



Hyperbaric Consult A/S

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DANISH WIND
INDUSTRY ASSOCIATION

ISO 9001
Management System Certification
BUREAU VERITAS
Certification Denmark A/S



Hyperbaric Consult A/S is a dynamic company with broad and diverse experience within the field of diving support for offshore construction, hyperbaric management, underwater and topside engineering and inspection.

HBC has participated in several different wind farm projects in Europe and is a very experienced company within all subsea aspects of wind farm development, IMR (Inspection, maintenance and repair) and NDT testing.



• Diving support • ROV support • Inspection, Repair & Maintenance

• Surveying • Repair & Maintenance • Trenching

• Cargo transport (fuel, oil or freshwater)

The ship

The DP1 Diving Support Vessel "HBC Achiever" is a 36 meter long, four point mooring vessel built in 2014 on the basis of our experience and according with specific requirements of HBC. She has been specifically set up and equipped for providing diving support for offshore construction, Inspection, Repair and Maintenance.

The work

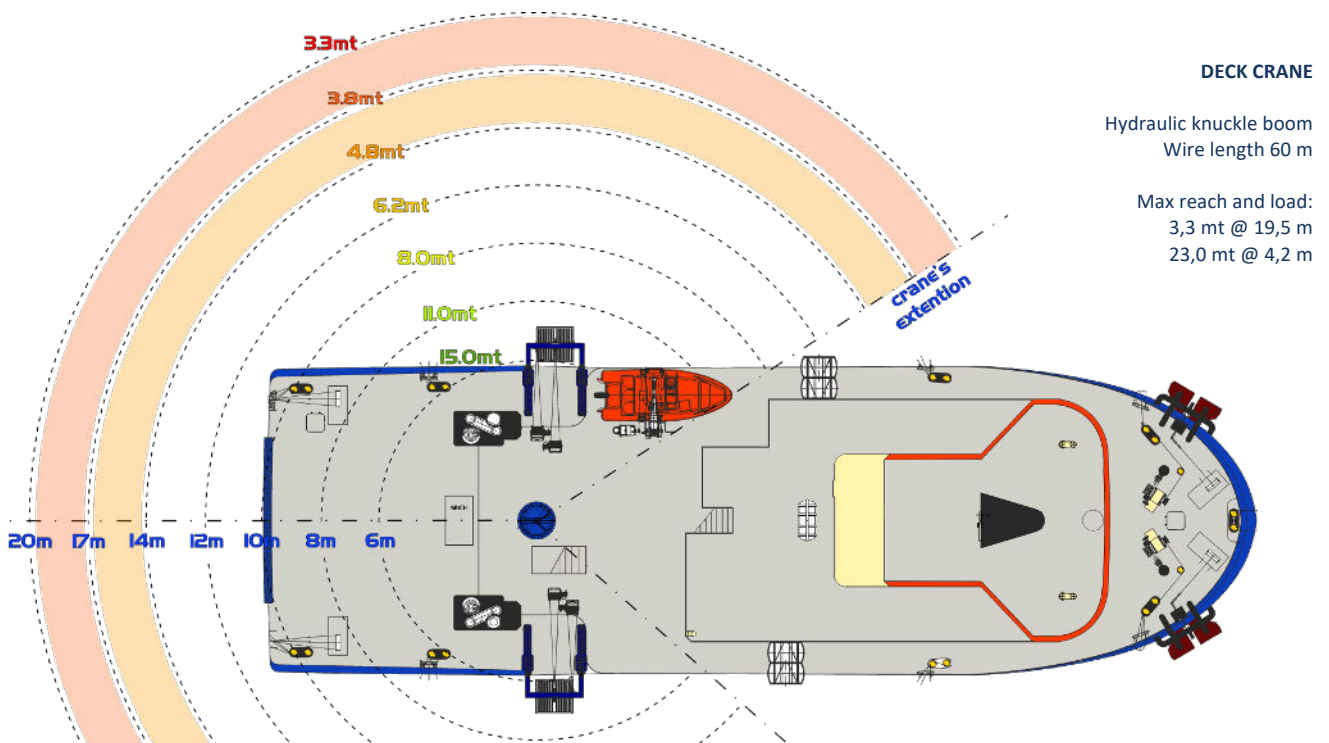
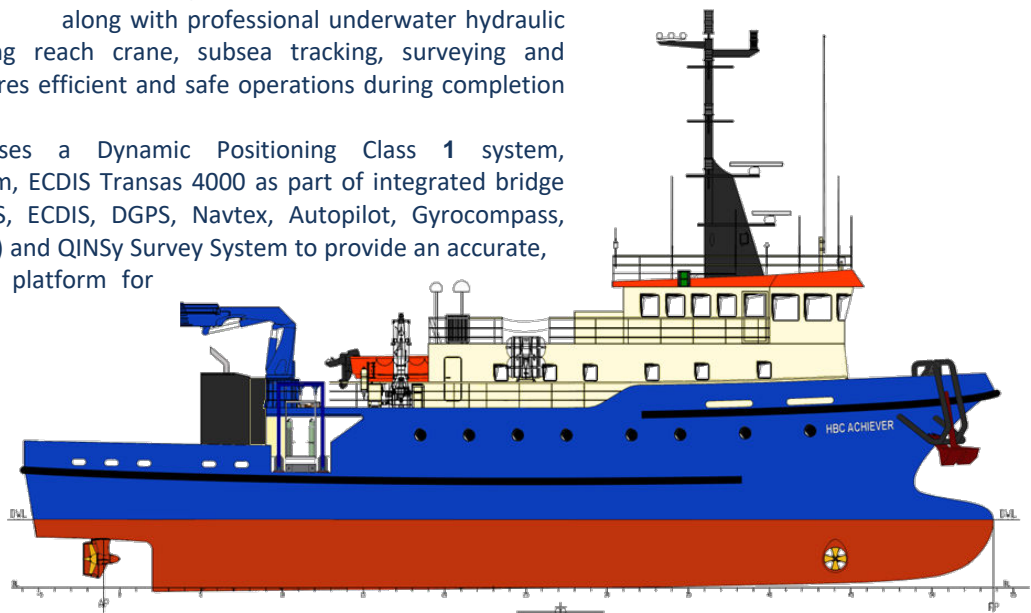
"HBC Achiever" is capable of conducting offshore surveys, trenching and conducting ROV operations. "HBC Achiever" has wide experience in offshore construction and maintenance. The capability of "HBC Achiever's" services can additionally be extended to include transporting fuel, oil, freshwater, general cargo and personnel.

