abto NEWS
ASSOCIATION OF BULK TERMINAL OPERATORS

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DOMINGUEZ VELASCO TAKES THE HELM AT IMO

Arsenio Antonio Dominguez Velasco has taken over as the next Secretary-General of the International Maritime Organization (IMO). The IMO Assembly unanimously approved the decision of the Council at its 129th session **(C129)** to appoint him to the role.

Dominguez Velasco took up the office of Secretary-General on 1 January 2024 for an initial term of four years. He becomes the IMO's 10th elected Secretary-General.

The outgoing Secretary-General, Kitack Lim, congratulated his successor on his appointment, saying: "I am confident that the membership as a whole has made a wise decision and that Dominguez Velasco will ably lead the Secretariat in promoting the mandate of the Organization and in the delivery of its objectives."

Addressing the Assembly, Dominguez Velasco said: "You have my full commitment to build on the great work that has been done by my predecessors, taking what is already a significant and influential organisation, to be an institution that will thrive in delivering its full agenda, from safety to decarbonisation, from digitalisation to the human element; an International Maritime Organization that not only looks towards the future, but does more in embracing change, diversity, inclusion and transparency; one that is dedicated to its people, from all the very professional staff that form the IMO Secretariat, to our seafarers worldwide and, perhaps most importantly, a dedication to the younger generations, the ones we are obliged to hand over to, to hand over a planet that is a better place to live in."

He concluded: "I want to reiterate how much I'm looking forward to leading IMO, to continue working with all of you – an extraordinary group of people who have demonstrated time and time again that we can deliver, by listening and understanding each other, sharing our aims and concerns. I'm very lucky to start with an already great team of professionals in the Secretariat who also want what is best for the member states and all our stakeholders."

P&O FERRIES SIGNS UP TO INNOVATIVE DRUG TESTS

Pan-European ferry and logistics company P&O Ferries is now using the portable Intelligent Fingerprinting Drug Screening System to support its drug and alcohol testing policy.

P&O previously used an external drug testing service provider to conduct random urine testing of seafaring staff on board its ferries. The testing process typically required multiple cabins with toilet facilities, HR support, external testers and a series of two-hour testing sessions across multiple voyages to conduct testing. This approach proved expensive and inflexible. Switching to an in-house programme using the Intelligent Fingerprinting system is expected to reduce P&O Ferries' overall drug testing costs by 90%.

"When we first saw fingerprint sweat-based drug screening in action, we knew it would be a great fit for P&O Ferries and our need for a flexible system that we could use on board our ferries," explains Grant Laversuch, head of safety and designated person ashore at P&O Ferries. "This has proved to be the case, with the portable and non-invasive Intelligent Fingerprinting system giving us the ability to test on our ferries as needed. Having rolled out the innovative fingerprint solution to our ferries, we're now looking at training additional HR team members so that we can extend the programme to our employees onshore".

P&O Ferries will deploy the Intelligent Fingerprinting system at its three UK ferry port sites at Larne in Northern Ireland, as well as Hull and Dover in England. The company's portable DSR-Plus readers and screening cartridges will be used to randomly test seafaring staff on board ferries in line with the company's drug and alcohol policy.

For further information about ABTO

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RED SEA CRISIS LEADS TO SUPPLY CHAIN WARNING

Consumers around the world will pay the price for the crisis in the Red Sea, according to industry analyst Xeneta, after missile attacks on merchant ships plunged supply chains into chaos.

Latest data from the organisation shows spot rates in the ocean freight shipping market spiked by 20% after major shipping liner companies announced they were avoiding the Red Sea amid the attacks by Houthi militia.

Peter Sand, Xeneta's chief analyst, says: "The region is essentially in a war situation because it is too dangerous for many vessels to sail through the Red Sea and therefore also the Suez Canal, which is the major artery for world trade.

"Ships are now being re-routed via the Cape of Good Hope, but not only will this add up to 10 days sailing time, it will cost up to US$1m extra in fuel for every round trip between the Far East and North Europe.

"If we look at container shipping alone, Xeneta estimates the diversion via Africa will also require additional shipping capacity in the region of one million TEU (20ft equivalent shipping containers).

