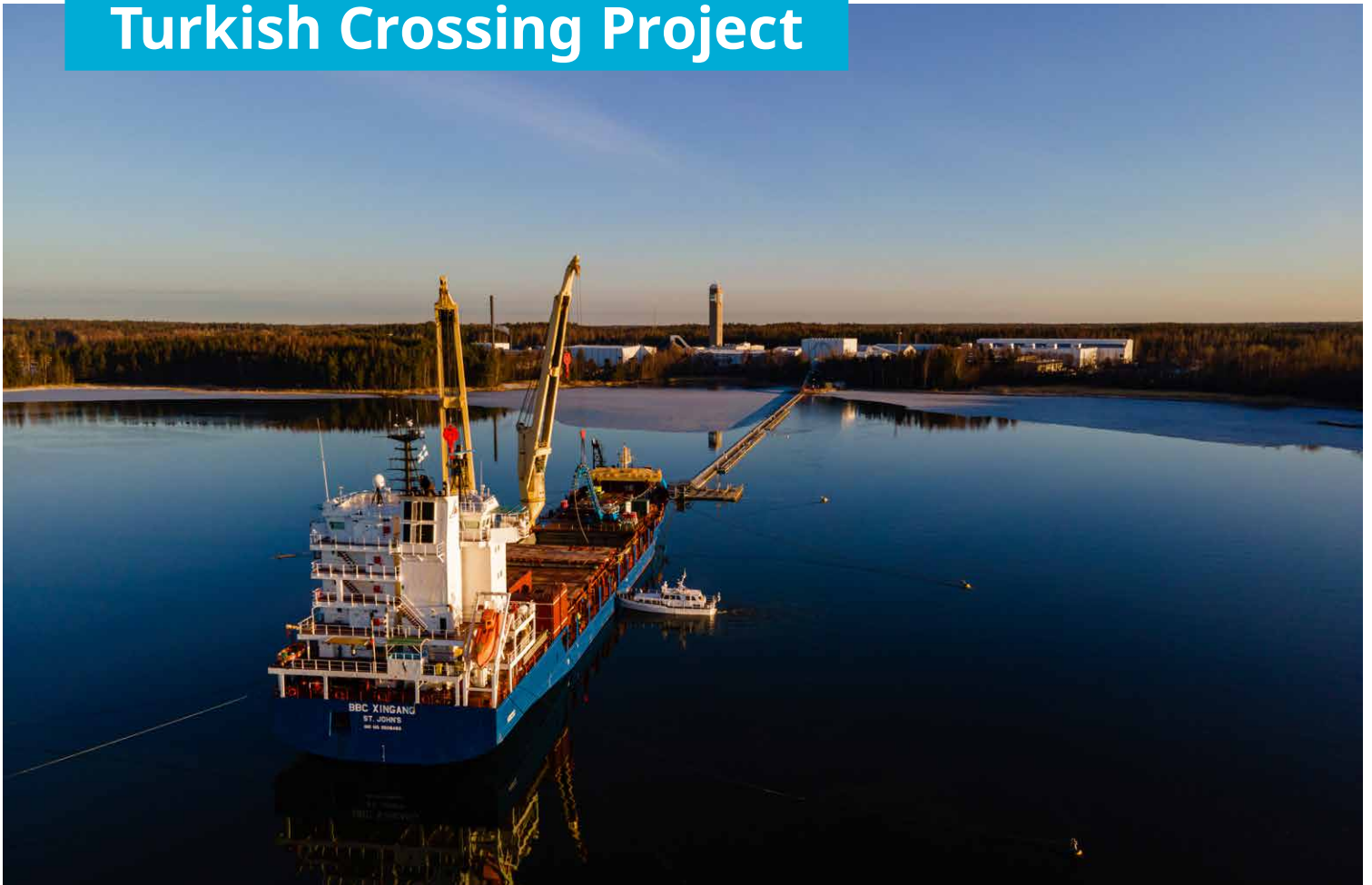
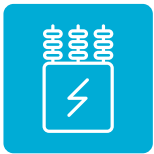
