ENVIRONMENTAL FEATURES OF 17,000 DWT GREEN HANDY

NO EMISSIONS TO THE SEA

No waste water to the sea

Grey and black water can be recovery system treated in the sewage treat- The vessel can store and UV-type system with capacity of ment unit, stored onboard and discharged to shore reception facilities.

Cargo hold wash water

reuse the washing water and discharge used washing water to shore reception facilities.

Ballast water treatment system (BWTS)

2 x 800 m³/h. System is United States Coast Guard approved.

POWERED BY GREEN METHANOL & HYBRID SYSTEM

Powered by fossil-free green methanol

Methanol engines and large methanol tanks enable a fossil-free operating range of 10,000 nautical miles.

Powerful hybrid system

Approximately 1 MWh hybrid system can be used for cargo cranes' peak shaving, blackout prevention, thruster operation and emission-free operation in

Shore power connection

Variable frequency drive

Cargo cranes, engine room fans

room are equipped with frequen-

and dedicated pumps in engine

equipment

cy drives.

Vessels have both low and medium-voltage (6.6kV) shore power connection. Enables emission-free cargo operations with cranes in ports where medium-voltage shore power is available.

EEDI 25% below requirements

Energy Efficiency Design Index (EEDI) of the vessels is approximately 25% below the EEDI Phase 3 requirements.

OPTIMAL HULL DESIGN

Hydrodynamic hull form

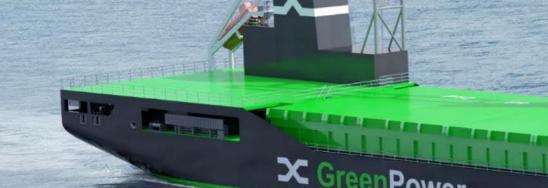
Extensive CFD calculations and model testing were performed to optimize hull form. The bow and stern thruster tunnel openings are provided with scallops and streamlined grids. Special attention is paid for monitoring of hull surface roughness during the building stage.

High efficiency propeller and rudder

Optimal hydrodynamic design of the propeller enables efficient thrust.

Low-friction hull coating

Hull is painted with low-friction ice-resistant paint. No harmful antifouling paint is used. Frequent hull cleaning will be performed to reduce the drag of the hull.



PACKED WITH ENERGY-SAVING TECHNOLOGY

Power Take In/Power Take Out shaft generator with VFD drive

The shaft generator enables flexible and efficient operation of propulsion and power generation at sea as well as extra power for ice conditions through power take in/power take out mode.

Energy smart accommodation

Waste heat recovery system with heat pumps supply heat for accommodation. The air conditioning system is equipped with a heat recovery wheel. Improved thermal insulation with a higher U-value reduces energy consumption for heating.

Dynamic drive for propulsion

Optimisation of the relation between the engine rpm and propeller pitch at constant thrust, which reduces fuel consumption. Possibility to set a maximum speed and/or fuel consumption. The dynamic drive takes also into the thrust generated by e.g. rotor er consumption reduce auxiliary

Energy management system

The system enables crew to optimize energy consumption onboard.

Electrical cargo cranes

Energy-efficient VFD electrical cargo cranes with low powengine demand.

READY FOR NEW TRADES

Great Lakes fitted

As the first vessels in the fleet, vessels are fitted for the trade in the Great Lakes and the United States.

Large deck capacity

Thanks to accommodation and bridge placed in the bow, vessels are able to load high and oversized cargoes on deck.

Ready for breakbulk cargoes

Cargo holds are equipped with tweendecks enabling efficient stowage of breakbulk cargoes.



17,000 DWT FOSSIL-FREE NEWBUILDING



DELIVERY Q3/2027-Q1/2028

ICE CLASS 1A

DWT 17,000 LENGTH 150 m

BREADTH 23.77 m

SHALLOW DRAFT 8.6 m



