

CTV/FSV MHO-BOREAS



Vessel Specifications

Build	2023
Shipyard	AFAI Southern Shipyard, Guangzhou, China
Flag	Danish
CLASS	✶ 1A HSLC Crew Battery(Power) Windfarm R1
Trade area	Worldwide
Length O.A.	35,89 m
Beam	11 m
Max draft	1,59 m
Air draft	12,40 m
Bow fender height	3,2 - 4,2 m
GT	411
NT	123
IMO No.	9994759
Call Sign	OZMA2
MMSI	219031153
E-mail	mho-boreas@mho-co.dk
Telephone	+45 xx xx xx xx
Satellite Phone	+45 82 xx xx xx

Performance

Max speed @ workload	25 knots
Max speed @ full load	17 knots
Range @ 15 knots	3.800 Nm

Crew and IP facilities

Crew	6
Beds	8 x single cabins
IP capacity	24
Suspension Seats	24 Grammar seats
Facilities	WI-FI throughout the vessel 4 x 43" TVs for safety videos 2 x public toilets + wet room with shower w/ cabinets and hangers Stove, microwave, coffeemaker and kettle 3 x Refrigerator, 3 x freezers
Pantry	

Capacities

Ship tanks	2 x 26.000 L, 2 x 13.000 L, 2 x 6.500, 2 x 1350 L Total 93.700 L
Fresh water	2.500 L
Sewage	2.500 L
Sludge	2 x 1000 L
AdBlue	2 x 1000 L
Max cargo	With 10.000 L fuel: 72.000 kg
Forward deck area	142 m ²
Fwd deck area strength	2 t/m ²
Aft deck area	10 mv
Total deck area	175 m ²
Container fittings	[2 x 10' + 4 x 20'] or [10 x 10']

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Deck equipment

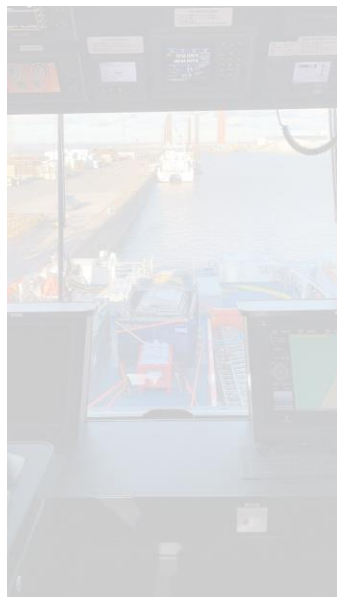
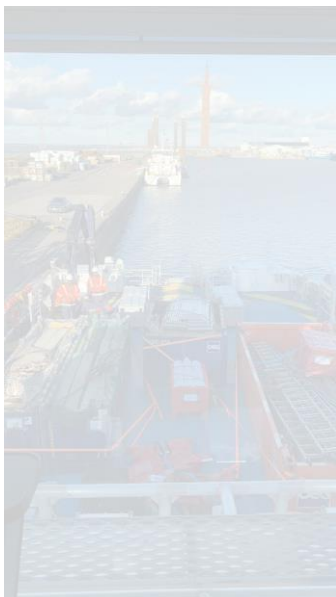
Crane	AMCO VEBA 815-4s: SWL: 1.065 Kg @ 10,25 m
Fuelling	1 x 40 m 2" hose
Pump capacity	750 L/min @ 23 m // 400 L/min @ 45 m
Pressure washer	High pressure washer with 40 m hose
Deck power output	4 x Reefer plugs 380 V 4 pin
Moonpool	1065 mm x 868 mm

Engines

Propulsion Motors	4 x Danfoss EM-PMI540-T3000-2000@550kW@2250rpm
Bow Thrusters	JET 2 x 45 kw
Generating Motors	8 x Volvo D8
	w/ Danfoss EM-PMI375-T1100-1800
IPS	4 x Volvo IPS 30
Battery	Dolphin 4 x 94kWh, design life 10 years
	- Max voltage 640Vdc, min. voltage 480Vdc -
	- Capable of 27 hours Standby -