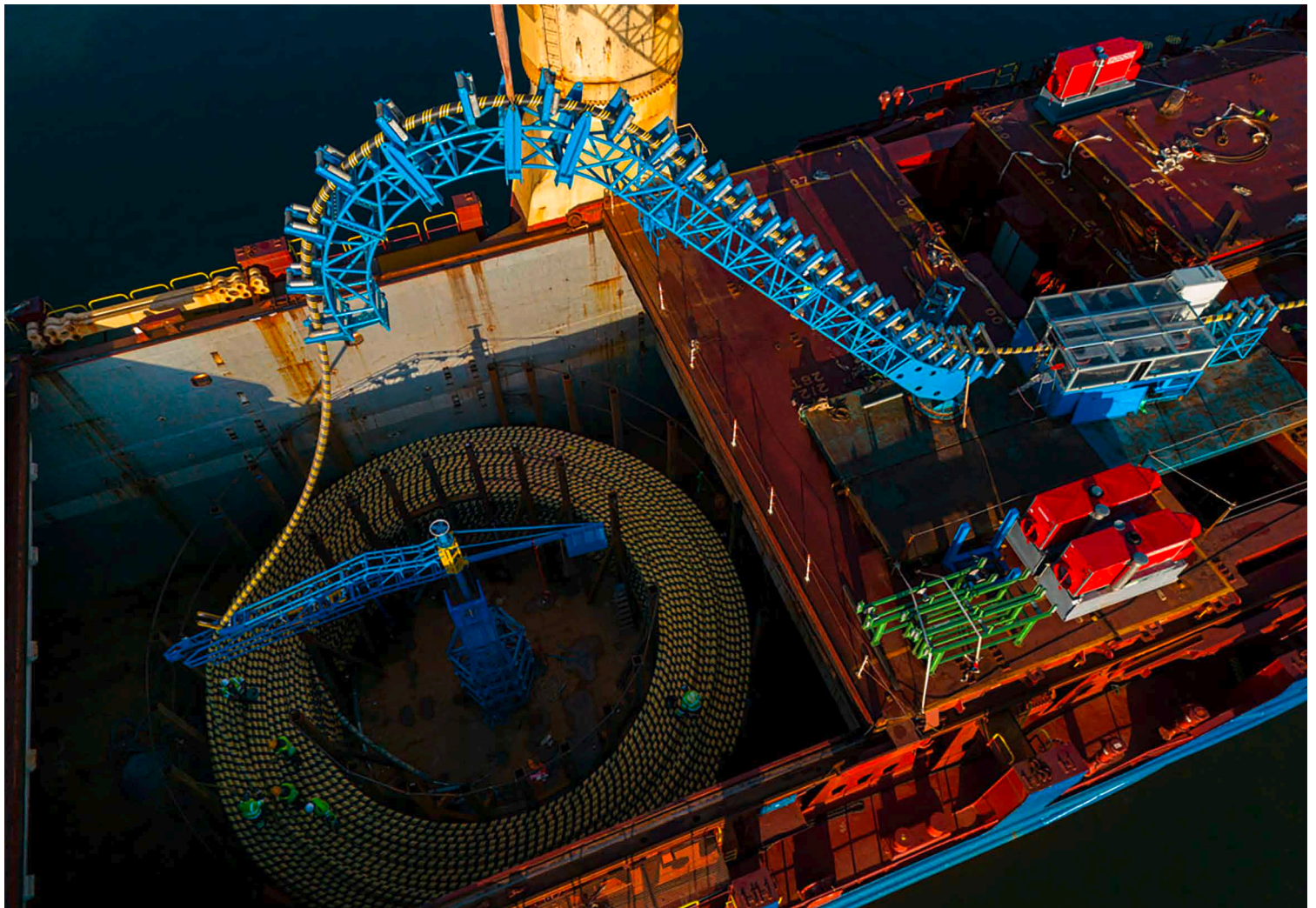


