

EDDA FREYA

VESSEL SPECIFICATION SHEET



Photo: Tor Erik Kråsvik

OFFSHORE CONSTRUCTION VESSEL

The Edda Freya is a state of the art construction vessel suited for operations worldwide and utilising an environmentally friendly, fuel-saving diesel-electric hybrid propulsion system. Edda Freya was designed with a focus on cable laying operations, offshore construction and inspection, and maintenance and repair (IMR) operations, and also with a focus on redundancy, excellent maneuverability and station keeping.

The vessel has 2300m² of deck space and is equipped with a 400 T AHC offshore crane that can lift 600 T in double-fall mode, a 70 T AHC offshore crane which is bolted, and can easily be moved to secondary position, a Huisman 150 T dual tensioner VLS located over the main moonpool, a system for quick mobilisation of reels and reel drive systems, an integrated skidding system for modules, two moonpool launch and recovery system for WROVs and a 3000 T carousel is located below deck.

In addition to the hybrid battery system Edda Freya's environmentally friendly credentials are enhanced by the adoption of Siemens' BlueDrive PlusC concept, which was implemented by Siemens in co-operation with Østensjø Rederi. By using variable rotational speed

KEY VESSEL FEATURES

with optimal operation of the diesel generators in combination with the battery system, the system will significantly reduce fuel consumption and the emissions of nitrogen oxides (NOx) and greenhouse gases (CO₂ and methane). The use of selective catalytic reduction systems further reduces emissions.

- LENGTH 149,8m
- BEAM 27m
- DP3
- 600T AHC OFFSHORE CRANE
- 70 TE AHC OFFSHORE CRANE
- 150T HUISMAN VLS
- 3000T CAROUSEL BELOW DECK
- 2 OFF 220HP CONSTRUCTOR WROVS MOONPOOL HANDLING, L&R 6-7mHs
- SIEMENS BLUEDRIVE PLUSC POWER MANAGEMENT REDUCING YEARLY FUEL CONSUMPTION WITH 15 - 20%
- ACCOMMODATION FOR 140 PERSONS
- 2300m² DECK AREA
- SCR CATALYTIC REACTORS FOR REDUCED NOX EMITON TO AIR

GENERAL

OPERATOR	Østensjø Rederi Charterer: DeepOcean AS
SHIP OWNER	Østensjø Rederi
BUILT BY	Kleven verft
DELIVERED	2016
DESIGN	SALT 304 OCV

MAIN PARTICULARS

LENGTH OVERALL	149,8 m
LENGTH BETWEEN PP.	138,3 m
BREADTH MOULDED	27 m
DEPTH MAIN DECK	12 m
MAX. SCANTLING DRAUGHT	8,5
CLASS	"+1A1, SF, EO, DYNPOS AUTRO, COMF C(3), Comf V(3), Clean Design, BIS, ICE 1C, DK(+), TMON, CRANE, NAUT OSV(A)-ICS, HELDSK-SH (CAA-N)
ACCOMMODATION	140 persons (64 single cabins and 38 double cabins)

CAPACITIES

CARGO DECK AREA	2300 m ²
FUEL OIL	2200 m ³
BALLAST WATER	6800 m ³
FRESH WATER	1000 m ³
DEADWEIGHT (MAX DRAUGHT AND OPEN MOONPOOL)	10000 t
DECK STRENGTH (AFT OF MAIN CRANE)	15 t/m ²
DECK STRENGTH (FWD OF MAIN CRANE)	10 t/m ²
DECK LOAD CAPACITY	Approx. 6000 t
MAIN ENGINES & GENERATOR SET	2 x MaK 8M32E 2 x MaK 6M32E 2 x MaK 6M20C
ELECTRICAL SYSTEM AND POWER MANAGEMENT	Siemens BlueDrive PlusC 4 x 130 kWh Battery banks Integrated EMS System
THRUSTERS	2 x 1500 kW Brunnvoll Retractable Azimuth Thruster 4 x 2050 kW Brunnvoll Tunnel Thruster
MAIN PROPULSION	Scana Volda CP95/AG TS1000 Reduction Gear: 2 x AG TS1000 (Twin input-single output) Power: 2 x 4200 kW Propeller speed: 145 rpm Propeller diameter: 4300 mm
AUTOMATION	Kongsberg K-Chief 700 Siemens RCS for Thrusters and Propulsion
MOONPOOL	2 x ROV moonpool 6,3 m x 4,2 m net opening 1 x Work moonpool 7,2 m x 7,2 m net opening

