

“NORA B”

SHALLOW DRAFT DP2-MPSV

Powerful, versatile and cost efficient MPSV, with high-spec deck equipment, tailor-made station keeping system and engine room configuration for maximum reliability at any offshore job.

Her **hybrid propulsion concept** provides various power/propulsion configuration modes, resulting in an optimized performance and fuel consumption. The advantages of conventional and diesel-electric systems integrated in one design.

“Nora B” and her professional crew are the perfect partner for:

- Dredging support auxiliary vessel
- Geotechnical / Geophysical survey
- Dive & ROV
- PLGR/PLR
- Cable Landing/ Trenching / laying / repair / removal
- Mass-flow excavation, Burial-Deburial
- Offshore Supply Vessel
- CTV
- Buoy installation & maintenance
- Subsea equipment deployment



Specifications

General

Delivery: April 2019 at Neptune Shipyards, NL. BV, I
 Classifications: ✱ HULL • MACH, TUG, UNRESTRICTED
 AREA, DYNAPOS AM/AT R, Last SS 04/24
 Flag: Dutch

Dimensions

Dims.(l x b x d): 36 x 15 x 2.9 m.
 Draft 1.9 / 2.35 m. (scantling / keel):

Clear Deck Area: 290 m² - 7.5 ton/m²
 GT / NT: 492 / 148

Propulsion

Main engines: 2 x Cat C-32, 970 kW each, IMO III/Tier III
 Electric drives: 2 x 192 kW, through Danfoss NXP drives
 Propellers: 2 x FPP in nozzles, diam. 1850 mm
 Thrusters: 4x 275 kW tunnel

Automated PMS, HCS, PPU for an optimum power supply

Tanks Capacity

LSDO / 135 / 91 m³
 Potable water:

Performance

Bollard pull: 35 ton
 Speed: 11.0 / 8 kts. Max / Eco

Consumption data (average from last projects)

Idle at port: **0.19** m³/day
 DP operations: **0.8** m³/day
 During transit: **3.5** m³/day

DP2 compliant - Equipment / features RHM

4500 Accurate DP and tracking system _____
 with high position keeping capabilities
 Bureau Veritas Certified DP-2 (AM/AT R)
 2x DGPS/GNSS Fugro 9205 G4+ <5cm +
 Seastar 9410 AUT sub-meter
 3x Ultrasonic Wind sensors, 2xMRU
 Equipped with Fanbeam 5
 Target follow mode, follow ROV mode
 USBL - GAPS
 Rudders integrated with DP system

Auxiliary Equipment

Generator sets: 4x Cat, 450 kW, IMO III/Tier III
Harbour gen: 1x Cat, 150 kW Tier II

Grid converter (400V&220V)
powered by Danfoss NXP grid, 50&60 Hz

Hydr. Powerpack: 2x90 KW 300 bar,
pump 240l/minlx

Fuel/FW transfer pumps: 120/80 m3/h

Air compressor
Water maker (6m3 per day)
Sewage treatment plant

Optional Equipment

Moonpool (with pole) compatible with USBL
Side-pole (abatable) for survey operations
4 Point Mooring system
GNSS survey dedicated

Electric deck supply

440V 60 Hz - **1x400A PMS controlled** (for heavy consumers as WROVs, trencher, etc), 1x125A, 2x63A
400V 50 Hz- 1x63A, 2x32A, 3x16A

Nautical & Comm. Equipment

Magnetic Compass: Cassens & Plath type 1
DGPS Navigator: Furuno GP170D
AIS: Furuno FA 170
Radar: Furuno RHRS
VSAT & 4G internet: COBHAM 800 Omniaccess
VHF: COBHAM 6248&6222
MF/HF Radio: Furuno FS 1575
Inmarsat-C: Furuno Felcom 18
GMDSS Area 1,2,3: Jotron
ECDIS: Transas 4000
Gyros: Raytheon 22
Wavehunter II 4G-5G antenna
Starlink internet system
Cybersecurity arrangement onboard

Accommodation

Comfortably heated and air-conditioned living spaces for 9 crew and 12 client personnel in 6 x double cabins at a dedicated deck A/C Daikin unit: AHU drive with 440V elec heating coils and independent heaters in all cabins Potable water treatment / testing onboard. Potable water dispenser RO unit.

Deck Lay-Out / Equipment

Deck crane aft: Heila HLRM 230-4SL, Fixed hook / wire (single-double line) 10,3T / (4.5T-9.5T) @ 16.50m.
Adapted for ROV operations

CT pulling winch: 58 ton max pull at 11m/min 1st layer or 24 ton pull at 22 m/min, 80 T holding brake
Dynamic and static tension readings
Counter meter
Data acquisition system
Wire capacity 350m Ø46 mm

