

Issue 29 | March 2021

## DRY BULK EXPERIENCES AN UP-AND-DOWN YEAR

Total tonnes transported by the dry bulk shipping industry last year fell by 1.3% to 5.49 billion tonnes, from 5.56bn in 2019, according to BIMCO.

China has further cemented its position as the dominant player in dry bulk shipping with its imports now accounting for just shy of 50% of the market when measured in tonne-miles.

This overall drop in tonnes marks discrepancies between different dry bulk commodities. Of the three main commodity groups - iron ore, coal and agriculture - coal is the only one to have fallen; down 102.2 million tonnes, the trade association says.

Iron ore and agricultural goods rose in 2020, up by 36.9m tonnes (+2.3%) and 33.3m tonnes (+4.9%) respectively, cementing iron ore's position as the highest volume dry bulk good. In percentage terms, the biggest growth came from construction, which grew by 8.1% in 2020, but as absolute volumes are much lower, this translated into an extra 29.6m tonnes.

The largest commodity in the construction category is cement, which saw a 13.4% increase between 2019 and 2020. China accounted for half of this 21.5m tonne increase, as the country saw its seaborne cement imports rise by 52.2% (12.7m tonnes). At the other end of the scale, the largest percentage drop came from forestry, down 8.9%, or 33m tonnes. Half of this drop comes from wood in rough, down by 14.9 million tonnes (-17.4%). 10.6m tonnes of the 14.9m loss came from lower imports into China.

"For dry bulk shipping, the year can be divided in two, with lower volumes and earnings in the first half followed by a recovery in the second, as China split from the rest of the world, boosting tonne and tonne mile demand, and sending freight rates to profitable levels. June was the turning point as volumes reached their highest point of the year, and earnings jumped, especially for Capesize ships," says Peter Sand, BIMCO's Chief Shipping Analyst.

In terms of dry bulk trades, China grew strongly last year, with volumes rising by 95.3m tonnes (+5.2%). Among other things, Chinese imports of iron ore and soya beans rose by 7.1% and 12.0% respectively.

The strong growth in Chinese imports has, however, not been enough to make up for the fall in imports by the rest of the world when measured in tonnes. Here, demand fell by 4.5%, amounting to 167.7m tonnes, overshadowing the growth in China, BIMCO says.

BIMCO expects China to continue to increase its dominance during the course of this year, although growth is likely to be more focused on private consumption rather than the infrastructure-heavy stimulus measures of last year, somewhat dampening dry bulk imports.

As the rest of the world starts on its slow and uneven path to recovery, the dry bulk industry will continue to face challenges this year, demand will grow unevenly across the four dry bulk sectors, and fuel prices are rising, adding pressure to earnings. Countering this, fleet growth is expected to be at its lowest level since the turn of the century.

"We expect 2021 to be a record-breaking year for the dry bulk industry both in terms of tonnes and tonne miles, with demand growth likely to outpace that of supply. However, this will not solve the overcapacity issue that has long plagued the dry bulk market and is an obstacle that will not disappear just because a new year has started or a vaccine has been found," says Sand.

#### MERGER CREATES FUTURE-PROOF PORT

The Korean Register (KR) has published a technical report outlining the safety regulations and resulting design implications for ammonia-fuelled ships. The report provides essential information for industry stakeholders. such as shipowners, shipyards, and equipment companies for the construction of ammonia-fuelled ships.

KR's technical report analyses the characteristics of ammonia, comparing it with other next-generation fuels. lt provides vital information on the appropriate safety measures for ammonia when used as a conventional fertiliser. refrigerant and industrial fuel, together with the safety for regulations onshore storage facilities and measures to be taken when loading ships with ammonia, as cargo.

The report also examines the development status of ammonia fuel cells and internal combustion engines, giving an in-depth analysis of key international requirements such as the IGC Code and IGF Code, which will influence further rule development.

The technical report can be downloaded free of charge from the KR website: **krs.co.kr** 

# For further information about ABTO

Email: info@bulkterminals.org

Phone: +44 (0) 7546 978020

#### MERGER CREATES FUTURE-PROOF PORT

The City of Antwerp and the City of Bruges have reached an agreement to merge their respective ports. The two-city agreement marks the official starting point for a unification process that is expected to take a year to complete. After that, the ports will continue under the name "Port of Antwerp-Bruges".

In this way, the ports strengthen their position in the global logistics chain and sustainable growth is perpetuated. In addition, the single port will be more resilient to the challenges of the future and lead the transition to a low-carbon economy. In this way, Port of Antwerp-Bruges wants to become the first world port that reconciles economy, people and climate.

