

Issue 30 | April 2021

DRY BULK SECTOR ENJOYS A SURGE

As BIMCO points out, while the Suez Canal grounding of the *Ever Given* made headlines round the world, bulk carriers represented the largest ship type of those ships waiting to get through the canal. There are some exciting things going on in the dry bulk sector, the second-hand market being one.

"The current strength of both the freight and the sale and purchase market inevitably leads to questions as to how long it will last," says Peter Sand, BIMCO's chief shipping analyst. "While there has been much talk of a new commodities super cycle, BIMCO's expectation remains more down to earth. The current strength of the market should be enjoyed for as long as it lasts; fundamentally the longer-term trends in the dry bulk market are not ones which support a prolonged upturn."

The ownership of dry bulk ships changed hands rapidly in the first three months of 2021. The course is now set for a record year in the bulk ship sale and purchase market.

A total of 794 ships were bought and sold in 2020, with the smaller sectors of handysize and supramax being most popular. Not even three months into 2021, 279 dry bulk ships have been traded, with panamax bulkers being the most popular single ship size and accounting for 82 of the trades. However, the number of panamax sales comes second to the number of sales of handymax, supramax and ultramax ships when these are put together.

According to BIMCO: "The high demand for dry bulk ships at the start of this year is also reflected in the asset values, which have all grown considerably since the beginning of the year. A 15-year-old panamax ship is now worth 47.4% more than it was on 1 January 2021, an increase of almost US\$4m. While the exact growth rate and increase in value varies by ship type and age, they have all seen very impressive value growth these past three months.

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SIMULATOR SIGNING

Kongsberg Digital has signed a contract with the Panama Canal Authority (ACP) to upgrade and extend the K-Sim Navigation simulators based in SIDMAR; the Center for Simulation, Research and Maritime Development of the Panama Canal Authority. Equipped with the new technology, the Panama City-based centre will be able to include multiple vessels in training scenarios and extend the realism of the simulator training provided for pilots and tug masters.

Scheduled for August 2021, this substantial upgrade will involve a broad scope of delivery. The centre's main K-Sim Navigation simulator will be upgraded with new visual image generation and display/projection systems, and an array of new consoles and hardware (HW) panels.

In addition, a unique new floor projection system will be installed to replicate the port and starboard views from the bridge wings. This feature will allow trainee officers on the main bridge to monitor the tugs and pilot boats in, for example, demanding port and tug manoeuvring scenarios with vessels in close proximity.



For further information about ABTO Email: info@bulkterminals.org Phone: +44 (0) 7546 978020

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SMOOTH SOLUTION FOR POST-BREXIT BORDERS

Elandbridge has launched its TruckPass technology, specifically designed to enable frictionless, digital borders and to address the challenges being faced by the haulage industry post-Brexit, including those presented by the border crossings between the UK mainland, Northern Ireland, and the Republic of Ireland.

TruckPass is an effortless, secure solution to getting freight across borders without delays, which can typically be anywhere from 15 minutes to several days.

Elandbridge is a consortium comprising border security professionals, haulage industry experts and leading IT, communications and systems development specialists. Using intelligent electronic seals, blockchain ledger, GPS tracking, secure facial recognition, IoT technology, enhanced communication systems and specifically-designed applications, Elandbridge is providing a proven and deliverable solution for frictionless borders. The innovative solution is thought to be the only technology that fully meets government, customs and security needs of the regulators and all the compliance requirements of the haulage industry.

RICHARD STEELE TAKES THE HELM AT ICHCA

The International Cargo Handling Coordination Association (ICHCA) has appointed Richard Steele as the new head of ICHCA International. He will take over the role from 1 July 2021, on the retirement of Richard Brough.

