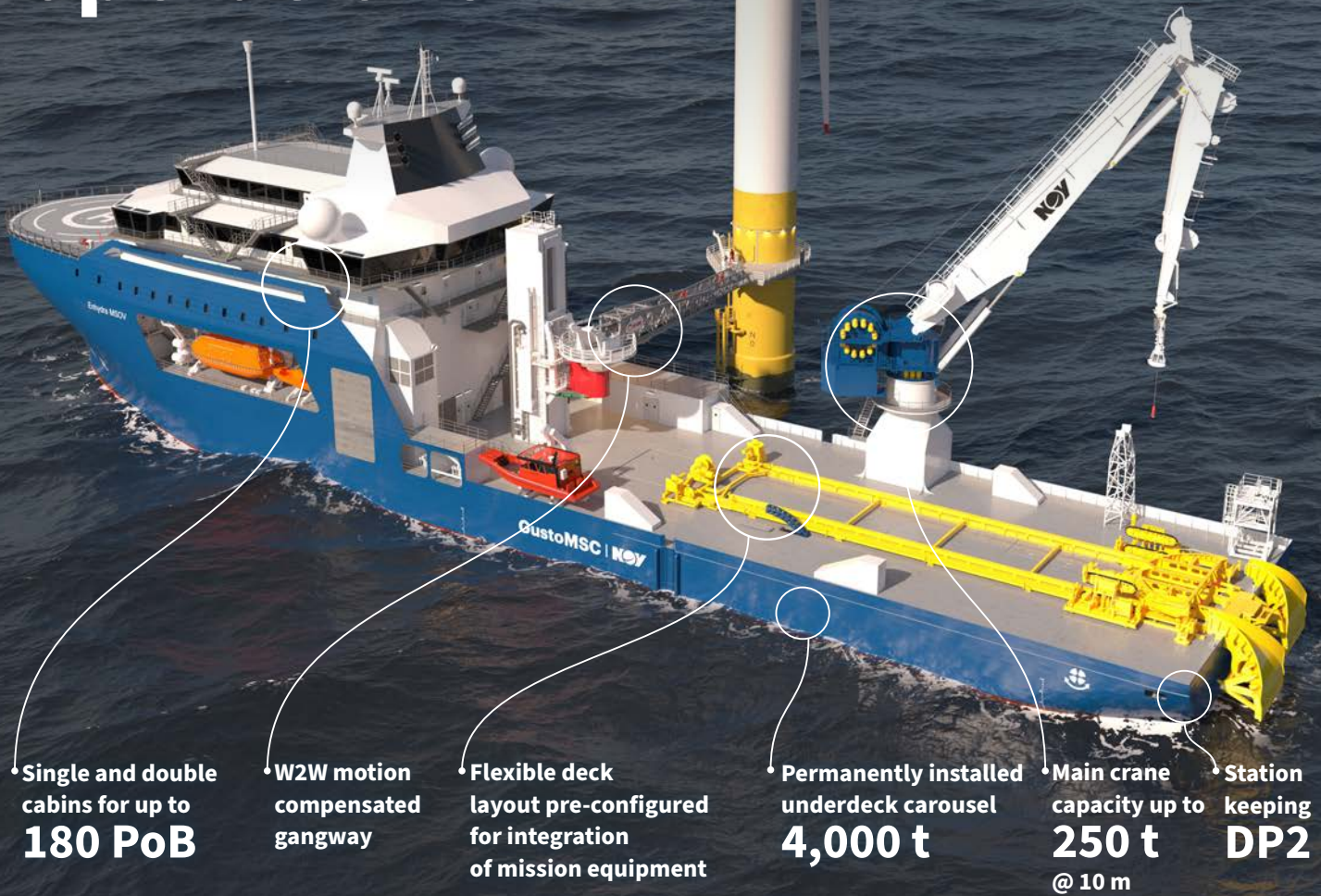


Enhydra MSOV

Next step in wind farm operations



• Single and double cabins for up to **180 PoB**

• W2W motion compensated gangway

• Flexible deck layout pre-configured for integration of mission equipment

• Permanently installed underdeck carousel **4,000 t**

• Main crane capacity up to **250 t** @ 10 m

• Station keeping **DP2**

Enhydra Modular Service and Operations Vessel

As wind farms move farther offshore and in deeper waters, robust operations and maintenance strategies are required. Support vessels must be able to operate safely, effectively, and longer in increasingly challenging environments. The Modular Service and Operations Vessel (MSOV) is a novel and versatile concept to optimize offshore wind farm operations and maintenance.