"There is capacity in the market, but it will come at a cost and we could see ocean freight shipping rates increase by 100%. This is a cost that will ultimately be passed on to consumers who are buying the goods."

US Secretary of Defense Lloyd Austin recently announced 'Operation Prosperity Guardian', a coalition task force to combat the Houthi attacks and protect merchant ships sailing through the Red Sea and Gulf of Aden. This builds upon the existing Task Force 153 in the region to tackle piracy.

Sand adds: "We are now seeing action from politicians, but we do not know how or when this coalition will be successful in opening safe passage for vessels through the Red Sea and Gulf of Aden.

"Everything is at stake here because free-flowing global trade affects almost every single human being on earth. The Suez Canal is absolutely critical, with many billions of dollars in goods passing through every day from the Far East towards North Europe, Mediterranean and US East Coast.

"Ocean liner companies are taking decisive action in re-routing via the Cape of Good Hope, but there are still many unknowns and the longer this disruption lasts the more expensive and painful it will be.

"Supply chains have still not fully recovered from the pandemic, with schedule reliability between Far East and North Europe standing at just 64%. This latest crisis could set that recovery back even further.

"For example, Maersk has stated it does not know when it will be safe to sail through the Bab-el-Mandeb Strait and CMA CGM Group has issued a notice of Force Majeure, which perhaps suggests it does not believe this situation will be resolved in the immediate future.

"We may also see this impact current negotiations between shippers and ocean freight carriers for long-term contracts lasting the duration of 2024. Shippers may feel a level of concern that long term rates could follow the spot market and increase dramatically as a result of this crisis."

REEFER TRADE CONTINUES TO DECLINE

In the final quarter of the year, the outlook for seaborne reefer trade has weakened, with cargo demand now expected to post a second consecutive year of decline, according to maritime consultancy Drewry. Meanwhile, transit restrictions on the drought-stricken Panama Canal are starting to impact vessel capacity serving exports of perishables out of the West Coast of South America.

A convergence of factors, ranging from climate impacts on key fruit crops, to weak Chinese demand and geopolitical tensions, have dampened the short-term outlook, with total seaborne reefer cargoes for 2023 forecast to decline -0.5% YoY, according to Drewry's Reefer Shipping Forecaster report published recently. This will follow last year's contraction of 0.8% and will represent two consecutive years of declining trade.

Meat remained the largest commodity by volume in 3Q23. Despite strong pork exports from the US and Brazil so far this year, this segment has been slowed by declines in beef exports and continued weak demand from China. In the fish and seafood sector, demand has also waned, as marine heatwaves in the Atlantic have added risks for piscine ecosystems and catches have been consistently low in the year to date.

Across the fruit sector, there has been a noticeable trend of reduced exports from almost all major producing regions, as El Niño effects have amplified weather events. Scarcity of quality produce has driven declines in deciduous, exotics, and melons and berries exports. The banana trade has also faced difficult operating conditions, with increasing cost pressures and weak demand resulting in flatlining seaborne exports this year.

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For further course details and how to register please see **bulkterminals.org/events/courses-and-training** or contact **Simon Gutteridge events@bulkterminals.org +33 (0)321 47 72 19**

MPA AND IACS LINK UP FOR COLLABORATION

The Maritime and Port Authority of Singapore (MPA) and the International Association of Classification Societies (IACS) have signed a Letter of Intent (LOI) to collaborate on various maritime digitalisation and decarbonisation initiatives.

The LOI was signed by Teo Eng Dih, chief executive of MPA and Nick Brown, council chairman of IACS, during the 33rd session of the IMO Assembly (A33) in London.

Under the LOI, both parties will consider the development of technical standards and unified requirements to ensure that new maritime solutions are safely implemented. The LOI will focus on key areas such as smart and autonomous ships, digitalisation and cybersecurity, marine electrification, and the use of zero- and low-carbon fuels onboard vessels.

As part of the collaboration, both parties will have regular information and knowledge exchanges, including discussions on industry challenges and opportunities, standards, best practices, and emerging technologies.

UK CADETS' UNIQUE CONCERNS

The first conference for UK cadets has revealed some stark contrasts with their fellow Gen Z seafarers across the globe.