Steele is a safety and skills professional with a Masters in Training and Development who has been involved in the ports industry for over 21 years. He is currently the chief executive at Port Skills and Safety (PSS), an organisation that he has led for 11 years. PSS is a subscriber organisation for UK ports, with a remit to share best practice, develop safety guidance and standards and produce qualification frameworks for the industry. Before PSS, he was the senior learning and development manager for Associated British Ports for 10 years. Prior to ports, he worked in the nuclear industry on safety and skills provision. "We are delighted to welcome someone of Richard's capability to ICHCA," comments ICHCA chairman John Beckett. "We are committed to extending ICHCA's delivery and reach. Richard's skills and experience will ensure that we move confidently forward. He has proven leadership and organisational management ability, which will be invaluable to our future. The ICHCA board is very excited about the journey ahead as we continue to build on the exceptional work of our outgoing head, Richard Brough"

Steele says: "I am excited to join ICHCA at a time where there is real opportunity to build on the success of this internationally recognised and respected association and to create new value-add services and representation for our members."

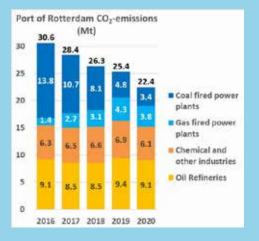
ROTTERDAM MAKES RECORD-BREAKING REDUCTIONS

In the period 2016-2020, the port of Rotterdam reduced its total carbon emissions by no less than 27%. Nationwide, the volume of greenhouse gases released into the atmosphere fell by 14% in the same period.

In 2020, Rotterdam achieved a 12% reduction in emissions, compared to 8% in the Netherlands as a whole. As a result of this swift decrease, companies in the port of Rotterdam are currently responsible for 13.5% of the Netherlands' total carbon emissions: a share that several years ago was 16%.

The port's total emissions volume combines those released by industrial production (refineries, chemical companies) and electricity generation (gas- and coal-fired power plants).

Last year, Rotterdam's power plants cut their carbon emissions by 1.9m tonnes (21%) — in percentage terms equivalent to the national figure. While a share of this reduction can be attributed to lower power consumption, this is mainly thanks to a substantial (more than 40%), nationwide increase in the generation of electricity from renewable sources (solar, wind and biomass). One remarkable milestone reached in 2020 was that for the first time in history, Rotterdam's natural gas-fired power plants actually released more carbon into the atmosphere than their coal-fired counterparts.



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SESSIONS WILL COVER

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- ③ Streamlining and increasing the profitability of operations
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- ③ Driving efficiency through technology, digitalisation and automation
- ³ Keeping abreast of increasing environmental regulation
- ③ Improving safety and security
- ③ Autonomous operations
- 3 Transhipment, rail and transport connectivity



An afternoon terminal visit for early arrivals on Tuesday 19 October.

Host Port



FREEPORT OF RIGA AUTHORITY



For more details, visit: bulkterminals.org/events.html

CLIMATE CO-OPERATION

In a global first for the maritime industry, Port Esbjerg and Honeywell are working together on a climate co-operation designed to help reduce carbon emissions at the Danish port by 70% by 2030 in line with the country's climate target.

Port Esbjerg, located on the south-west coast of Denmark, is working with Honeywell on a comprehensive carbon and energy management programme to help achieve the port's emissions reduction goal. The initiatives also contribute towards the International Maritime Organization's ambition to halve greenhouse gases from international shipping by 2050, compared with 2008 levels.

The Port Esbjerg team recently inaugurated its first shore-to-ship power units, which allow docked vessels to run on renewable electricity from offshore wind turbines, instead of using on-board diesel generators.

This power connection is enabled by the co-operation between Honeywell and Port Esbjerg, specifically supported through understanding estimations of the vessels' carbon footprint. The port can access this data at any time through the Honeywell Enacto Carbon and Energy Management system. The shore-to-ship units can simultaneously power multiple large vessels, helping to reduce CO2, SOx and NOx emissions, as well as reducing noise pollution.

In the next phase of the project, Port Esbjerg and Honeywell will monitor and manage water consumption and heating, as well as the emissions performance of businesses around the port. The plan also features significant investments in electric vehicle technology and hydrogen-powered cranes. The target is for all port vehicles to be powered by electricity by 2025.

SEAFARERS FACE VACCINATION LOTTERY

Once again seafarers are falling victim to the lack of focus and joined-up thinking from leaders of governments and the maritime industry, which has become apparent during the current on-going crew change crisis. The vaccination lottery that is faced by the industry is beginning to hit the dry bulk sector hardest, says dry bulk shipowners association Intercargo.