Bridge control

Manoeuvring	Volvo IPS "DP0" system
Manoeuvring stations	1 x main station + 1 back-up on bridge
Manoeuvring stations	2 x wing station w/ joystick
Navigation lights	Lupolight LED
Monitoring	CCTV with 31 cameras and 10 days storage
BWA	Walker P7007

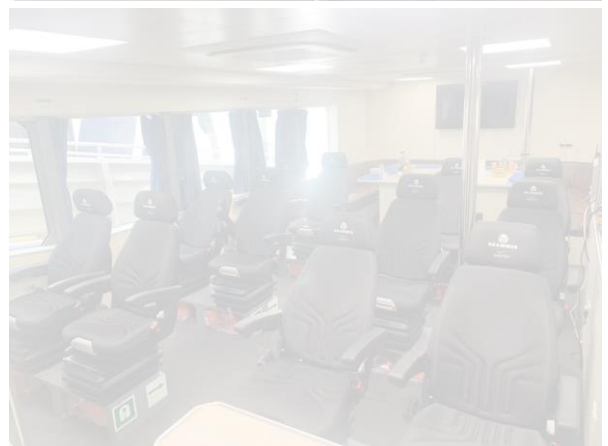
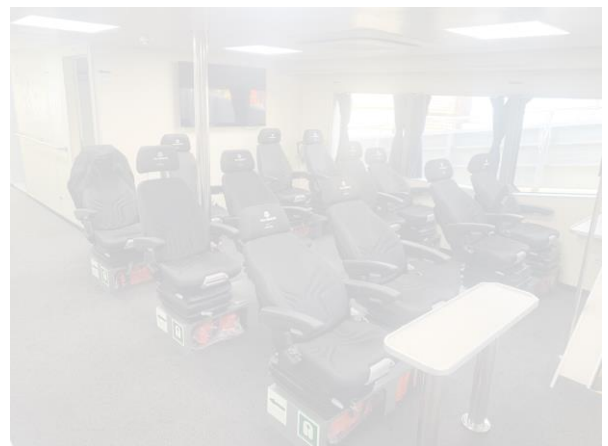