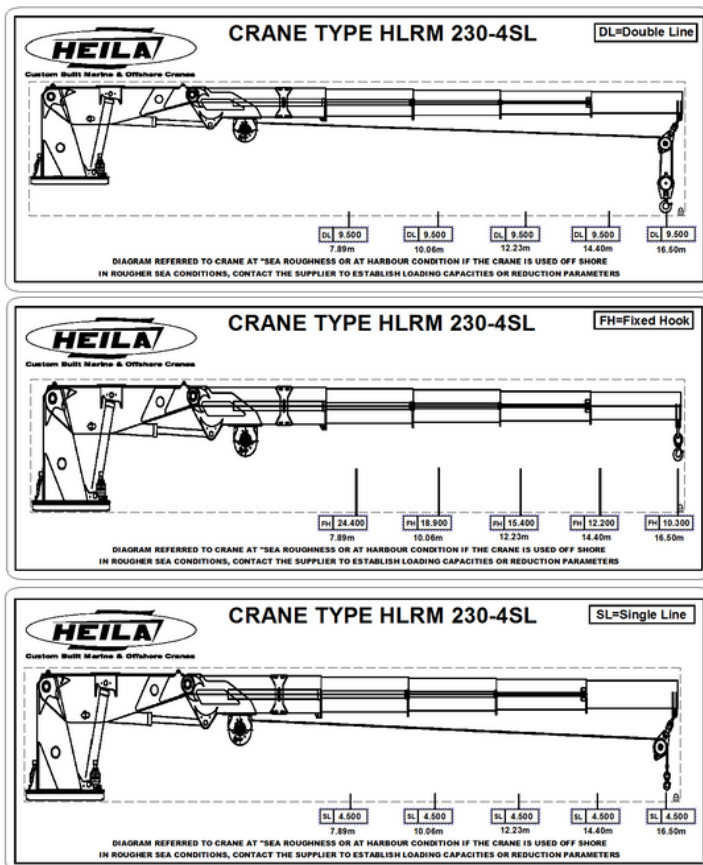
Boatladder: 1.8m wide, fitted at the bow optimizing CTV ops with DP system

A-frame: 7.5m transversal clearance, 6m outreach, 7,5-8m height from deck level, 42 Ton through main sheave, 32 Ton Double fall with integrated aux winch, 6m outreach, tension monitoring system, RRC operated.

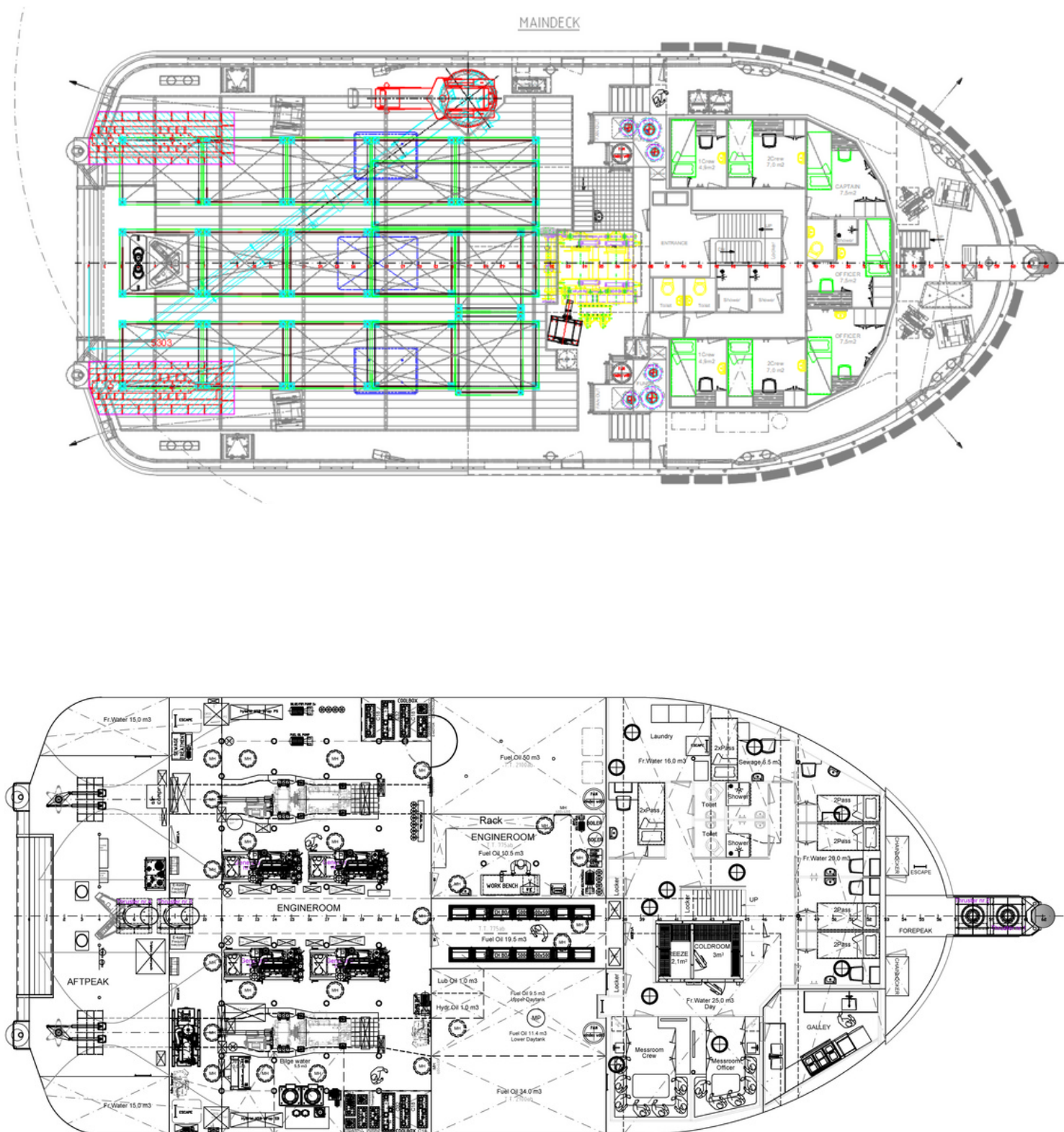
Tugger Winch: 1x 20 ton
Guide pins: Triplex SWL 115 t
Shark jaws: Triplex SWL 200 t with chain stopper

Multiple container fittings flushed on deck

Crane Diagram



GENERAL ARRANGEMENT



A-FRAME ARRANGEMENT 32T DF & 42T direct pull CT winch