Case Study

Turkish Crossing Project





Industry
Power



Cargo
54 km of HVAC
cables



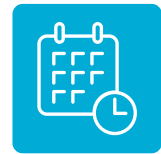
Cargo Weight
Total of 3,300 MT



Cargo Highlight
Complex
coordination
of operations,
engineering and
installation



Service
Complete turnkey,
all-in-one service
solution



Timeline
High urgency to
ensure ongoing
cable-laying
operations

Case Study: Turkish Crossing Project

To ensure ongoing cable-laying operations for the Turkish Crossing Project, deugro Italy, in cooperation with deugro Chartering, timely delivered 54 kilometers of urgent HVAC cables to a cable-laying vessel in Turkey.

deugro was initially requested to provide a quote for the ocean transportation of cables. However, the time frame became tight, and therefore, besides the ocean transportation, deugro was awarded the contract by its client Prysmian Powerlink to provide a complete turnkey, all-in-one

service solution—encompassing the provision of tank engineering and installation, spooling, relevant personnel and all related activities and equipment. deugro’s task was to deliver the cables, with a total weight of 3,300 metric tons, from the client’s cable manufacturing facility in Pikkala, Finland, in time to meet the arrival of the cable-laying vessel *Giulio Verne* at the job site, located in Dardanelles Strait, Turkey.

Due to the critical urgency to receive the cable—so as to commence installation as soon as possible and save costs overall for the project—scheduling, precise preparation and smooth project execution were paramount. To meet the tight timeline and challenging project requirements, deugro Milan, serving as the project control tower, assembled and orchestrated a team of experienced project, chartering and engineering experts. Thanks to close cooperation with the client, carrier and all partners, as well as due to proactive communication and daily status reports, they

ensured that all operations were executed according to plan and on schedule.

Preparation

One of the first tasks was to identify a suitable vessel that was available at short notice and had all the technical requirements and personnel to safely transport the urgent and unique cargo. Therefore, deugro Milan immediately involved the experts from deugro Chartering, who identified a vessel with the required capacities: the heavy lift vessel *BBC Xingang*.

However, before the *BBC Xingang* could be deployed in accordance with the cargo’s requirements, several technical modifications were necessary to ensure safe ocean transportation and smooth spooling of the cables during collection at the Prysmian factory in Pikkala and after arrival from the transport vessel to the cable-laying vessel. These were arranged for at the Port of Bremerhaven, Germany.

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Project challenges

- The timely procurement of a suitable vessel with the required capacities against the backdrop of a tight market and a strict project schedule
- Technical modifications of the heavy lift vessel to ensure safe ocean transportation and spooling operations



Vessel modifications at the Port of Bremerhaven, Germany

To safely stow, secure and transport the 54 kilometers of submarine cables, the heavy lift vessel had to be equipped with two static tanks, which were installed in the ideally suited, box-shaped cargo hold. The first fixed tank was able to accommodate 23.9 kilometers (1,460 metric tons) of HVAC cables and the second 30.1 kilometers (1,840 metric tons). The design, production and installation of the static tanks were executed in collaboration with BBC Chartering, who developed and implemented an efficient solution.

Further modifications were required for safe and efficient spooling operations during cable pick-up and delivery to the cable-laying vessel. Because a wave-breaker in the bow section of the vessel prevented the positioning of the loading chute in the central part of the vessel and installation of a straight spooling line to the hold, deugro commissioned its cable spooling partner Futura Srl to develop an ad-hoc solution for installing the chute on the right side of the ship's bow. Several rollers were welded across the wave-breaker to overcome the obstacle and allow the cable to be safely repositioned in a straight line for the next activity—providing a seamless handshake from factory to tank.

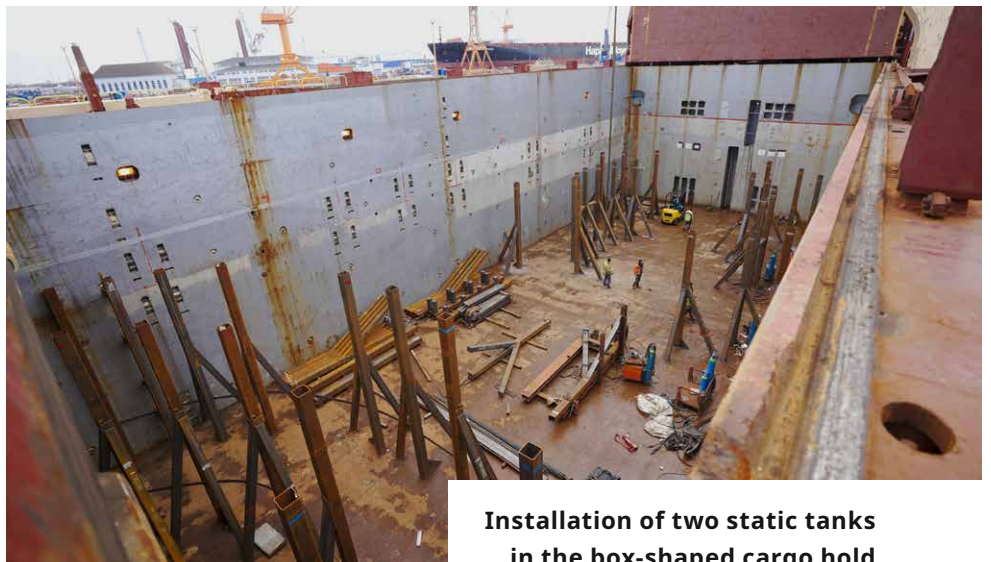
Another challenge that had to be overcome was the opening type of the McGregor holds. Thanks to a study conducted in close collaboration between the carrier and subcontractor, deugro managed to find a suitable loading