"We are seeing a number of port states suggesting that all crew on board a vessel must be vaccinated as a pre-condition of entering their ports, and indeed insisting on a particular brand of vaccine. This is of course a very serious problem for the industry as a whole, when we consider the high proportion of seafarers that come from developing countries with no access to any vaccine at all," says Dimitris Fafalios, Chairman of Intercargo. "The dry bulk sector is, however, bearing the brunt of this uncertainty due to the nature of its business. Bulk carriers on tramp trading call at many more ports than other shipping sectors and are at the mercy of the nationalised vaccination policy, applying at the port of call."

Fafalios adds: "Intercargo is participating in a joint industry Vaccination Taskforce, led by the International Chamber of Shipping, aimed at providing clear solutions and practical guidance in the increasingly complex situation we currently face."

The group has produced guidance on the legal, liability and insurance issues arising from the vaccination of seafarers and is also working on developing a preliminary list of vaccination hub ports.

ABP SIGNS MENTAL HEALTH PLEDGE

The UK's Associated British Ports (ABP) has signed Maritime UK's Mental Health in Maritime Pledge, demonstrating the company's commitment to promoting positive mental health and wellbeing both within ABP and the wider maritime community.

The pledge forms a key pillar of Maritime UK's Diversity in Maritime Programme and aims to ensure that employee mental health and wellbeing are considered at the highest levels across the sector.

The Mental Health in Maritime Pledge calls upon executives from maritime organisations to make a public commitment, which states: "We are committed to improving the quality of mental health and wellbeing provision through action and support, at all levels, throughout our organisation and our industry."

Henrik L Pedersen, ABP chief executive officer, says: "While discussions around mental health are not new, the covid-19 pandemic has brought them to the top of the public agenda and resulted in many leaders gaining a better understanding of the challenges, as well as sharing their personal stories to raise awareness. We have a responsibility to support our employees and create programmes, policies, and resources for them to be at their personal best. Creating a culture of workplace health is not a nice-to-have; it is a core business priority and goes hand in hand with proactive employee engagement efforts."

PORT AND TERMINAL OPERATIONS FOR BULK CARGOES – Short Course

on-line delivery - call to arrange an in-company course

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

Next open course – March 2022

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, University of Greenwich





The Wolfson Centre for Bulk Solids Handling Technology

To register an interest in attending and further course details, please contact Simon Gutteridge events@bulkterminals.org +33 (0)321 47 72 19 or see bulkterminals.org/events/courses-and-training.html

MATERIAL SIZE REDUCTION LIVE ONLINE SEMINAR

27 April 2021

Institution of

ENGINEERS

MECHANICAL

https://events.imeche.org/View Event?code=SEM7275

The Institution of Mechanical Engineers' Bulk Materials Handling Committee is pleased to announce that the forthcoming Material Size Reduction seminar will be taking place live online on 27 April 2021.

Attend this seminar to:

- Gain an overview of the types of size reduction equipment and their suitability for processing different materials
- Understand the performance of material classification technology and open vs. closed loop processes to maximise the quality of the finished product



- Take part in roundtable discussions with equipment specification experts, solution providers, and end-users from a range of industries to address specific technical challenges
- Deepen your knowledge of the OPEX and CAPEX implications of material size reduction technology to minimise spend
- Increase the uniformity and quality of reduced material output, cutting down waste in the process
- Learn about specialist technology such as fluid energy and cryogenic mills to identify potential opportunities for investment in new equipment

To view the full speaker line-up and seminar programme, please visit https://events.imeche.org/ViewEvent?code=SEM7275

ABTO members can register at the same rate as IMechE Members. Simply select 'Member, Supporting organisation' when booking online. Alternatively, contact the IMechE Event Enquiries team on +44 (0)20 7973 1251 or email eventenquiries@imeche.org

GUIDANCE AIMS TO MINIMISE METALS ACCIDENTS

The International Council on Mining and Metals has published updated guidance that will support the mining and shipping industries to minimise the risk of accidents in maritime transportation by outlining the techniques required for accurate hazard assessment of ores and concentrates.

