, pushing up global ore prices and undermining Chinese import demand.

“In recent years, freight market dynamics during the first quarter of the year have been dominated by steel and iron ore markets and signs continue to mount that steel demand has weakened in China,” says MSI Dry Bulk Analyst William Tooth.

GRAIN EXPORTS SURGE AT PORT OF IPSWICH

ABP's Port of Ipswich has more than doubled its grain export volumes this harvest season, reporting 500,000 tonnes exported from the port in the months of June to November 2019.

This represents a more than two-fold increase in tonnage volumes when compared with the figures in 2018, which saw the port export around 200,000 tonnes of grain. In addition, October 2019 saw 161,885 tonnes of grain exported via the port, representing the highest traffic in 11 years.

October 2019 was also strong for ABP's customers Clarksons Port Services, which reported record-breaking volumes, having exported 68,809 tonnes and beating its previous record held since September 2008 of 64,186 tonnes.

Clarksons managing director Andy Rham says: "We were pleased to work closely with ABP's Port of Ipswich in order to ensure we had adequate stores and equipment to look after our customers through this extremely busy period. At times we were loading four vessels using all eight of our conveyors."

October was also very strong for ABP customers COFCO International. Speaking about the increased volumes, COFCO International's chief operating officer Tim Capey says: "We were pleased to handle a record tonnage through Ipswich Grain Terminal during the month of October.

"The business handled 140,000 tonnes of grain and animal feed, the highest monthly tonnage since the facility opened in 1983. This high level of activity reflects the leading role that COFCO International and Ipswich Grain Terminal play in the food and feed supply chain."

Together with the ABP's other port in East Anglia, Ipswich handles over 2m tonnes of agribulks annually and plays a vital role in supporting the regional economy.

ABP's divisional port manager in East Anglia, Paul Ager, says: "We would like to thank our customers for working with us to ensure smooth operations at the port during the busy harvest season.

"We have been investing in expanding storage capacity at the port to meet the requirements of the agricultural sector, with more developments currently underway, which will be unveiled in 2020."

HOT TOPIC

Grange Resources (Tasmania) has found the perfect solution to moving red-hot pellets at its pellet works in Port Latta. Aumund Fördertechnik's steel plate conveyor KZB-H can move 500 tonnes per hour of hardened iron ore pellets at 750°C continuously from shaft furnace to cooler.

Designed for hot material up to 1,000°C, the new conveyor is 92m long and 1,000 mm wide. It will replace the existing belt conveyor – which previously had to have its belts changed approximately every 40 days – in spring this year.



The Aumund steel plate conveyor type KZB-H will transport iron ore pellets at up to 750°C to the cooler. (Photo AUMUND)

Port and Terminal Operations for Bulk Cargoes 2020

10-11 MARCH 2020

CYBER BOOST

A new benefit for North P&I Club members aims to encourage them to better understand their vulnerabilities to cyber risk and improve their cyber security processes and systems. North has partnered with HudsonCyber to offer its members access to their HACyberLogix platform ahead of the International Maritime Organization's deadline for safety compliance in January 2021.

HACyberLogix is a secure, cloud-based programme, designed specifically for the maritime industry. It will enable users to assess their cyber security capabilities and gain insight into what changes need to be implemented for January 2021 compliance. Colin Gillespie, director (loss prevention) at North, says: "North P&I Club is committed to helping members prepare for the ever-changing regulatory environment and this partnership with HudsonCyber will help them meet the challenges presented by the upcoming requirement for cyber risks management to be included in Safety Management Systems from January 2021."

Hudson's HACyberLogix platform integrates industry-leading cyber security standards, frameworks and standardised practices, including the IMO's International Ship and Port Security Code and the International Safety Management Code.

COMMISSION RAPS POOR ACCESS TO AUSTRALIAN BULK GRAIN PORTS

Grain growers and exporters continue to raise concerns about the fairness and transparency of access to Australia's bulk grain export supply chains, including ports, despite Australia experiencing its lowest annual grain production since 2007-08 and lowest bulk grain exports since at least 2011-12.

The latest bulk grain ports monitoring report from the Australian Competition and Consumer Commission (ACCC) found that while grain exporters could generally access Australian ports during the 2018-19 shipping year, they remained concerned about the fairness and transparency of their access, especially at facilities operated by CBH and Viterra.

Australian bulk grain export port terminal services remain dominated by three port terminal service providers: CBH, Viterra and GrainCorp. Each has export trading arms that compete for port access with third-party exporters.

During the past season, CBH and Viterra provided 99% of bulk export services from Western Australia and South Australia respectively. Since the 2016-17 shipping year, when grain was last exported in significant quantities from eastern Australia, the three dominant providers have loaded 91% of Australia's bulk grain exports.