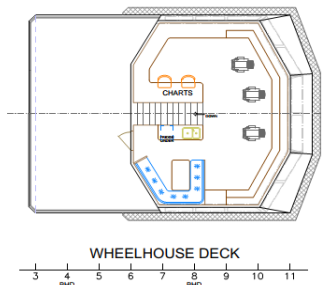
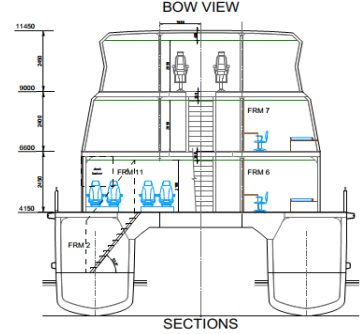
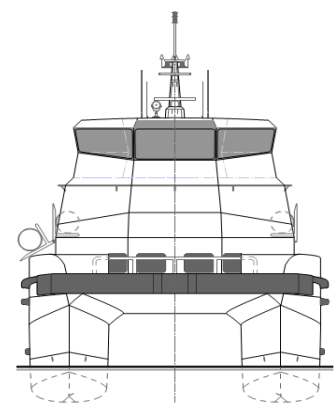
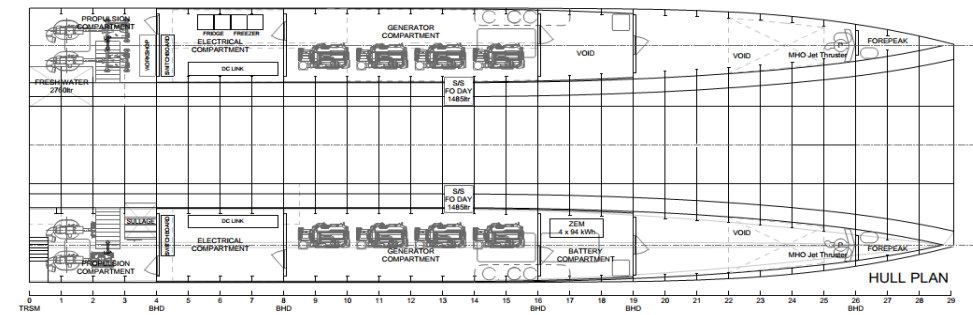
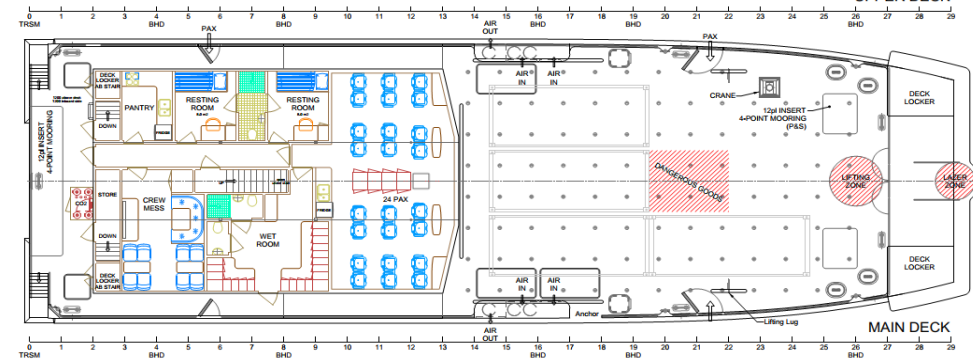
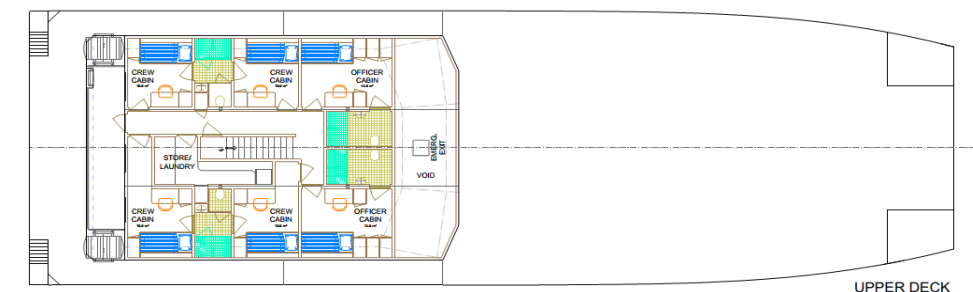
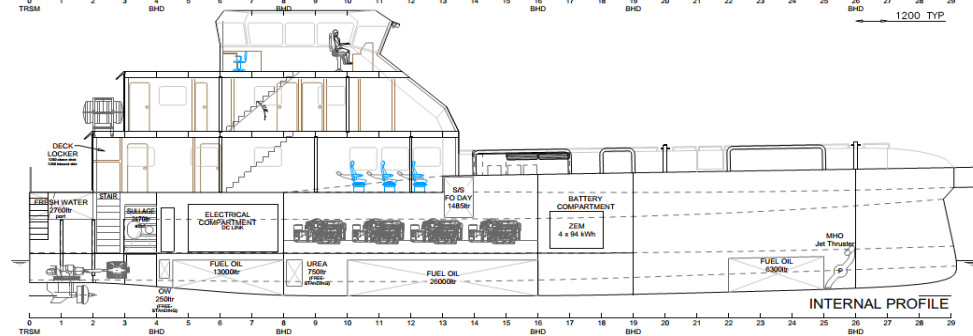
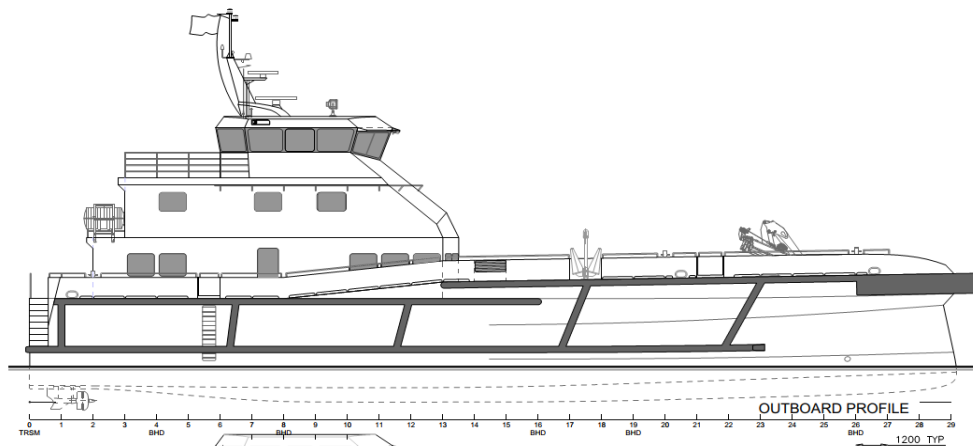
Navigation equipment