The Hazard Assessment of Ores and Concentrates for Marine Transport: Guidance 2021 brings the previous guidance issued in 2014 in line with recent regulatory updates from the International Maritime Organisation and advancements in knowledge in assessing hazards.

Through ICMM's Mining Principles, members commit

to implement effective risk-management strategies and systems based on sound science to ensure products can be used and transported safely. Carrying out an accurate hazard assessment is a critical element of this and the provisions set out in this guidance will support members to ship and transport vital ores and concentrates safely.

The guidance has been developed by ICMM's Material Stewardship Facility, which convenes experts from across ICMM's membership to make progress on strategic multi-metal topics, such as chemicals management, life-cycle management, minerals transport and responsible sourcing to enable sustained market access.

SIMPLY OVERCOMING OBSTACLES

In the mining industry, modern technologies require systems capable of transporting bulk materials efficiently from the quarry to their destination, through rough terrain and populated areas. BEUMER Group supplies customised systems such as open troughed belt conveyors and closed Pipe Conveyors. The systems operate quietly and only minimal amounts of dust or exhaust gases are emitted. Compared to trucks they are often more energy-efficient and can be adjusted to the structure of the premises. They are also able to safely handle steep sloping routes, rivers or road crossings. The system provider determines the optimum conveying route, then takes over project planning and installation. BEUMER Group also ensures that the owner remains sustainably competitive - with cost efficiency and comprehensive customer support.

An essential feature of the technology is that it enables horizontal and vertical curves. Angles of inclination of up to 15 degrees are possible, depending on the characteristics of the material to be transported and the topography, with lengths of more than twelve kilometres. Due to the ability to navigate curves, considerably fewer and in some cases no transfer towers are required. This results in substantial cost savings for the customer and the system continuously transports the material even over challenging ascending and descending sections. The open troughed belt conveyors are particularly suitable for high throughputs. Conveying capacities of up to 10,000 tons/hour are usual.

Using BEUMER calculation programs, a team of experts precisely calculates the static and dynamic tractive forces of the belt during the development phase of the system. This is the prerequisite for the safe dimensioning of the curves. BEUMER engineers select the type of drive technology and conveyor belts needed on the basis of these calculations. This ensures longevity of the entire system.



Whenever technically possible, the routing of the conveyor has been adapted to the topography. Photo credits: BEUMER Group GmbH & Co. KG

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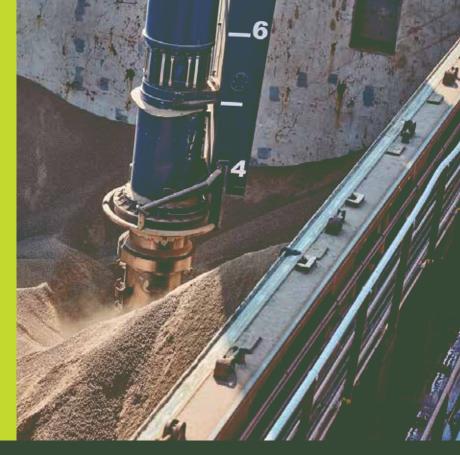
SOME THINK THAT TRANS-PORTING RAW MATERIALS REQUIRES TRUCKING. WE THINK DIFFERENT.

DIFFERENT

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Designed to help delegates identify and resolve common problems when handling various biomass materials.

This new course is aimed at the manufacturers and suppliers of biomass materials, at the users – particularly those responsible for maintenance and management on site – and at the manufacturers and installers of equipment used to transport and store biomass materials.



BIDMASS OPERATIONS AND HANDLING TECHNOLOGIES SHORT COURSE – ONLINE

DATES TO BE ANNOUNCED MARCH 2022

Subjects covered include:

- » Material types, flow properties and handling equipment requirements
- » Self-heating, fire, explosion and safety
- » Dust and degradation, pneumatic conveying and wear
- » Dust control and management
- » Explosion protection and ATEX regulations
- » Engineering of equipment for storage and discharge
- » Ship unloading
- » Biomass potential and possible future trends





The Wolfson Centre for Bulk Solids Handling Technology