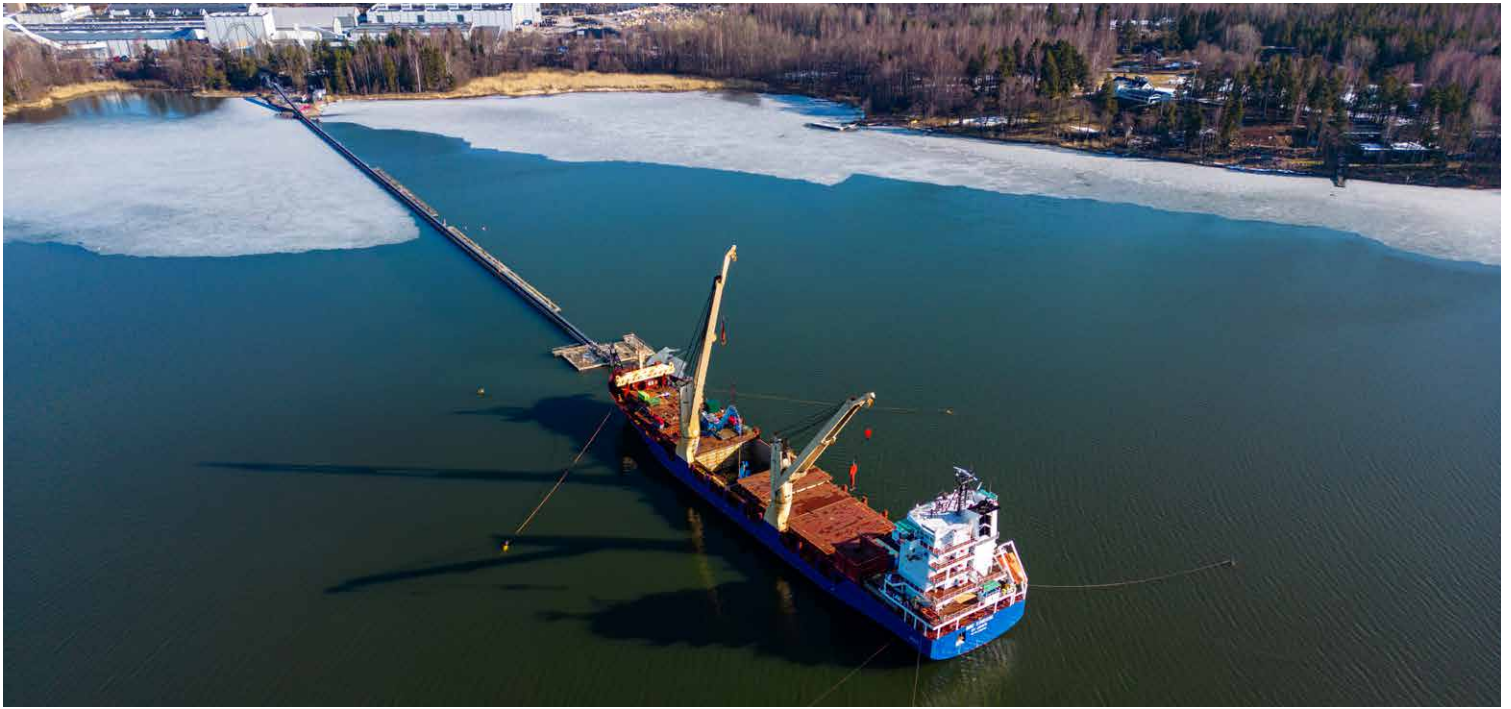
Installed chute on the right side of the vessel's bow

sequence by moving all the holds into a precise order—ultimately enabling and completing all loading and unloading operations safely.

