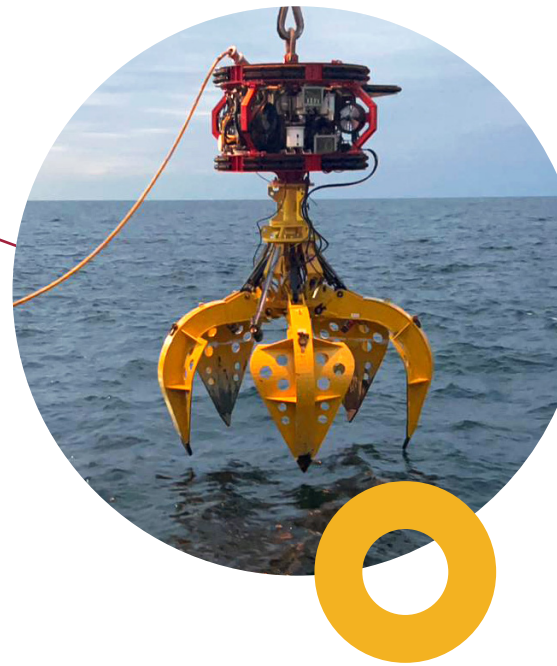


MV Trym

Multi-Role Support Vessel (MSV)



The DP2 **MV Trym** multi-role vessel is equipped for offshore renewables, UXO disposal, boulder clearance, and WROV operations, featuring ample deck space for versatile support.



The *MV Trym* is a state-of-the-art Multi-Role Support Vessel (MSV) designed for a broad range of offshore operations, focusing on the expanding offshore Renewables sector. This 73-meter vessel, equipped with DP2 dynamic positioning capabilities, is a versatile asset that can be utilized for a variety of offshore needs, including unexploded ordnance (UXO) identification and disposal, boulder clearance, and other specialized Work Class Remotely Operated Vehicle (WROV) activities.

The *MV Trym* features an XLS 150 HP WROV and Helix's newly designed and custom-built IROV boulder grab, enhancing our operational flexibility and effectiveness in challenging environments. The vessel is outfitted with a 25-ton Active Heave Compensated (AHC) crane, ensuring the precise handling of heavy equipment and materials. The vessel boasts 380 m² of unobstructed deck space, providing ample room for a range of subsea construction and support tasks.

With accommodations for up to 46 personnel, the *MV Trym* offers high comfort and functionality, including single and double cabins and a gym. This well-appointed living space supports a productive work environment, essential for extended offshore operations.

The *MV Trym* will play a pivotal role in supporting Helix's new and existing clients across various energy sectors, combining advanced technology, extensive deck space, and robust operational capabilities to meet the diverse needs of the offshore industry.



Experience

Helix Robotics Solutions operate a fleet of ROVs, seabed jet trenchers and multi-purpose ROV and construction support vessels worldwide via strategic offices in key areas of the world.



Innovation

Helix Robotics Solutions works closely with our clients and vendors to seek and resolve complex technical developments to engineer practical solutions and implement in the most efficient, safe and economical ways possible.



Value

Helix Robotics Solutions is one of the most innovative and reliable specialty marine contractors in the world. Focusing on providing leading edge underwater, unmanned services in extreme environments, Helix strives to deliver the highest value to its customers.

TECHNICAL SPECIFICATIONS

| Main characteristics | |
|----------------------|----------------------------------|
| Vessel Name | MV Trym |
| Owner | Sea Shipping |
| Builder | Vyborg Shipyard - Vyborg, Russia |
| Design | UT 755 LN |
| IMO Number | 9342724 |
| Year Built | 2006 |
| DNV Class Notation | Det Norske Veritas |
| Flag | Norway |

| Vessel dimensions | |
|-------------------|-------------------------------------|
| Length Overall | 73 m / 240 ft |
| Deck Strength | t/m ² (Flush steel deck) |
| Breadth Moulded | 16 m / 52 ft |
| Maximum Draft | 5.84 m |
| Dead Weight | 3,250 t |
| Gross Tonnage | 2,769 t |

| Accommodations | |
|----------------|--|
| Accommodations | Max 46 Persons |
| Cabins | 10 x Single Cabins 18 x Double Cabins |
| Gangway | 1 |
| Lounges | 2 |
| Hospital | 1 |
| Gym | 1 |

| Dynamic positioning system | |
|---|--|
| Dual Redundant Dynamic Positioning System (AUTRO / DP3) | |
| 2 x HiPaP 500, Hull Units HL 3770 | |
| 2 x HiPaP Operator Stations Apos 500 (w/responder triggers) | |
| 1 x Light Weight Taut Wire Mk 15B | |
| 1 x Radius 1000 (c/w 2 x interrogators) | |
| 1 x CyScan | |