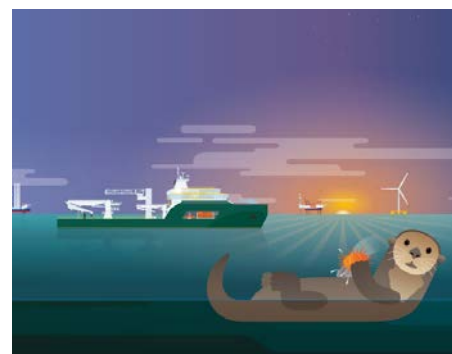
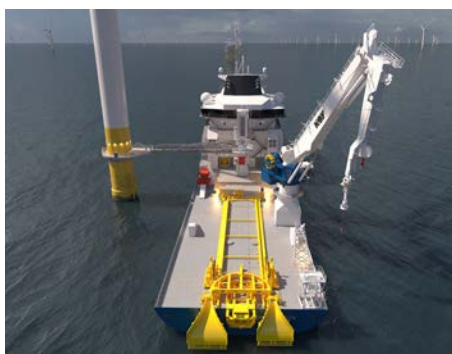
The MSOV concept is a collaboration across NOV's Marine and Construction business unit. To introduce the concept, an MSOV design was developed based on GustoMSC's Enhydra MSOV design. The GustoMSC vessel design offers an extensive and flexible deck layout to integrate mission equipment from our Lifting and Handling group and NOV Remacut to maximize capability, workability and endurance.

At 140 m in length, the Enhydra MSOV's larger design allows for additional capabilities by integrating additional modular equipment, increased comfort, and capabilities beyond current construction/service operations vessels. Featuring Remacut™ cable-lay equipment, this versatile workhorse is designed for cable repair and change-out, subsea inspection and intervention, and mooring installation for floating wind farms.

Features

- Modular deck layout for integration of mission equipment
- Compensated crane capacity 250 t
- Large free deck area >1,000 m²
- Permanently installed carousel 4,000 t
- Single and double cabins for up to 180 PoB

The Enhydra series can be fully customized to owner's specific requirements



Main characteristics MSOV

Hull	
Length overall	140 m
Length between perpendiculars	135 m
Breadth	28 m
D main deck	11.9 m
Draught	7.5 m
Deadweight	12,500 t
Speed	13 kn
Autonomy	60 days
DP class	2
Bollard pull	160 t
Accommodation	150 - 180 POB 150 cabins

Power generation & utilities

Installed power	16,000 kW
# Generator sets	6
MGO	3,000 m ³
Alternative fuel capacity	1,500 m ³
Fresh water	1,000 m ³

Propulsion and DP

Tunnel thrusters	2 x 2,000 kW
Azimuth thrusters	2 x 3,500 kW 1 x 2,000 kW
Total thruster power	13,000 kW

Classification, regulations

DNV or ABS Crane Vessel Notation
DP2 station keeping notation (upgradable)
IMO - Special Purpose Code

Offshore logistics

Gangway System	
Compensation	Active Motion Compensation (AMC)
Length	30+ m
Integrated elevator	Yes
Cargo	Yes (trolley & integrated crane)

Main crane	
Type	knuckle boom
SWL	150 - 250 t
Outreach	10 m
Max outreach	35 m
Compensation	Yes, Motion Compensated

Helideck	
Size	26 m (Sikorsky S-92 capable)

Workboat	
Length	15 m
PoB	10 - 15
Boat Landing	Yes (Port & Starboard side)

Additional equipment	
ROV	Yes, inclusive of launch system
Drone/AUV	Yes, optional

Inspired by nature

The Enhydra series design characteristics resemble the sea otter's (Enhydra) unique and physical behavioral features. The sea otter is the sole marine mammal to use tools and it uses its streamlined body design to efficiently perform deep dives to the seafloor and adapt its lung capacity to float effectively on the surface.

GustoMSC services

Providing the basic design package including all services required to obtain Class approval.

After Market activities throughout the lifetime of the unit. This includes, consultancy, engineering support, etc.

Data presented in this product sheet is for information only and subject to change without notice.