



BOREAS

A DUAL-FUEL HYBRID WIND TURBINE INSTALLATION VESSEL DEVELOPED FOR VAN OORD ON THE BASIS OF KNUD E. HANSEN'S ATLAS CX-CLASS PLATFORM

175 m Dual-Fuel Hybrid Offshore Wind Turbine Installation Vessel

The Boreas is the largest offshore wind turbine installation vessel of its kind, purpose-built for transport and installation of next generation of wind turbines and foundations up to more than 25 MW.

To handle these huge turbines, the vessel is equipped with a crane, which can lift more than 3,200 t and features a 155 m long boom. And with a jacking deadweight of more than 20,000 t and 7,150 m² deck

area, the jacking capacity and space is state of the art.

The vessel features a dual fuel diesel-electric hybrid propulsion plant capable of running fully on methanol, which in conjunction with a large battery pack and energy recovery from jacking operations drastically reduces its carbon footprint.

Four giant legs measuring 126 m in length, allow the vessel to be jacked up and work on water depths up to 80 m.



MAIN PARTICULARS

Length on main hull	175.10 m
Breadth, on main hull	63.00 m
Depth to main deck	13.20 m
Draft, summer loaded, main hull ex. spud can cones	7.20 m
Jacking deadweight	> 20,000 t
Tonnage	47,617 GT

CAPACITY

Number of persons on board	135 pers
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MACHINERY & EQUIPMENT

Stern thrusters	4 x 4,000 kW
Retractable bow thrusters	2 x 2,700 kW
Bow tunnel thrusters	2 x 2,700 kW
Electrical power generation	3 x 5,010 kWe + 2 x 3,340 kWe
Emergency generator	750 kWe
Battery pack	5,290 kWh
Jack-up legs	4 legs - length 126 m
Main crane	Main hoist > 3,200 t Auxiliary hoist 500 t Boom length 155 m
Auxiliary crane 1	32.5 t / 45 m
Auxiliary crane 2	20.0 t / 50 m
Clear deck area	7,150 m ²

SPEED

Service speed	12 - 13 kn
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MISCELLANEOUS

Classification	DNV
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Classification	✕ 1A Self-elevating unit, Wind turbine installation unit, Crane unit, E0, DYNPOS (AUTR), Naut (AW), LCS, BWM-T, ER(SCR), Clean (Design, Tier III), COMF - V(3) C(3), VIBR, BIS, Recyclable, Crane-offshore, Strengthened (DK), HELDK(S,H), SPS, Shore power, Battery (Power), LFL FUELLED, Smart (EEN)
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Number of vessels built	1
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SCOPE OF WORK

Concept Design, Tender Design, and Full Basic Design

Interior Design

Final stability documentation

HVAC Design

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