The joint position of the ports of Antwerp and Zeebrugge in the global logistics chain will receive an important boost. The unified port will thus become the most important container port (157m tonnes / year), one of the largest breakbulk ports and the largest port for vehicle transhipment in Europe.

In addition, the port will account for more than 15% of the total gas throughput in Europe and it will also remain the most important chemical hub in Europe. Finally, it will be the largest cruise port in the Benelux. With a total throughput of 278m tons per year, the unified port maintains its worldwide top position.

### **BIMCO BOOSTS JUST-IN-TIME ARRIVALS**

In order to encourage wider adoption of just-in-time (JIT) arrival principles in the bulk sector, BIMCO has published a new clause for voyage charter parties to promote more efficient shipping procedures and, as a result, help reduce CO2 emissions.

The new clause creates a contractual framework to overcome the primary obstacle to JIT arrivals — the obligation on shipowners to proceed with due or utmost despatch and without deviation. This is a critical aspect of making JIT arrivals work. Removing this obstacle will allow ships to optimise their speed and thereby arrive at a port at an optimal time and avoid delays without breaching their usual voyage charter obligations.

BIMCO believes that the widespread adoption of JIT arrivals in the bulk sector will bring many benefits, including reductions in fuel consumption, emissions and waiting times in ports and at anchorage. In addition, the concept will make shipping more efficient and improve vessel utilisation. From a charterers' perspective, the JIT scheme should help foster a greater focus on setting more accurate laycans. Currently, charterers often agree laycans that have ships hurrying to arrive at ports to meet a cancelling date only to end up waiting for lengthy periods at anchorage before berthing.

BIMCO's JIT Arrival Clause for Voyage Charter Parties gives charterers the right to ask owners to optimise the ship's speed to meet a specified arrival time. If the ship is on its way to a loading port, charterers must in return agree a revised cancelling date.

JIT arrival schemes have been successfully implemented in the container sector and BIMCO believes that the bulk sector could also benefit. The bulk sector is not as vertically integrated as the liner trades and has many more "players". As a result, implementing JIT arrival schemes in the bulk sector will require a determined and co-ordinated effort between owners, charterers and other key stakeholders. A few bulk operators are already using JIT arrival schemes and BIMCO believes that the bulk sector as a whole should actively investigate a more widespread adoption as pressure grows to optimise ships and ports.

Copies of the BIMCO Just in Time Arrivals Clause for Voyage Charter Parties can be downloaded from BIMCO's website: **bimco.org** 

#### SOLENT STEVEDORES MAKES SAINT-MALO MOVE

Solent Stevedores, a UK leading port terminal operator, has expanded operations to Saint-Malo in France with the creation of subsidiary company Saint-Malo Stevedores.

The company, currently leading stevedoring operations in 13 port locations, has committed to investing €1m in new equipment at the Port of Saint-Malo having also secured a €200,000 grant from the Brittany region. The investment includes the purchase of new tugs for roro operations, forklifts and a loading shovel.

The operations will see up to 200,000 tonnes of dry bulk and breakbulk cargo pass through the port each year and in excess of 500,000 passengers.

Hans Uiterdijk, director of Saint-Malo Stevedores, says: "We have a real opportunity to develop operations beyond the current cargo traffic that we're seeing and we hope that with the experience brought into the port from Solent Stevedores, we could potentially create some synergies to import cargo from the UK."

# BULK TERMINALS 2021 THE ONLY EVENT AIMED AT THE ENTIRE BULK TERMINALS INDUSTRY

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

Sponsor

# SESSIONS WILL COVER

With sessions focused

on the concerns of operators, **Bulk** 

Terminals 2021 will consist of a full two-

day programme on Wednesday 20 and Thursday 21 October.

- Bulk markets
- The impact of covid-19
- Streamlining and increasing the profitability of operations
- Development opportunities
- Driving efficiency through technology, digitalisation and automation
- Keeping abreast of increasing environmental regulation
- Improving safety and security
- Autonomous operations
- Transhipment, rail and transport connectivity



19-21 OCTOBER 2021

RIGA, LATVIA

BRUKS Siwertell BULK HANDLING & WOOD PROCESSING

TRADUCTOR DE LA COMPANY

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

#### **CYBER SECURITY UPDATE**

The fourth edition of the industry cyber risk management guidelines, "Guidelines on Cyber Security Onboard Ships", is now available and lays the foundation for further improvements and refinement of companies' cyber security risk assessments.

Version 4 of the guidelines is published at a time when shipowners and managers are faced with a requirement to implement cyber risk management in their safety management systems (SMS) by the time of their first Document of Compliance audit after 1 January 2021.