International maritime charity Sailors' Society held the ground-breaking virtual event as part of its global 2023 Wellness at Sea Maritime Schools' Conferences, which also saw events for cadets in North and South East Asia and Africa.

More than 4,000 cadets attended these events and polls taken during the conferences, on everything from the cadets' motivation for a career at sea to their views on diversity, revealed that cadets from UK schools had very different views to those training elsewhere in the world.

Unlike cadets from Indian and African continents and the Pacific, UK cadets were not concerned about securing a job post-graduation. Despite 86% of North Asian cadets revealing they had yet to have their first experience of seafaring, it was the UK cadets that were unique in saying their biggest concern was not being able to cope with life at sea.

The conferences, now in their third year, also revealed that a greater percentage of UK cadets saw their time at sea lasting just five years compared to cadets elsewhere who overwhelmingly saw this as a long-term career.

Sailors' Society CEO, Sara Baade, says: "We have designed these events to offer a unique opportunity to equip cadets for their future careers.

"We've brought together top industry experts to give a real insight into the realities of life at sea and we've given participants the tools they need to look after their own mental and physical health. But these events also give a voice to these young people, allowing them to speak to the industry they are about to join.

"Sailors' Society's approach to hosting conferences across diverse regions not only allows for a deep dive into local trends, but also contributes to a holistic view of wellbeing, mental health and maritime education and training for our new generation of seafarers."

The full data from the four conferences along with analysis from industry experts will be published in the Society's 2023-4 cadet report due out in the spring.

DRONE DELIVERY FIRST FOR INDUSTRY

Port agency and services provider, S5 Agency World (S5) has announced it recently completed its first drone delivery of Cash to Master to the bulk carrier Nord Magellan, as it was anchored in Singapore, working with leading drone services provider Skyports Drone Services.

In collaboration with Skyports Drone Services, S5 were able to bring cutting-edge technology to the essential logistics of port agencies. The partnership offers a new way to realise carbon emissions reductions and reduce the environmental impact of port services.

The successful drone delivery unlocks new possibilities for reducing greenhouse gas (GHG) emissions in the maritime industry. Compared to traditional methods of transportation, the company estimates a significant impact with the reduction of CO2 emissions from drone delivery services. Drone deliveries of this type can be completed in around 15 minutes, significantly faster than using traditional vessels, which take much longer. The approach substantially reduces GHG emissions and, as a means to reduce delays in port calls, can create a more sustainable port visit, while minimising port time.

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Some of our Consultancy services include advising on:

- Storage and Discharge of bulk materials
- Pneumatic Conveying of bulk solids
- Spoiling of materials in storage and in transit
- Plant and Equipment design/redesign
- Ship Unloading/ quayside operations
- Control of plant wear
- Dust control
- Bulk Materials characterisation
- ATEX/DSEAR compliance
- Expert Witness services

SHORT COURSES FOR INDUSTRY

We also provide a range of short courses to help delegates identify potential bulk materials handling problems and advise on how to avoid and/or overcome these issues. They fall under 4 main categories

Pneumatic Conveying:

- Pneumatic Conveying of Bulk Materials
- Pneumatic Conveying System Design
- Rotary Valves; Design, Selection and Operational Issues
- Commissioning and Troubleshooting 'Hand's On' Pneumatic Conveying Systems

Storage of Bulk Materials:

- Storage and Discharge of Powders and Bulk Solids
- Design of Equipment for Storing and Handling Bulk Materials
- Biomass Handling, Feeding and Storage (can be adapted to other materials such as waste, recycled goods, pellets)

General bulk materials handling:

- Overview of Particulate Handling Technology
- Port and Terminal Operations for Bulk Cargoes
- Measurement of the Properties and Bulk Behaviour of Particulate Materials
- Dust Control in Processes

Specialist areas of concern:

- Caking and Lump Formation in Powders and Bulk Solids
- Undesired De-blending and Separation in Processes and Equipment
- Electrostatics in Powder Handling
- Numerical Modelling of Solids Handling and Processing
- Powder Handling and Flow for Additive Manufacturing

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A SMART APPROACH TO SHIPPING

A smart ship partnership bringing together ship management company Laskaridis Shipping, digital technology provider METIS Cyberspace Technology and classification society Bureau Veritas (BV) has developed new notations reflecting the latest advances in digitalisation, and in particular the use of augmented data to optimise the efficiency of shipping operations and reduce greenhouse gas emissions.