"The level of competition between port terminals varies significantly among different regions. The entry of new service providers has provided competition in some regions, but Western Australia and South Australia remain serviced by vertically integrated near-monopolies," ACCC Commissioner Cristina Cifuentes says.

"Even though many port terminals had excess port capacity this season, exporters and grower groups were still worried about the quality and fairness of port access. In particular, they were concerned about their limited ability to negotiate favourable terms with the dominant port operators," she says.

"While some new port terminal service providers have recently entered the market, many of them exported very little or nothing at all this season and their ability to compete with and impact the behaviour of dominant providers remains unclear."

The ACCC also continued to hear concerns from growers and exporters about access to upcountry grain storage and handling services.

"In addition to the concerns raised about ports access, some exporters and growers are also still concerned about the terms of up-country storage and handling agreements and their inability to negotiate non-standard terms of access," she says.

THROUGH WILD NATURE AND POPULATED REGIONS

Sichuan Yadong Cement Co, Ltd. in Pengzhou, China, has been relying on a 12.5 km overland conveyor from BEUMER Group in order to convey limestone from their quarry to their silo. When constructed in 2009 it was the longest belt conveying system in BEUMER history (BEUMER installed a longer system in 2016). The troughed belt conveyor runs through hilly terrain and nature reserves, over streams and unstable ground. The second project includes two additional overland conveyors, with an overall length of 13.7 kilometres, transporting limestone to the cement plant. Unlike the first project, the task here was to build the conveyor across inhabited areas. Noise emission limitations set forth by the government also needed to be considered.

The route of the overland conveyor was coordinated between BEUMER Group and the cement manufacturer. The system supplier calculated the tractive forces of the belt considering the eight horizontal curves with radii of 1,000 to 5,000 metres. The routing was checked for its feasibility on site. The complete route was checked by employees on foot, passing through rough terrain, in order to reliably check the predefined positions for the 460 supports for their suitability directly on site. Whenever technically possible, the routing of the conveyor was adapted to the topography. Height differences of up to 100 metres had to be overcome within shortest distances, so several sections were equipped with bridges of up to 55 metres. One section was realised with a 130 metre long tunnel.

Both overland conveyors have four horizontal curves with radii of 1,200, 1,500 and 1,800 metres. "We provided the engineering and the individual parts such as pulleys, motors, drive and control technology and the entire automation," describes Dr. Echelmeyer. The installation was monitored by a BEUMER Group supervisor and the wiring of the system was supported by a BEUMER electrical engineer. The system supplier was also in charge of the commissioning in May 2016.

The troughed belt conveyor is now supplying three kiln lines, a fourth line is planned.

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Port and Terminal Operations for Bulk Cargoes 2020

NEW
for
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Practical
Workshop

10-11 March 2020
Optional Practical Workshop: 12 March 2020

Subjects covered include:

- » Ship unloading technologies
- » Conveying technologies
- » Storage and discharge technologies
- » Loading and unloading control
- » Rail and road out loading equipment and control
- » Explosion and fire risks and management
- » Mobile plant and safety
- » Developments in automation and autonomous vehicles
- » Dust control and environmental protection
- » Controlling cargo damage
- » Wear protection and maintenance
- » Cargo characterisation for handleability and other issues
- » Practical Workshop: our first course earlier this year included a visit to The Wolfson Centre's pilot plant. Interest was such that in 2020 we will be offering an optional Practical Workshop, to be held in its on-site industrial-scale pilot plant.

**University
of Greenwich Medway
Campus, Chatham Maritime, Kent, UK**

For anyone concerned about or responsible for the safe handling and storage of bulk materials in ports and on the sea

Course Leader: Mike Bradley, Professor of Bulk and Particulate Technologies and Director of The Wolfson Centre

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To register an interest in attending and further course details, please contact
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PORT AND TERMINAL OPERATIONS FOR BULK CARGOES
Tuesday 10 and Wednesday 11 March 2020 – plus –
Optional Practical Workshop, Thursday 12 March 2020

The Wolfson Centre for Bulk Solids Handling
University of Greenwich Medway Campus, Chatham Maritime, Kent, UK



Course Overview

The Association of Bulk Terminal Operators (ABTO) is delighted to be partnering with the **The Wolfson Centre for Bulk Solids Handling** – part of the University of Greenwich School of Engineering – to deliver this course, hosted by them at their Medway Campus.

The course will examine the issues surrounding the safe handling and storage of bulk materials in ports and on the sea. It is designed to be interactive so delegates are given the chance to discuss real life issues and to determine best practice for future developments.

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