"In recent years, the industry has been subjected to several significant incidents which have had a severe financial impact on the affected companies," says Dirk Fry, chair of BIMCO's cyber security working group and director of Columbia Ship Management. "While these incidents have had little or no safety impact, they have taught us some very important lessons which have been incorporated into the new version of the guidelines."

## QUALITY STANDARD SUPPORTS DRY BULK SAFETY

RightShip and Intercargo have announced the launch of an important new quality standard for the dry bulk sector, DryBMS. The standard will be governed by a new NGO to be established later this year and will support the improvement of safety in the dry bulk segment.

Supported by the International Chamber of Shipping (ICS) and BIMCO, DryBMS now exists as a simple set of best practices and key performance indicators and raises the bar on safety, environmental and operational excellence.

RightShip's CEO Steen Lund says that he is confident that such a programme will be supported and adopted: "We are proud to launch DryBMS to the industry. The standard is a product of extensive collaboration with many stakeholders within the dry bulk sector.

"We believe that this ensures the programme will be supported and adopted across the industry as a whole. The rapid delivery of the initial consultation document means that we are a step closer to providing consistent, meaningful safety expectations for the dry bulk industry.

"Handing the standard over to a new and independent NGO will ensure the standard is protected and governed with the industry's best intentions at heart."

Dimitrios Fafalios, chairman of Intercargo, agrees: "This is an important step, not only for the industry, but for the sector as a whole. We are all collaborating in a scheme that is being developed by the industry and for the industry, which will deliver a truly robust standard with the buy-in of those that the industry relies upon to implement and support it."

Interested parties are invited to sign up for the DryBMS newsletter to receive regular updates regarding the development of the NGO and the finalised standard. The final draft version of the standard is now available to download on the DryBMS website, and the team will continue to review feedback sent to **enquiries@drybms.org.** 

#### PAPER SETS OUT SUSTAINABILITY ISSUES

The Sustainable Shipping Initiative (SSI) has published a white paper setting out sustainability issues and principles surrounding marine fuels under consideration for shipping's decarbonisation.

The paper, *Defining sustainability criteria for zero-and low-marine fuels*, outlines 13 sustainability issues and principles to be taken into consideration to ensure that the marine fuels the industry is investing in, purchasing and using to transport cargo are sustainable over their entire lifecycle and not causing negative impacts.

The sustainability principles and criteria will feed into the development of industry standards and third-party certification schemes to assure and facilitate the selection of - and demand for - sustainable marine fuels.

As the industry transitions to zero emission shipping, stakeholders across the shipping value chain are increasingly aware of the need to better understand the sustainability issues surrounding the zero and low carbon marine fuels under consideration. The sustainability principles and criteria can be used by stakeholders across the shipping value chain ranging from shipowners (as fuel purchasers), fuel producers and suppliers, shipping customers, regulators and investors in zero emission shipping.

Defining sustainability criteria for zero- and low-carbon marine fuels is available here.

# PORT AND TERMINAL OPERATIONS FOR BULK CARGOES 2021 – Online delivery

# 8-11 March 2021

# 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

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

#### **GAC SIGNS UP WITH QATAR**

Shipping and logistics company GAC has signed an agreement with Qatar Free Zones Authority (QFZA) to establish a contract logistics facility and office in the Ras Bufontas Free Zone. The agreement with GAC will play an important role in expanding the logistics offerings for QFZA and Qatar, strengthening supply chains and bolstering Qatar's position as a global hub for trade.

The purpose-built 27,000m<sup>2</sup> multi-user contract logistics facility, due to be completed in the first quarter of 2022, will be built from sustainable materials, partly fuelled by solar power, have several energy-saving features and use recycled water in its operations.

The warehouse will serve key sectors including fast-moving consumer goods, food and beverage, fashion, sports, energy, aerospace and healthcare. It will maintain temperatures ranging from -18°C to +22°C to support cold chain operations and will feature dedicated mezzanine levels for value-added services activities, such as component assembly, repacking and labelling to enhance customers' supply chains.

GAC's marine and offshore services will be well supported by Marsa Port, the marine cluster in QFZ. Its operations at the port will serve the energy companies active in the North Field expansion projects.

### PORTS STILL LAG BEHIND IN DIGITAL AGE

Port management software provider Innovez One says that of the 4,900 ports in the world, the majority are not yet using digital technology for even the most basic processes; 80% of ports continue to rely on manual, legacy solutions such as whiteboards or spreadsheets to manage critical marine services such as towage, pilotage and launch boats. This leaves many ports commercially vulnerable and less able to compete in an increasingly digital world.