The project, launched in June 2022, led to BV delivering an Approval in Principle to METIS Cyberspace for its METIS Ship Connect System, an automated data acquisition platform for the monitoring of vessel operations and subsystems.

Furthermore, two new classification notations were awarded to the bulk carrier Leto, built in 2015 and managed by Laskaridis Shipping, and one of the 20 ships of the company's fleet equipped with METIS Ship Connect.

METIS Ship Connect serves as the onboard Internet of Things component within the METIS solution. METIS Ship Connect collects data streams from onboard sensors, instruments and automation control systems that are utilised by the METIS cloud–based platform to generate actionable intelligence.

Essential vessel metrics such as fuel oil consumption, engine performance, electrical power production and so on are monitored in real time and through advanced data analytics and machine learning techniques the METIS platform provides optimisation recommendations, predictive insights and regulatory compliance management.

With METIS Ship Connect on board, bulk carrier Leto became the first vessel to be awarded the DATAINFRA notation, which was developed by BV as part of the project. The DATAINFRA notation recognises that the ship is equipped with data infrastructure consisting of data assets, technologies, organisations and data management processes, ensuring the reliable collection, transmission, storage, sharing and availability of data to multiple data consumers.

The Leto is also the first in-service vessel to receive BV's SMART notation, which recognises that the company and the vessel incorporate software and hardware that provide smart functions for the collection, transmission, analysis and visualisation of data related to energy efficiency, speed optimisation, weather routing and emissions monitoring.

Focusing on the use of big data and AI technology, the new notations and the METIS Ship Connect platform will help ship managers reduce greenhouse gas emissions from vessels and optimise performance. The project and notations' scope support ship-to-shore connectivity, remote decisions and remote operations.

BV ADDS HYDROGEN-FUELLED SHIPS TO RULES

Bureau Veritas (BV) has launched its first classification Rules for hydrogen-fuelled ships (NR678) to support the safe development of hydrogen propulsion in the maritime sector.

The rules outline technical requirements for the safe bunkering, storage, preparation, distribution, and use of hydrogen as fuel for power generation on board. Monitoring and control systems are also covered, addressing specific safety challenges relating to the transport and use of hydrogen on ships, such as high flammability, as well as the need to store the fuel in very high-pressure or low-temperature conditions.

BV's Rules for hydrogen-fuelled ships aim to mitigate the risk of hydrogen leakage, fire or explosion, with detailed requirements for machinery and engine design, as well as the vessel's configuration and the arrangement of fuel tanks and other systems on board. They also include prescriptions for the ventilation of hazardous areas, venting and pressure relief systems, and monitoring and safety systems including vapour and gas detection.

NR678 also covers 'hydrogen-prepared' vessels, which are designed to be ready for the installation of a hydrogen fuel system at a later stage.

These classification Rules complement BV's existing rule note (NR 547) on fuel cell power systems on board ships that was launched in 2022 in response to growing interest in the maritime industry for fuel cells, and cover all types of fuels including hydrogen. BV is currently working on around 10 projects involving hydrogen as a fuel, either as main propulsion source for smaller ships or as an auxiliary power for larger vessels.

These new rules have been informed by industry feedback and input from a wide range of stakeholders, combined with the land-based hydrogen experience of other divisions within the Bureau Veritas Group. NR678 reflects the latest state of industry knowledge on the use of hydrogen as ship's fuel and will be periodically updated, in line with the evolution of the technology, as well as regulatory decisions from Flag States and at the International Maritime Organization (IMO).

BUMPER BARS LEAD TO NEAR MISS

The International Marine Contractors Association has outlined the details of a near miss during lifting operations.

A member of the deck crew put themselves in the line of fire during landing of a structure on the back deck of a vessel. The installation aids (bumper bars) were insufficient to stabilise the load, resulting in the structure being landed narrowly missing the individual, and damaging an adjacent container.

The bumper bars were a critical barrier for keeping the banksman safe on the walkway, but as they were not spaced far enough apart for the structure, they allowed a rotational movement of the load.

