

TOR BOREAS – Multi-role offshore wind farm support and survey craft



Gross tonnage..... 399
Displacement..... 507tonnes
Draught, max..... 3.65m
Lightweight..... 445tonnes

Deck space (total)..... 70m²
Deck capacity..... 5tonnes/m²

Max speed..... 11knots

Propulsion
Number of motors..... 2
Make..... Schottel - Vem
Output of each engine..... 450kW

Propeller(s):
Number of propellers..... 2x ASD
Make..... Schottel
Model..... SRP 210 FP
Diameter..... 1,450mm
Number of blades..... 4
Fixed/controllable pitch..... Fixed
Open/nozzled..... Nozzled

Deck machinery and bridge electronics

Crane(s):
Number of cranes..... 1
Make..... Melcal
Model..... KL120 T3
Capacities/SWL..... 4.4tonnes@12.7m max

Winch(es):
Number of winches..... 1 (towing)
Make..... Data Hidrolik
Capacities..... 100tonne brake, 25tonne@10m/min

Roller(s):
Number of rollers..... 1
Capacities..... 30tonnes SWL

Other deck machinery/equipment:
- Kongsberg DP1 system
- Hydraulic 'A' frame, 1,000kg @4m (on board), 5,000kg @3m (outboard)
- 4-point electric mooring winches, 25tonnes holding, 4-8tonnes pull
- Aft roller
- Bow thruster
- Moon pool

Bridge electronics:
Radar(s)..... X2 (X&S Band)

Onboard capacities:
Fuel oil..... 77,000litres
Fresh water..... 40,000litres
Black water..... 15,000litres
Grey water..... 11,000litres

Complement:
Number of crew..... 6
Number of passengers..... 12
Number of cabins..... 10

Other significant or special items of equipment:
- DP1 – Kongsberg
- Veem ZG140 SD gyroscopic stabiliser
- 1.45m x 1.45m moon pool
- Rescue boat

Classification
Classification society..... Bureau Veritas
Notations..... I ✱ HULL ● MACH, Wind Farm Service Ship – M2 Tug standardized bp 17 tonne unrestricted Navigation, ● AUT-UMS, ● DYNAPOS AM/AT

Shipbuilder..... Tor Marine
Designer..... Macduff Ship Design
Vessel's name..... Tor Boreas
Owner/operator..... Tor Boreas Limited
Country..... UK
Flag..... UK
Total number of sister ships already completed..... 0
Total number of sister ships still on order..... 0
Contract date..... Q1 2022
Delivery date..... Q4 2024

Tor Boreas is a multi-role support vessel with a diesel-electric propulsion system. The vessel was designed with wind farm service, survey and support services in mind, and in particular to assist dive support services and to demonstrate lifting, utility, berthing and towing capabilities – all while maximising crew and passenger comfort.

Other vessel features include gyroscopic stabilisation, a dynamic positioning (DP) system and an extensive deck equipment package, all within a compact design of less than 24m registered length. This equipment includes a high-capacity 'A' frame, towing winch and crane, plus a four-point mooring system and a moon pool.

Substantial accommodation is provided for up to 18 personnel, with private bathroom facilities, along with ample provision for lounge and messing, enabling greater comfort to those aboard in harsh conditions. Additionally, *Tor Boreas* has been fitted with a Veem Marine gyrostabiliser, for enhanced stability, permitting a safer working platform for crew and enabling operation in a greater variety of sea and weather conditions, alongside the obvious advantage of improved crew comfort.

Propulsion is provided via a diesel-electric drivetrain with twin Schottel SRP 210 FP ASD units powered through an active front-end diesel electric system comprising three MAN D2676 340KWe generators and a Baudouin 4W105ES harbour generator set. This, combined with the presence of a Veth VT-90 bow thruster, provides high levels of manoeuvrability and allows the vessel to be fitted with a Kongsberg DP1 system.

TECHNICAL PARTICULARS

Length, oa..... 26.95m
Length, bp..... 23.95m
Breadth, moulded..... 11m
Depth, moulded..... 4.35m

