



SEAHORSE 4 WROV 125 HP

Seahorse 4 remotely operated vehicle is a 125 HP. Work Class ROV, high performance professional ROV system with Garage TMS which can be used for a variety of underwater tasks such as drilling support, observation, survey and NDT inspections, construction, intervention, IRM, etc. The stainless steel open-frame design, the abundance of space and the generous payload capability provide a versatile solution for the fitting of additional equipment and sensors.

Performance/Dimensions

Horse Power	:	125 HP.
Depth Rating	:	600 MSW.
	:	2000 MSW. (Optional)
Payload	:	150 Kg.
Dimensions		
Height	:	1,960 mm.
Length	:	2,900 mm.
Width	:	1,300 mm.
Mass in Air	:	3,000 Kg.
Bollard Pull @ 0 Knots		
Forward	:	500 Kgf.
Reverse	:	450 Kgf.
Lateral	:	300 Kgf.
Vertical	:	300 Kgf.
Maximum Velocity/ Operational current		
Forward	:	< 1.64 m/s. < 3.2 Kt.
Reverse	:	< 1.44 m/s. < 2.8 Kt.
Lateral	:	< 1.44 m/s. < 2.8 Kt.
Vertical	:	< 1.28 m/s. < 2.5 Kt.
Turning Rate	:	150 Degrees Per Second.

ROV Spread power requirements:

440 VAC 3phases 60 Hz 300KVA.

Features

- High Reliability.
- 600 MSW. Version.
- High Thrust Capability.
- 150 kg Payload Capacity.
- Multiple Camera & Sensor Interfaces.
- 5F manipulator.
- Optional 7F manipulator.
- Auto-Heading, Depth.
- Optional Auto Altitude.
- Fiber Optic Gyro.
- Aluminum Open Frame Design.
- Compact Surface Control Unit.

Lighting

7 off 120 VAC 300 Watts halogen lamps, dimmer controlled, 1 off 24 VDC 40 Watts mounted on frame and camera pan and tilt unit.

Frame

The SEAHORSE 4 frame is manufactured from T6 aluminum.

- Aluminum load frame and Stainless Steel fasteners.
- Lift point.



Control System

The system incorporates a Surface Control Unit (SCU) which communicates with the vehicle electronics which are housed in one-atmosphere E-pod located on the vehicle.

The SCU incorporates:

- 6 off color monitors.
- Pilot's control panel & joystick.
- Light dimmers.
- Automatic depth & heading control.
- Video overlay system.
- Earth leakage protection system (LIMs).

Power requirements:

440 VAC 3 phases 60 Hz 30 KVA.

ROV E-pod consists of the thruster system, light dimmers, telemetry system, compass, depth transducer, pan and tilt camera controls. The housing also has spare electrical connectors to provide power and control for extra equipment interfaces.

Propulsion System

The vehicle is propelled by eight hydraulic motors, propellers and nozzles, arranged in the following configuration:

- 4 off propeller thrusters for horizontal.
- 4 off propeller thrusters for vertical.

Vehicle Functions/ Integral Sensor

- TRITECH fluxgate compass.
- Hydraulic pressure sensor.
- Depth sensor and auto depth function.
- Auto heading function.
- Pitch and roll sensors.
- Turns counter.
- 5F manipulator.
- 7F manipulator.

Tether Management System

Type	: Side entry TMS.
Operating	: Sea state 5.
Depth Rating	: 1500 MSW.
Dimensions	: 4,2 x 2,3 x 4,1 (M).
Weight in Air	: 2,000 Kg.
Tether	: 120 M.
Lighting Capability	: 2 off 120 VAC, 300 Watts Halogen lamps and 1 off 24 VDC, 40
Video capability	: 3 channels composite.

Optional Equipment

The SEAHORSE 4 ROV system will support the following additional equipment which is available as options to the standard specification:

- High definition cameras.
- Boom arm camera.
- High Definition Sonar System.
- Profiling Sonar.
- Side Scan Sonar.
- Bathymetric and Oceanographic Sensors.
- Torque tool.
- CP probe.
- Water jet.
- Cleaning brushes.
- Cable cutter.
- Pipe Tracker.
- GPS navigator.
- 19" display for bridge.
- 7F Manipulator.

Standard Equipment

- Umbilical System.
- Winch.
- A-Frame, Sheave, Lock-latch and Bullet.
- SIT (Silicon Intensified Transistor) Camera.
- Color zoom video camera and sonar system.
- 5F manipulator.
- 16 channels video matrix switcher.
- 4 channels audio communication.
- DVD recorder and black box.