The system

Modern diving systems including IMCA standard twin lock Decompression Chamber along with professional underwater hydraulic tools, ROV Support, long reach crane, subsea tracking, surveying and positioning systems, ensures efficient and safe operations during completion of the project.

"HBC Achiever" uses a Dynamic Positioning Class 1 system, four point mooring system, ECDIS Transas 4000 as part of integrated bridge system (ARPA Radar, AIS, ECDIS, DGPS, Navtex, Autopilot, Gyrocompass, Echosounder, Doppler log) and QINSy Survey System to provide an accurate, safe and stable working platform for subsea projects.

With the use of Sonardyne transducer system connected with ship in DP mode – the ship is able to track a target (diver, ROV or other) with precision of less than one meter.



GENERAL SPECIFICATIONS

Classification	Diving Support Vessel DP1
Flag State Authority	Danish International Ship Register
Port of Registry	Gilleleje
Classification Authority	RINA
IMO Number	9647978
Call Sign	OWMH2

MAIN PARTICULARS

Overall Length	35,99 m
Beam	11,44 m
Summer Draught	3,092 m
Air draft	12,9 m
Gross Tonnage	487 GT
Net Tonnage	146 NT

ENGINE POWER & PROPULSION

Engine	2x 331 kW
Generator	3x 180 kW / 225 kVA
Bow Thruster	1x Schottel STT110FP 150kW
Rudderpropellers	2x Azimuth Thrusters: Schottel SRP 200, 280-410 kW

SPEED

Economical Speed	8,5 knots
Full Speed	10,5 knots

CONSUMPTION

In port	0,25 m ³ / 24 hrs
Transit	4 m ³ / 24 hrs
DP mode maneuvering	3 m ³ / 24 hrs
Diving operations	0,5 m ³ / 24 hrs

TANK CAPACITIES (100%)

Fuel Oil	70,0 m ³
Fresh Water	48,0 m ³

CARGO DECK

Main Deck Area	80 m ²
Upper Deck Area	28 m ²
Bridge Deck Area	38 m ²

DECK CRANE

Type	Hydraulic knuckle boom
Wire length	60 m
Main Crane max reach and load:	3,3 mt @ 19,5 m 23,0 mt @ 4,2 m