DYNPOS, NAVIGATION AND COMMUNICATION	Kongsberg Maritime Dynamic Positioning System 1 off KPOS DP-21 1 off KPOS DP-11 Class 3 Back-up DP 1 off cJoy joystick system
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	Reference systems installed: 2 x DPS 232 2 x Seapath 330 1 x CyScan system 1 x RADIUS 1000 2 x KONGSBERG Redundant HiPAP@ 502 system
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OFFSHORE CRANES	Main Crane NOV Knuckle Boom Crane Single Fall lift mode: 400 t @ 20m AHC, 150 t @ 40 m AHC 2-Fall Lift Mode: 600 t @ 14 m AHC Special Lift Mode: 400 t @ 18 m AHC Water Depth Main Crane Single fall: 3000 m Main Offshore Crane Aux hook: 25 t @ 43 m AHC
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	Auxiliary Crane NOV Knuckle Boom Crane Single Fall lift mode: 70 t @ 21 m AHC, 14 t @ 45 m AHC Water Depth Auxiliary Crane: 2000 m Auxiliary Crane Aux Hook 10 t @ 50 m
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ROV SYSTEM	2 x 220 Hp Kystdesign Constructor W-ROV 3000 m water depth rating MacGregor AHC Moonpool Launching- and recovery System 2 x ROV Handling Cranes Skidding system
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DECK EQUIPMENT	Deck Tugger Winches: 4 x 10 t CT Shipboard crane: NOV knuckle Jib Crane Single Fall: 10 t @ 15 m; 5 t @ 20 m Helideck 26,1 m - 16 t
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VLS	150 t Huisman VLS 2 x 75 t 4-track Tensioners Electric Driven Retractable Tensioners 185 t Below Deck A&R winch Service Crane 18 t @ 8 m 2 x 10 t Hoisting Beams 2 x 5 t Moonpool Tugger Winches 2 x 2 t Product Handling Winches
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CAROUSEL	3000 t IMECA Below Deck Carousel 6m Ø Core 24, 3m Ø Overall 6 m Height Spooling arm 8 t SWL Modular partitioning
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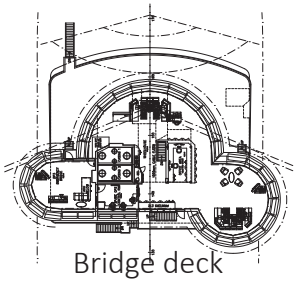
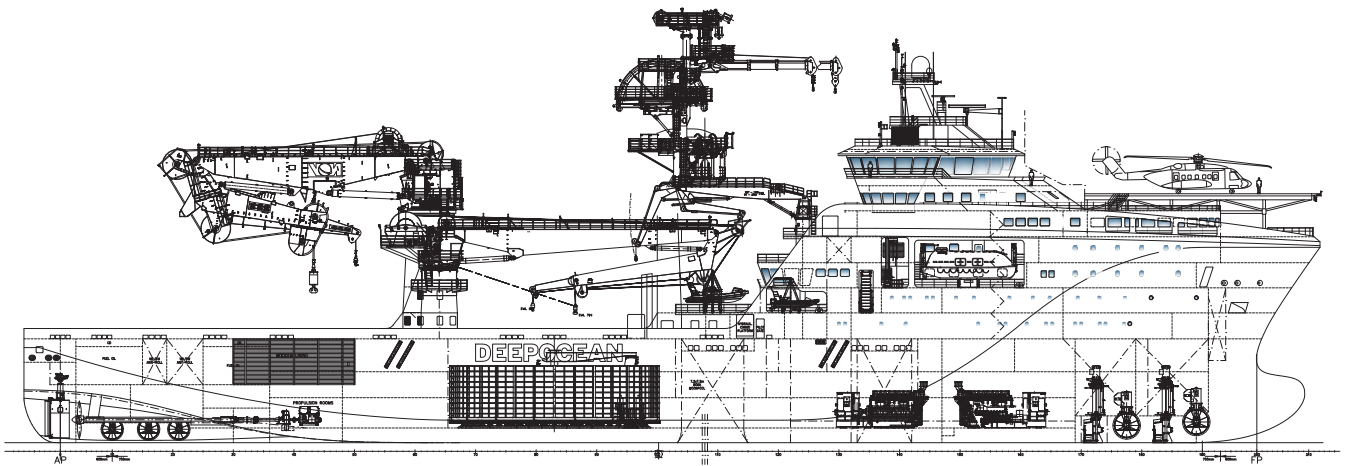
DECK SKID SYSTEM	Prepared for Reel Drive system Deck Skid System 6 x 400 t Reel capacity
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LIFESAVING EQUIPMENT	Life Boats - Life Rafts 2 x Covered Lifeboats with capacity 130 persons Life boats and rafts 100% each side MOB Boats 1 x Weedo 700 FRC 1 x Weedo 17 RB
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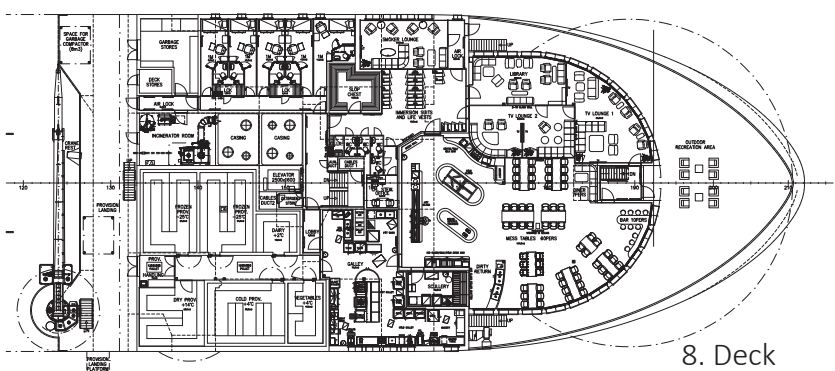
FUEL CONSUMPTIONS