After only seven days, the tanks and required equipment were successfully installed—the *BBC Xingang* was ready to set sail for the client's cable manufacturing plant in Finland.



Installation of two static tanks in the box-shaped cargo hold



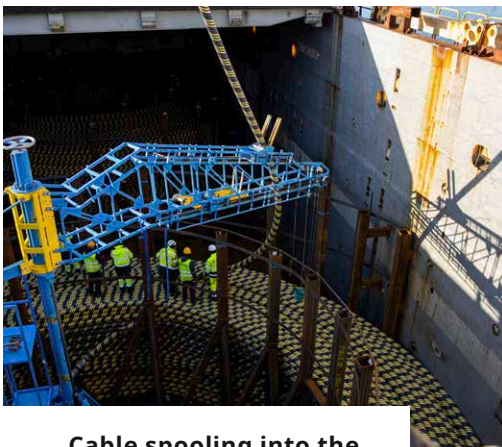
Cable loading operations at the Pikkala Prysmian factory port

At the client's state-of-the-art manufacturing plant in Pikkala, Finland, the equipment was put

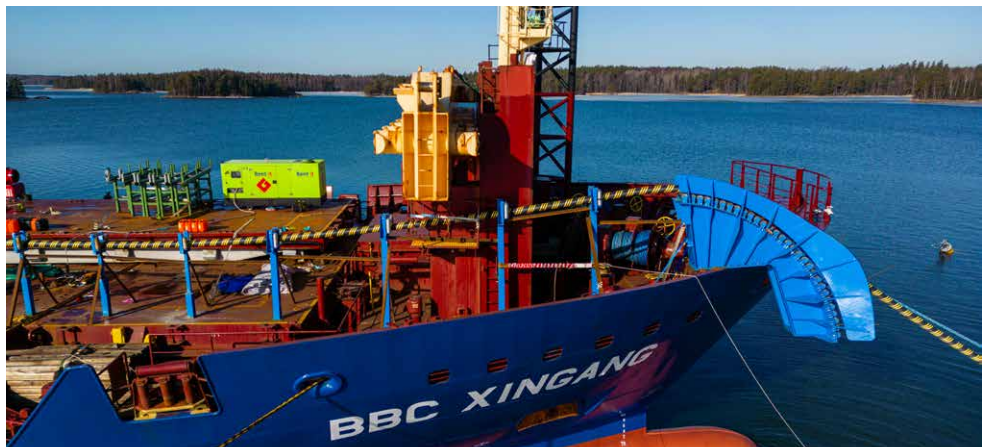
» Despite harsh weather conditions, the loading operations were successfully executed. «

to the test. Under the constant supervision of and testing by the client, deugro, dteq Transport Engineering Solutions and the

vessel's team, the cable loading operations began. The project team encountered harsh weather conditions and surface ice, and had to deal with the fairly long distance from the ship's anchor position to shore. This required a perfectly aligned mooring system and constant monitoring. Within just a week, 24 kilometers of cable were spooled at up to 10 meters per minute into the first tank, with an additional 30 kilometers safely reeled in the second tank. During the operations, Prysmian's factory remained in full operation. After the 3,300 metric tons of cables were spooled into the custom-designed tanks, the *BBC Xingang* set sail for its ocean voyage to Istanbul, Turkey.