IMCA

CMID	M 149 & M 189 compliant
Diving Services and Systems	compliant

PERSONNEL

Crew	9 pers
Project team	23 pers

DIVE SYSTEM

Fully integrated 3 diver panel with multiple redundancies	
Twin lock IMCA standard Decompression Chamber	
Nitrox compressor for on-site production	Bauer B-TROX
Hot water system	2x Aquila HB254
Diving Launch and Recovery	2x LARS diving basket
Diver hydraulic and pneumatic tool station	
Full CSWIP inspection capabilities	
Coded welding and burning facilities	

SURVEY SYSTEM

QINSy ver. 8.0

ROV SAAB

SeaEye Tiger 8106

NAVIGATION AIDS

Fully Integrated Bridge System:	Navi-Sailor 4000 Dual ECDIS Multi-purpose display system
Radar ARPA	2x Transas Navi-Radar 4000 X-band 3 cm
AIS	Class-A, JRC JHS-183
Autopilot	Navis AP4000
Gyrocompass	GC-80 Simrad
DGPS	JRC JLR-31
Echosounder	JRC JFE-380-25 50/200kHz
Navtex	JRC NCR-333
Speed log	Doppler log system, JRC JLN-205

DYNAMIC POSITIONING SYSTEMS

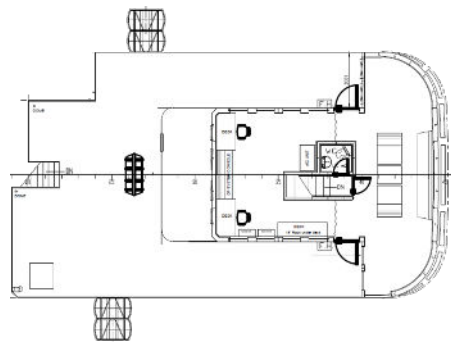
DP System	DP1 Navis NavDP 4000
ROV following mode with HPR interface	

DP INTERFACES AND SENSORS

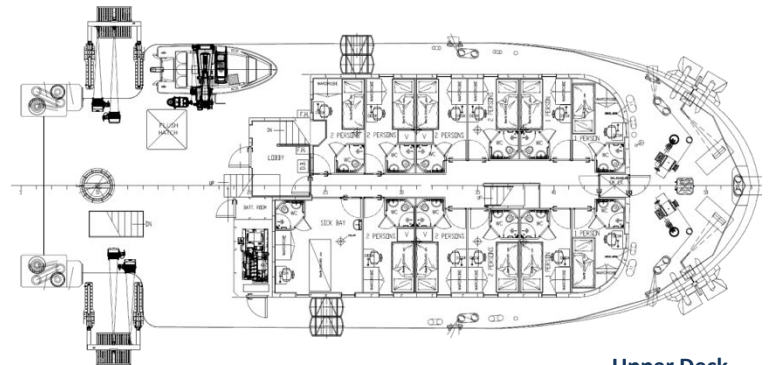
DGPS and GPS Satellite Compass	x2
Gyrocompass	x1
VRU/MRU	x2
Thruster and propulsion interface	x4
Wind sensor	x2
Hydrostatic Pos.Ref. (HPR) <Sonardyne Ranger 2>	x1

COMMUNICATION SYSTEMS

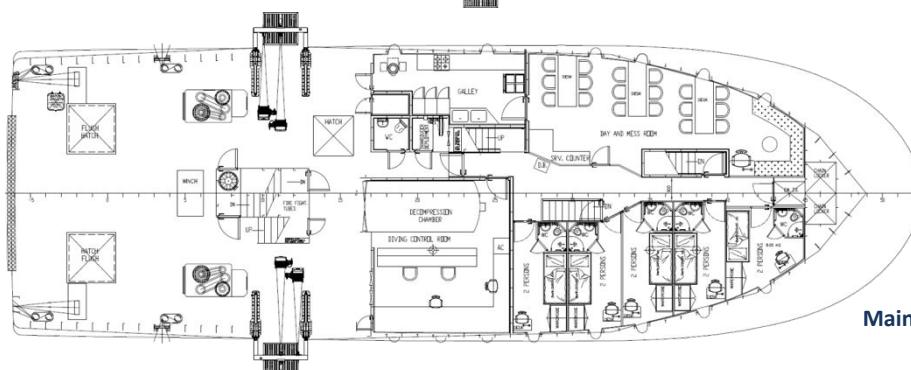
Marine Satellite Broadband	KNS Sea Master
Satellite Internet (by V-SAT)	SuperTrack A9
VHF DSC	Sailor 6220
VHF RT	x3 Sailor 6248
MF/HFSSB RT	Sailor 6310
UHF	x4 Icom IC-2820E



Bridge deck



Upper Deck



Main Deck