DNV HONES SHORE POWER RULES

DNV's updated Shore Power class notation for tankers provides crucial guidance for shipowners who wish to take advantage of shore power while lying at berth. The rules were developed in close cooperation with industry organisations to ensure practicability.

Ports and coastal states around the world have passed or are preparing legislation to curb air pollution from ships lying at berth, and to help cut carbon emissions in general. Using shore power is a great way for ships to keep their on-board systems running without emitting smoke and CO2. As the first rule set of its kind, DNV's updated Shore Power class notation addresses the specific safety needs of tankers.

Recent legislative advancements have prompted tanker owners to inquire about rules and standards for shore power for their ship type. The latest version of the California Air Resources Board's Ocean-Going Vessels At-Berth Regulation, published on 1 July 2023, requires tankers to have emission control strategies in place at specific Californian ports from January 2025. The EU has adopted similar legislation for container and passenger vessels, the ship types with the highest non-propulsion power demand, as part of the Fit for 55 package, including requirements for onshore power supply.

While the EU regulations do not apply to tankers, the unrivalled simplicity of plugging in a cable makes "cold ironing" an attractive option to meet emission control requirements during port stays of nearly any ship type. What has made the development of appropriate rules for tankers difficult is the type of cargo they carry.

"At DNV, our primary focus is on safety," explains Catrine Vestereng, senior vice president and global segment director tankers at DNV Maritime. "With tankers that often carry potentially flammable cargoes, the electrical risks can be greater than for dry bulk carriers and containerships. This requires more attention to system safety both on board and on the quayside."

PROPELLER SHAFT SEAL FAILURES RISE

Seawater-lubricated bearings pioneer Thordon Bearings has welcomed the publication of Gard's latest research into the potential hidden costs of synthetic Environmentally Acceptable Lubricants (EALs).

Far-reaching financial and environmental consequences can result when a propeller shaft seal failure occurs, with the Norway-headquartered marine insurance firm pointing to a "significant increase" in propeller shaft aft seal damage following the 2013 introduction by the US Environmental Protection Agency (EPA) of new Vessel General Permit (VGP) rules.

According to Gard, the increase in the number of seal failures directly correlates with the increase in the use of approved synthetic lubricants – these lubricants are among those in compliance with US EPA regulations.

Thordon Bearings' VP of Business Development, Craig Carter, says: "It appears that the introduction of a synthetic EAL as a means of mitigating the risk of mineral oil pollution has had unforeseen consequences. Seawater alone is the only 100% pollution-free means of lubricating a ship's propeller shaft bearing."

Gard's research has suggested that one reason for the seal failure hike (and consequent increase in insurance claims) is based on the chemical composition of synthetic EALs, which, while being environmentally preferable to the mineral oils that are being phased out, are typically inferior in performance.

CYBER CLAIMS IN SPOTLIGHT

In a recent viewpoint piece on cyber issues, Hill Dickinson takes a look at claims against hackers.

Ransomware cyber attacks (typically involving use of malicious software designed to block access to electronic information pending payment of a sum of money) have surged over recent years, with some very high-profile victims.

The appropriateness of legal claims against hackers, including applications for urgent injunctive relief, should always be considered on a case-by-case basis. Targets will want to weigh up a number of relevant factors, including the impact of the attack (specifically whether it is ongoing), the likely outcome of litigation and associated costs and deterrence.

TT CLUB CALLS FOR THEFT VIGILANCE

Reducing the threat of theft in the supply chain can have many lines of attack, and freight insurance specialist TT Club is advocating cutting off the market for stolen goods.

Receiving stolen property is not just illegal, it provides a market for the criminals, consequently causing lost time, revenue and reputational damage to the rightful owners as well as the transport and storage businesses that serve them, the Club says.

Theft of cargo is an ever-present concern within the logistics industry and prevention is in the interest of businesses, law enforcement agencies and the economy as a whole. As the industry seeks to understand the way that criminal networks operate, it is worth questioning what happens to goods after they are stolen. Organised criminal networks employ many of the same 'business' strategies used by legitimate supply chain operators.

There are myriad examples of police forces uncovering large warehouses containing stolen goods, trucking operations engaged in the movement of those goods and incidents of stolen goods entering the retail market.