Radar	Navi-Radar 4000 ARPA Radar
Radar	Simrad NSS16 EVO 3S
ECDIS	2 x Transas 4000 ECDIS
VHF	2 x Sailor 7224
VHF	Motorola DM-4400E with P-channels
MF/HF	Sailor 6301
AIS	Sailor 6004
Sat Compass	Furuno SC-702
GPS	Furuno GP-170
Echo sounder	Skipper ESN200
Navtex	Sailor 6004
Speed log	Skipper DL1
Autopilot	AP70 MK
Motion dampening	Humphree Active Ride control

Charter facilities

On bridge	Sofa w/ table and workstation
Pax Area	Refrigerator, sink, coffeemaker, and kettle





PRINCIPAL PARTICULARS

LENGTH OVERALL	35.9 m
TONNAGE, GT / NT	411 / 123
LOAD LINE LENGTH	33.08 m
LENGTH WATERLINE	35.00 m
BEAM MOULDED	11.00 m
DRAFT	1.70 m (typical)
SERVICE SPEED	18-25 knots
MAX DEADWEIGHT	80 t (subject to final lightship)
DAY FUEL CAPACITY	2 x 1485 litres
CARGO FUEL	90000 litres (6 tanks)
FRESH WATER	2500 litres
SULLAGE	2500 litres
CONSTRUCTION	Aluminium
SURVEY	DNV +1A HSLC Crew Windfarm R1
Personel Capacity	Battery Power
Foredeck Cargo Area	24 technicians + 6 crew
	142 m ² with 2 t/m ² load capacity

MAIN MACHINERY

E-Propulsion:
4 x Volvo E-IPS 30 with PM Electric Propulsion Motors: 4 x Danfoss EM-PM1540-T3000 rated at 550kW at 2250 rpm

Electrical Energy:
8 x Volvo D8-MH (259kW @ 1800rpm) with Danfoss EM-PM1375-T1100 PM Variable Speed Generator Motors

Battery Bank: 376 kWh total

Foredeck Crane: IRON FIST - IFG177M/3



C	01-NOV-2022	MW	SVF	Added WT door to BHD 19 port side and removed extra deck hatch. Raised WH roof 50mm. Repositioned Gensets and Girders. Added WH window wiper detail. Updated pillars locations, e-motor position.
B	13-SEP-2022	MW	SVF	Corrected section view dimension. Removed wall from aft-stbd crew cabin.
A	06-SEP-2022	MW	SVF	Removed 9th generator. Added mooring bollards, fairleads and dangerous goods. Updated main deck seat blocks and CO2 locker. Changed hatch to soft patch in propulsion compartment. Minor changes to hull stair, air in/out, upper deck bulkheads two frame 7 and vessel particulars. Updated cabin areas to include bathrooms. Added ZEM battery detail and soft patch above.
ISS	02-AUG-2022	MW	SVF	1st issue
NO	DATE	DRN	CKD	REVISION

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TITLE	36m CATAMARAN WIND FARM SUPPORT VESSEL	DRAWN BY	SVF
CLIENT	MHO-Co / AFAI / Ørsted	CHECKED BY	SVF
GENERAL ARRANGEMENT		DATE	2-AUG-2022
DRG. No.	MHO36-116-A-01	REV	C
CAD FILE: MHO36-116-A-01 Rev-C-General Arrangement.3dm			

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