

POLAR ONYX

VESSEL SPECIFICATION SHEET



OFFSHORE CONSTRUCTION / SURF VESSEL

The Polar Onyx is a state-of-the-art Subsea Construction Vessel, perfectly suited to support the subsea construction market on a global scale. Through her enabling factors such as a Vertical Lay System (VLS), high capacity WROVs, large crane and deck space she is ideally suited for all types of subsea construction activities including amongst others activities within the SURF, IMR and subsea lifting market.

Key differentiators of the vessel for (flexible product installation) / construction include a 275T VLS with a 2 or 4-track tensioner capable of handling products up to 630mm in diameter, a 300T A&R winch equipped with 3000m of Abandon & Recovery (A&R) wire and hydraulically operated moonpool doors complete with a 300T hang-off clamp.

Furthermore all operations benefit from the availability of a 250T NOV AHC compensated crane and 1700m² deck space. Subsea operations are further monitored, supported and/or controlled by two ea. WROVs launched either through a dedicated moonpool or with a LARS over the starboard side and are capable of reaching to 3000m.

KEY VESSEL FEATURES

The Polar Onyx is built to the highest standard for dynamic positioning with DP3 and Operation +, providing reliability in operation. The Ulstein X-bow design ensures excellent sea-keeping capabilities and fuel efficiency. With clean Design and Green passport the Polar Onyx is built according to high environmental standards.

- LENGTH OVERALL 130m
- BEAM 25m
- DP3
- 250T AHC NOV CRANE
- 12T KNUCKLE BOOM SECONDARY CRANE
- 275T HUISMAN VLS
- 1700m² DECK AREA
- ACCOMMODATION FOR 130 PERSONS
- HELICOPTER LANDING DECK
- SCHILLING HD ROV

GENERAL

OPERATOR	Charterer: DeepOcean
SHIP OWNER	GC Rieber
BUILT BY	Ulstein
BUILD	2014
DESIGN	Ulstein SX 121

MAIN PARTICULARS

LENGTH OVERALL	130m
LENGTH BETWEEN PP.	122m
BREADTH MOULDED	25m
DEPTH MAIN DECK	10m
MAX. DESIGN DRAFT	7,6m
CLASS	DNV, SF, EO, DYNPOS-AUTRO, CLEAN DESIGN, NAUT-OSV(A), COMF-V (3),DK(+), HELIDK-SH, CRANE, SPS, VIBR, BIS
ACCOMMODATION	130 persons (48 single cabins and 41 double cabins)

CAPACITIES

CARGO DECK AREA	1700m ²
FUEL OIL	318m ³
TANK CAPACITY	MEG 318 ³
FRESH WATER	1400m ³
DEADWEIGHT IN SURF MODE	Approx. 7200MT
DECK STRENGTH	10 t/m ²
DECK LOAD CAPACITY	Approx. 5800T w/crane stowed
MAIN ENGINES	6x 2700kW Total 16.2MW
THRUSTERS	Tunnel thruster, 2x 2140kW Azimuth thruster, 1x 2000kW
MAIN PROPULSION	3x Azimuth 3000kW, OPERATION+ Additional redundancy in DP2/AUTR. Propulsion & Power Systems arranged to tolerate occurrence of a single failure. Vessel to keep position and remain redundant as by class (DYNPOS-AUTR)
MOONPOOL	Reinforced for 275MT VLS, 8m x 8m
LIFESAVING EQUIPMENT	MOB/Rescue boat: Mare Safety 600 2x enclosed lifeboats 80 pax each 4x Davit launch life rafts

DYNPOS, NAVIGATION & COMMUNICATION	DP3 Class DNV DYNPOS AUTRO (OPERATION+), Kongsberg Reference System. 2x DPS 132, 1x DPS 232, 2x HiPaP 501 ERN: DYNPOS-AUTR: 99,99,99,99 DYNPOS-AUTRO: 99,99,99,85
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Navigation equipment according to GMDSS regulations, Area 3 and Naut-OSV notation.
VSAT high speed, broadband satellite communications

OFFSHORE CRANES	Primary Deck Crane NOV 250T / 3000m wire Max lifting capacity 250T outreach 16m and 100T at 36m, Aux hook 20MT, 1-fall with personnel transfer. Secondary Deck Crane, port side, Knuckle boom 12MT at 15m, max outreach 21m 2x LARS SWL 12T for deployment of Work ROVs through moon pool and starboard side.
ROV SYSTEM	2x SCHILLING HD ROV 3000msw 2x LARS for deployment WROV SWL 12T

DECK EQUIPMENT	Deck Tugger Winches: midt: 2x 14 ton of first layer, aft: 2x 12 ton on first layer. Main moon pool 8m x 8m, reinforced for 275MT VLS. Work ROV moon pool 4.9m x 4.9m in hangard. Helideck D-value 20,88m (total size 26.1 - 1,25D), designed for Sikorsky S-92. Certified according to CAA CAP437 / DNV. Max take-off weight 12,8mt
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VLS	275T Huisman Vertical Lay System 4-track tensioner frame, operational in both 2-track and 4-track mode. Max pull 4-track 275T incl. 1,2 dynfactor. Nominal line pull 230ton pay out speed 19m/min, reduced line pull 117ton, 32m/min. Set of 6 sets tensioner pads varying in size & contact angle. Capable of handling product from 50mm to 630mm.
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CENTRALIZER, TOP CHUTE	Retractable roller box, 2 arms, 5m free passage diameter, side load capacity of 7,5 ton. Radius controller, 6m radius with 18pcs rollers, 3m horizontal adjustment of location for A&R.
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ABANDONMENT AND RECOVERY	15ton under deck storage winch, approx. 3000m of 96mm wire. 300 ton traction winch with 2 capstan drums. Nominal line pull 240ton 19m/min Reduced line pull less than 120ton 32m/min.
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MOON POOL WORKTABLE	Hydraulic operated with tow hatches sliding aft/ fwd. Equipped with integrated hang off clamp. SWL incl. 1.25 DAF 300 ton. Max horizontal loading of flexible product 26 ton in all directions.
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FUEL CONSUMPTIONS

MAX SPEED	15 kts, approx. 50mt/day
SERVICE SPEED	13,5 kts, approx. 32mt/day
DP OPERATIONS	Approx. 13mt/day, weather & sea dependent
ECO SPEED	10,5 kts, approx. 18mt/day

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SPECIFICATION SUBJECT TO CHANGE WITHOUT NOTICE.

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