As TT's managing director, loss prevention Mike Yarwood reports: "Earlier this year two containers of barbecue equipment destined for a high street retailer were stolen from a depot in the UK. Two months later the owner of the goods, shopping in another retail store, recognised the equipment and, by tracing the serial numbers, was able to identify them as those stolen earlier in the year."

An ongoing legal wrangle has ensued, but, as Yarwood explains: "The moral of the tale is that a relatively ready market for stolen goods is accessible to thieves if unknowing 'receivers' do not take sufficient care to ensure the goods they purchase are legitimate.

Read more in **TT's latest Supply Chain Security Bulletin**.

MORE RECYCLING YARDS JOIN APPROVED LIST

A new EU agreement on waste shipments is set to remove a legal roadblock to make it possible for a raft of non-Organisation for Economic Co-operation and Development (OECD) ship recycling yards to be included on an EU-approved list, which would unleash much-needed shipbreaking capacity for a massive wave of tonnage due to be scrapped over the coming years, according to green recycling consultancy Sea Sentinels.

The European Parliament and Council have agreed to allow exports of hazardous waste, including that contained in EU-flagged ships, to non-OECD countries provided receiving facilities can document sustainable management and disposal of this waste in line with EU regulations under a proposed amendment to the EU Waste Shipment Regulation (WSR) expected to be ratified by year-end. This would be subject to the receiving facility being included on an EU-approved list.

Ships that are sold for recycling at the end of their lifetime contain hazardous materials such as asbestos, ODS, mercury and many others, as well as operational substances and waste including oil, fuel, ballast water and sludge, which constitute a risk both to human health and the environment if they are not managed and disposed of properly.

Exports of such waste in EU-flagged ships are currently banned by the EU under the Basel Convention on transboundary movements of hazardous waste, or Basel Ban, that is transposed into the WSR. In addition, the EU Ship Recycling Regulation (EUSRR) sets stringent standards for ship recycling and requires all EU-flagged vessels to be recycled at a facility on a list of approved yards.

ADAPTING TO EVER-CHANGING CIRCUMSTANCES

Dry bulk ports and terminals are in a state of constant change. Operators need more space for future expansions, and they are constantly facing the challenge of adapting their facilities to the increasing throughput, while at the same time paying ever more attention to avoiding dust emissions and improving their CO2 footprint. In projects such as these, BEUMER Group works together closely with its customers to develop efficient and new solutions.

The ability to load ships quickly is a decisive productivity factor. It is important to adapt the technology implemented in ports to the local space constraints and the size of the vessels – as well as to take account of the characteristics of the transported material. "Ports are faced with the challenge of increasing their performance," explains Lukas Paul, Head of Ports & Terminals at BEUMER Group. To remain competitive, operators must constantly expand their terminals. "That is just one of the challenges. It is necessary to ensure economically viable and environmentally responsible operation and, first and foremost, cost efficiency." When it comes to dry bulk handling equipment, BEUMER Group is there to help. The system provider supports operators – starting with every aspect of conveyor technology and through to the loading of the ships.

"When customers come to us, we sit down with them and talk," explains BEUMER expert Paul. "In most cases, they know their everyday workflows extremely well and are aware of where the weak points and bottlenecks are." To ensure the efficient handling of dry bulk, they must constantly adapt or expand their terminals. However, the restricted space available in ports often presents a difficulty. This means that operators face the challenge of integrating new storage areas – and these are not always in the immediate vicinity of the port. To use these areas, environmentally friendly conveyor systems represent an alternative to trucks.

Belt conveyors as a cost-efficient alternative

Belt conveyors can be used to transport various bulk materials from and to the port. BEUMER Group supplies a variety of solutions depending on the intended use. Troughed belt conveyors, for example, permit high mass flows. They have an open design and are therefore suitable for coarse materials and very large volumes. Pipe conveyors, by contrast, have other specific advantages. The idlers shape the belt into a closed tube. This protects the transported material against external influences and also protects the environment against emissions such as dust or material loss. Panels with hexagonal cutouts and idler rollers in an offset arrangement keep the tube closed. Pipe conveyors are able to cope with tighter curves and larger angles of inclination than are possible with an open troughed belt conveyor. Their enclosed design also enables them to handle various bulk materials securely without any danger of cross-contamination. They also protect the health of the people who work at the facility or live nearby – for example, when bulk metal concentrates are being transported.

