

Normand Baltic



Introduction

The Normand Baltic is an offshore support vessel with a length of 96.3 m and is fitted with a heave compensated, marine geotechnical drill rig (GMR302). In standard mode the rig can operate in water depths of up to 300 metres.

Positioning

The vessel uses the Kongsberg K-Pos 21 system for dynamic positioning control. The K-Pos 21 dynamic positioning - DP system consists of a dual DP controller unit and operator stations. The controller unit and the operator station communicate via a dual high-speed data network. The DP-2 provides a direct interface to the propellers, thrusters and rudders, and includes the necessary interfaces to power plants, position-reference systems and sensors. This translates to accurate and precise station-keeping during drilling, sampling and testing operations.

Key Features:

- Class 2 Dynamic Positioning
- Heave compensated offshore geotechnical drilling rig
- Combined water and borehole depth of 300m
- Large deck space
- Comprehensive on board soils testing laboratory

Drilling Monitoring and Downhole Tools

The GMR302 drill rig includes instrumentation for the electronic display of drilling parameters: torque, bit weight, mud pressure, mud flow rate and rotation speed. A comprehensive range of wireline downhole sampling and testing tools is available including PCPT (Piezocone Penetration Test), piston sampling, push sampling, wireline core barrel and percussion (hammer) sampling. All downhole tools (coring, sampling, P-S logging, etc) are fully compatible with the 5.5" API drill string. A range of drag and specialised coring bits are provided. Large diameter drill pipe can also be used to allow large diameter cores to be taken.

Normand Baltic	
Flag	Isle of Man
Class	(+) 1A1 Clean(Design) COMF(V-3) Crane DK(+) DYNPOS(AUTR) E0 HELDK HL(2.8) NAUT(OSV(A)) SF
Built	2010, converted 2019
Tonnage	Approx. 2.000t
Principal Dimensions LOA / Length BP Breadth Mid Hull depth/Draft	96.3m 20m 8.0m
Tank Capacity Fuel Oil Potable Water Ballast Water	1.200m ³ 1.200m ³ 2.550m ³
Speed / Consumption Standby ON DP Economic (transit) speed Max speed	3m ³ /24h 9m ³ /24h 18m ³ /24h at 10 knots 28m ³ /24h at 12.5 knots
Endurance	30+ days
Machinery Main Engine Propellers Thrusters / Rudders Fuel Type	2 x Caterpillar 3516X, 2188kw each 2 x Ulstein azipull 2200kw each 2 x RR 1200kw, + 1 x 880kw n/a MGO
DP System	Kongsberg K-Pos 21
Moon Pools Main Deck	4.5m x 4.5m
Cargo Deck	970m ²
Accommodation	17 x 1 man cabins, 14 x 2 man cabins, 6 x 4 man cabins, 3 x client office, 1 x conference room 1 x recreation room

GMR302	
Power Swivel	Dando 500 with dual speed setting for high torque/high rotation dependent on soil/rock type
Drill String	5.5" API drill pipe, Range 2 (9m length)
Seabed Frame	20t, with hydraulic clamps
Heave Compensation	Drill string and seabed frame heave compensation with an effective stroke from 0.0 to 4.0m
Mud	4,000l mix tank, 8,000l storage tank guar gum seawater miscible
Downhole Sampling	Tools piston/push sampler, percussion/hammer sampler, marine wire
Downhole <i>in situ</i> Testing Tools	WISON-APB PCPT (cone penetration test with pore water pressure measurement) WISON-APB S-PCPT (cone penetration test with pore water pressure and seismic velocity measurements)
HPU	Electro-hydraulic, 3x 125hp
HP Air	2,000l HP Air with associated compressors, filters and driers
Drill Control Cabin	Lever controlled operations, fully HVAC
Drill Rig Workshop	ISO 20ft container sized fully equipped workshop c/w suitable tools and equipment. 220v supply
Equipment Winches	Braden draw works winch, 8t seabed frame umbilical winch, piston sample winch (electro mechanical), headline tugger winch, tail line tugger winch