Cable spooling into the custom-designed tanks



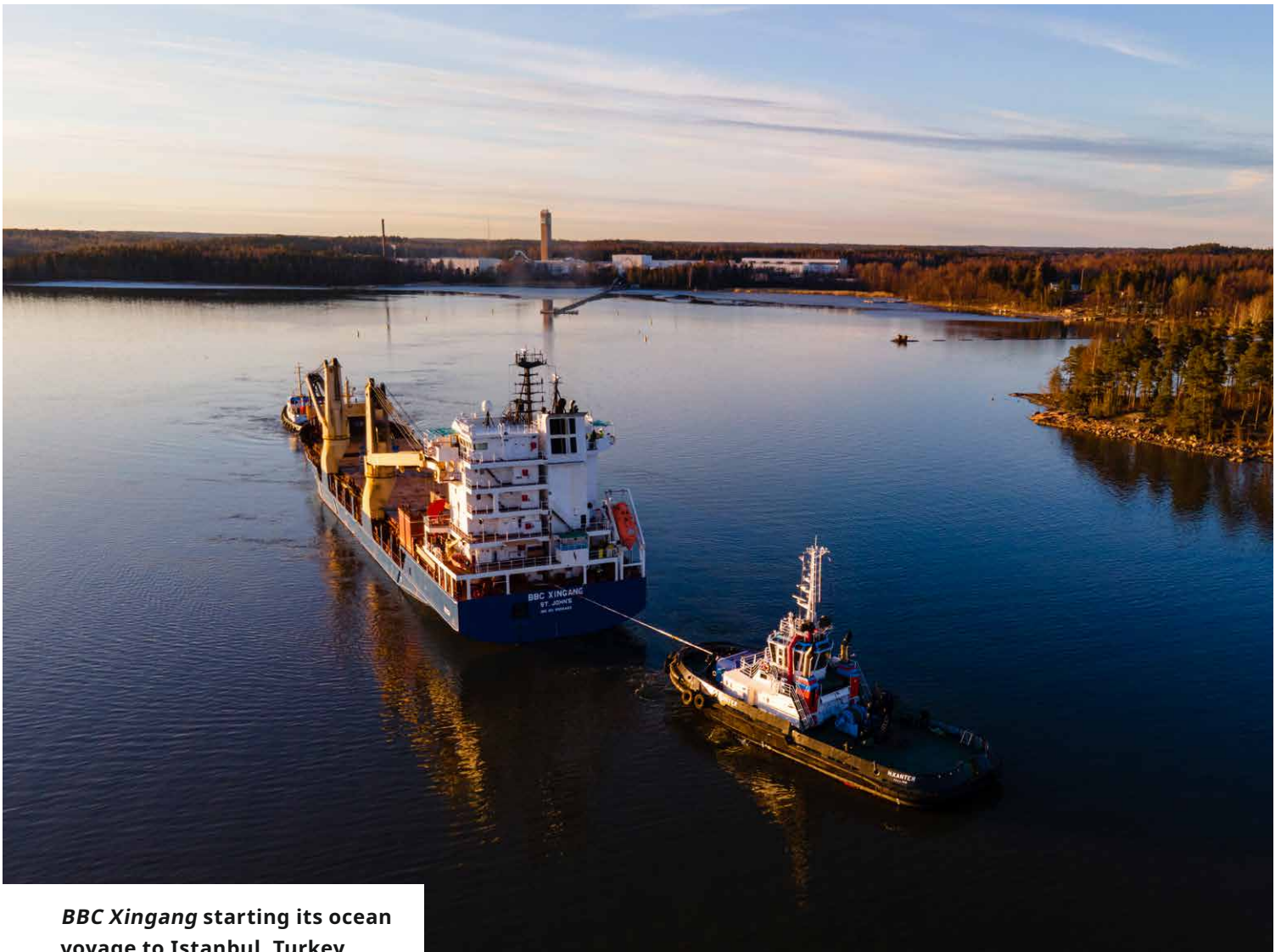
Cable unloading operations at the Port of Hydarpaşa, Turkey

The heavy lift vessel safely arrived at the Port of Hydarpaşa, Turkey—punctually meeting up with the installation vessel *Gulio Verne*. The unspooling operations from *the BBC Xingang to the Gulio Verne* then commenced according to schedule. After seven days, the cables were successfully and safely delivered to the installation vessel, ensuring the schedule of the cable-laying project remained on track. After delivery, the port crew dismantled all the equipment and removed the tanks from the ship's hold. Within four days, the work was

completed, and all the equipment was duly trucked back to Pozzuoli, Italy, while the tanks were disposed of locally in Turkey.

Conclusion

Thanks to the close and professional collaboration between all partners, the 54 kilometers of urgent HVAC cables were punctually delivered, keeping the cable-laying operations of the Turkish Crossing Project on track. The smooth project execution once again demonstrates deugro's flexibility and ability to provide and orchestrate innovative solutions that go far beyond standardized cargo movement.



BBC Xingang starting its ocean voyage to Istanbul, Turkey