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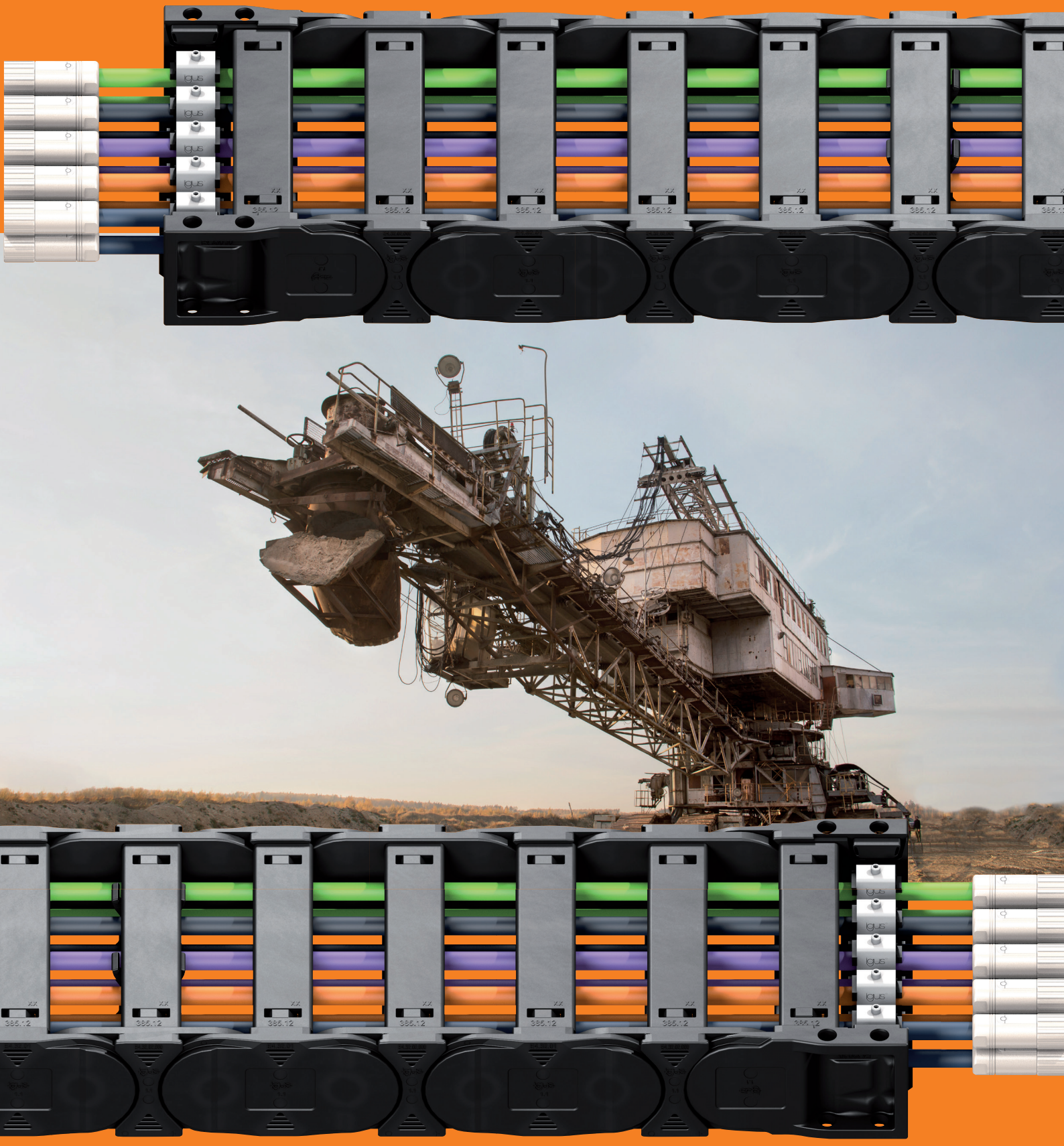

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