| Navigation and radio communications | |
|--|--|
| 3 x SAM Radar Pilot Platinum | |
| 2 x Simrad MX510 Navigation DGPS | |
| 3 x Anschutz Gyro Compass | |
| Electronic Chart Display and Information System | |
| Autopilot, Echo Sounder and Speed Log | |
| AIS and VDR | |
| Communication Equipment according to GMDSS Regulations Area A3 | |

| Tank capacity | |
|----------------------------|----------------------|
| Fuel Oil | 849 m ³ |
| Potable Water | 237 m ³ |
| Technical Cargo/FW Storage | 1,370 m ³ |

| Power generation, propulsion & thrusters | |
|--|---|
| Engine Type | Bergen KRMB 9, 2005 kW (2725 hk) 825 rpm, 2 x Volvo 310 kVA |
| Number of Engines | 2 |
| Engine Total Power | 5,454 BHP |
| Emergency Generator | Volvo Penta 60 kVA |
| Rudders | 2 x Brattvaag Flap |
| Propellers | 2 x Kamewa Ulstein 66P74T |
| Tunnel Thrusters | Bow: 2 x 800 BHP Tunnel Stern: 2 x 800 BHP Tunnel |

| Fuel consumption | |
|---|-------------------|
| Fuel estimates are dependent on environmental conditions (e.g. Wind, Waves & Currents). | |
| In Port | 1 m ³ |
| Normal Speed @ 10 kts | 11 m ³ |
| On DP | 8 m ³ |

| Safety equipment | |
|--|---|
| Rescue Boat | 1 |
| According to SOLAS for the specified class and number of crew | |
| Stability according to IMO Res. MSC.266 (84) code of safety for special purpose ships 2008 | |

| Crane | |
|--|-------|
| 25 t AHC crane capable of lifting 25 t @ 10m radius at significant wave height (H _s) 1.5 m minimum | |
| Crane wire length | 500 m |
| Auxilliary crane for provision handling | |

| Remotely operated vehicles (ROVs) | |
|--|--|
| 1 x XLS 150hp WROV | |
| Port and Starboard Launching of WROV's | |
| ROV Workshop and Maintenance Area | |
| Offices and Meeting Rooms for ROV Operations | |

| Winches | |
|------------|-----------------------|
| IROV Winch | Dynacon AHC 521 Winch |
| ROV Winch | Dynacon 521XL Winch |

| Helix IROV specifications | |
|---------------------------|-------------------------------------|
| Dimensions | 2,400 mm x 2,400 mm x 1,500 mm High |
| Depth Rating | 3,000 m Rated System |
| Weight In Air | ~ 2,500 kg* |
| Weight In Sea Water | ~ 2,200 kg* |
| Through Frame Lift | ~ 30,000 kg* |

| IROV HPU/hydraulics | |
|----------------------------------|--|
| Motor | 100 HP Impaq, 4 Pole, 3000VAC |
| Pump | Kawasaki K3VL 140 |
| Output | ~ 200 lpm* |
| Operating Pressure (bar) | ~ 210-240 Bar* |
| Tooling Valve (Grab Open/Close) | Pilot Operated NG6 supplying ~60 lpm & ~210 bar* |
| Solenoid Valve Pack | 1 x 10 Way NG3 Solenoid Valve Manifold. 15 lpm per valve |
| Pan & Tilt Units | 2 x Sub Atlantic, Hydraulically Driven |
| Thrusters | 4 x Horizontally Mounted Rotary Power A200 |
| Max Thrust FWD / AFT / Lateral | ~800 Kgf * |
| Hydraulic Oil / JB Compensation | Environmentally Friendly Panolin Synth 32 |

| Boulder grab specifications | |
|-----------------------------|---|
| Type | 6 Tine, Orange Peel Style |
| Capacity | 5,000 Kg SWL |
| Weight In Air | 1,580 Kg |
| Weight In Seawater | 1,350 Kg approx |
| Dimensions Closed | 1,600 mm Wide x 1,905 mm High |
| Dimensions Open | 2,600 mm Wide x 1,570 mm High |
| Max Grab Opening / Span | 2,200 mm Internal |
| Operation | 6 x Hydraulic Cylinder Actuation. Hyd. power supplied by IROV |

| Support vans / equipment | |
|--------------------------|---|
| Control Vans | Standard 20 ft, A60 Offshore ISO Container 6,040 mm x 2,430 mm x 2,600 mm. 12,000 Kg * |
| Workshop Van | Standard 20 ft, A60 Offshore ISO Container 6,040 mm x 2,430 mm x 2,600 mm. 12,000 Kg * |
| IROV 1 Transport Frame | 2,900 mm x 2,900 mm x 615 mm, ~ 2,000 Kg* |





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