While the phrase "smart ports" has been used regularly within the maritime industry for a number of years, the benefits of digitalisation remain the preserve of only a few, large "Tier 1" ports that have the profile and financial muscle. This has created a polarised landscape within the port sector.

Many "Tier 2" and below ports still use manual, paper-based processes or Excel spreadsheets to arrange and execute jobs and rely on personal interaction and paper-based transactions as the norms for shipboard, ship-port interface and port-hinterland-based exchanges. This leads to a range of inefficiencies in ordering, execution and billing, as well as a lack of sustainability and competitiveness, says Innovez One. Alarmingly, this dynamic makes the "last mile" of a journey at sea a weak link in the global logistics chain, opening up risks of delays, late payments, increased fuel consumption and emissions, reduced revenues and even safety concerns stemming from a lack of traceability. For the 20% of ports where this is not the case, they have often been able to rely on their own in-house software.

"The current dynamic reflects the often-messy reality of port operations, which is a blend of high-tech digital and paper-based manual processes sitting side-by-side," says David Yeo, CEO, Innovez-One. "This causes issues in relation to inter-operability, where systems are not talking to each other properly, which is impeding effective execution. However, it also highlights the fact that while global supply chains are becoming increasingly automated, of which ports are an integral part, the majority of ports still overwhelmingly rely on person-to-person systems."

The ramifications and missed opportunities for ports from increased efficiencies, revenues, sustainability and competitiveness are significant. In particular, towage operators are missing out on the opportunity to make substantial savings of their annual fuel costs by reducing the mileage of tugs while saving yearly maintenance costs and personnel cost savings of their towage vessels.

#### PARTNERSHIP AIMS TO PUSH BRAZILIAN DIGITALISATION

PortXchange has announced a new partnership with Albatroz Energia to accelerate the digitilisation of Brazilian ports and port communities.

PortXchange is a provider of a digital platform that aims to improve collaboration between all the parties involved in a port call. It combines various data sources so that a port call by a vessel can be planned as accurately as possible. This way, activities that must occur during the port call can be seamlessly co-ordinated with each other.

The platform enables more effective capacity utilisation at the port and terminals as well as the precise planning and co-ordination of a range of vessel services, including bunkering and provision. Also, it enables vessels to optimise their sailing speed and arrive at the port when berth, tugs and pilots availability are ensured.

## BEUMER GROUP PIPE CONVEYOR ENSURES DUST-FREE TRANSPORTATION OF ORE CONCENTRATES WITHOUT POLLUTING THE ENVIRONMENT

Transportadora Callao S.A., the logistics operator of a special cargo terminal in the port of Callao/Peru, relies on a BEUMER Group Pipe Conveyor for the transportation of zinc, copper and lead concentrates of different mining companies from the warehouse to the terminal. With its ability to navigate curves in three dimensions, the conveyor can be optimally adapted to its routing course of approximately 3,000m. What is even more important: the conveying system prevents the concentrates from coming in contact with the environment and ensures dust-free transport to the ship's holds. BEUMER Group was responsible for engineering and supply, including the steel structure, supervision of the installation and putting the Pipe Conveyor into operation.

Due to the system design and the required system capacity, BEUMER designed it with a diameter of 400mm. The conveyor transports 2,300 tons per hour, at a speed of 4.5m/s and is driven by three motors with a capacity of 650kW each. BEUMER Group equipped the system with filters, strippers, a dedusting unit and a control system and was responsible for engineering and automation, and supplied the steel structure and the necessary components. The site managers supervised the installation and put the system into operation.

The process is practically free of faults and, above all, safe: trucks or trains transport the mining commodities from the mines to the ore storages, from where they are transported to the open access station. Here, the concentrates are received by a feeding 43m belt conveyor that transfers it to the Pipe Conveyor at a height of 6m. A dedusting unit ensures that no material is emitted during this process. BEUMER Group equipped the feeding belt conveyor with a metal detector and an electric magnet. This prevents damage of the downstream Pipe Conveyor by metal parts. At the end of the route, the conveying system runs along the seaside in the naval port of Callao to the transfer tower. Here, the belt opens automatically. It transfers the material to another belt conveyor that conveys the ore to the ship loading system.



View from the pier: the last section of the Pipe Conveyor runs along the sea to the transfer tower. Some think to be a construction of the test of tes

**BEUMERGROUP** 

MADE DIFF3RENT 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.



# **HANDLING TECHNOLOGIES** SHORT COURSE – ONLINE

# 22-26 MARCH 2021

## 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



NEW



The Wolfson Centre for Bulk Solids Handling Technology