MAX SPEED	15,5 kts
SERVICE SPEED	13 kts. Helideck: D = 22,8 T = 16
DP MODE	Approx. 17 m ³ /24 hrs
HARBOUR MODE	Approx. 7 m ³ /24 hrs

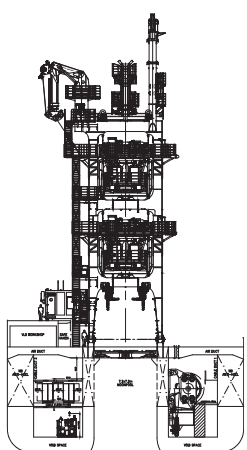
EDDA FREYA



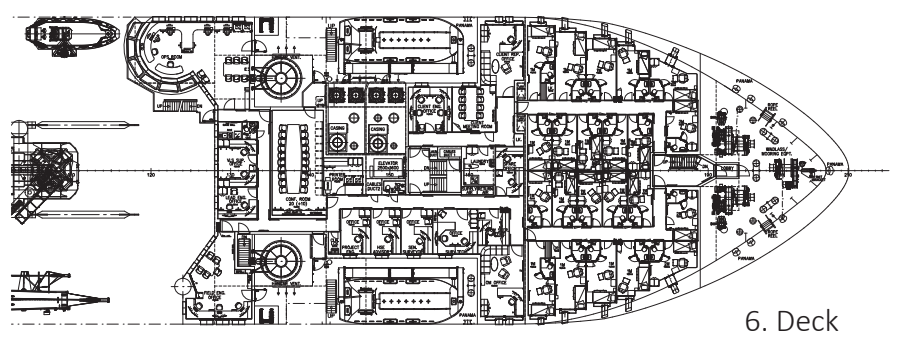
Bridge deck



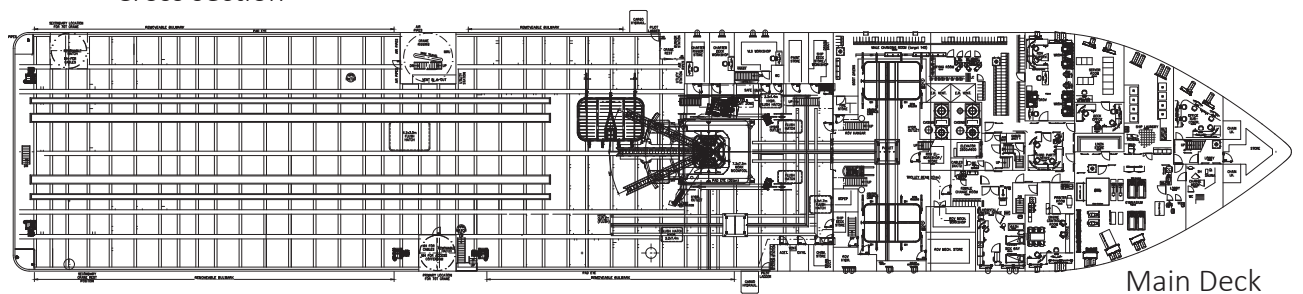
8. Deck



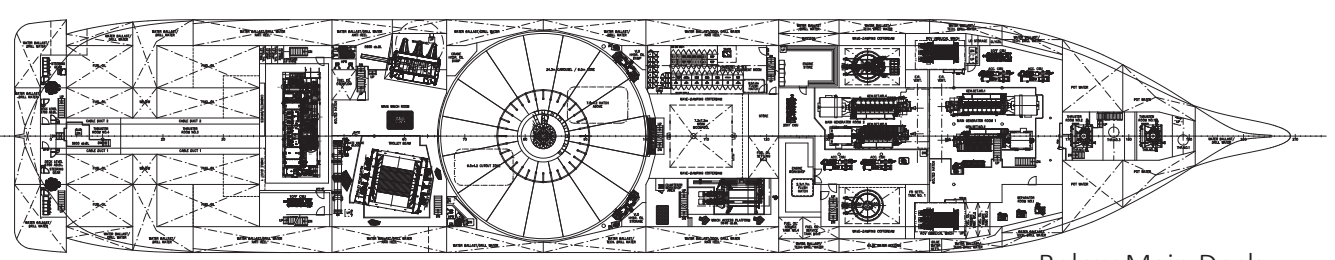
Cross section



6. Deck



Main Deck



Below Main Deck

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