

SeaTrepid Outland 1000



The SeaTrepid Outland 1000 observation Class ROV offers a truly versatile, professional ROV system suitable for offshore use. Its small size provides a stable platform in spaces that are inaccessible by other larger ROV systems. This access helps ensure the security of assets by providing reliable video and sensor packages. With an enhanced propulsion system, it will continue working in currents that often stop other ROV small observation class systems.

SeaTrepid owns and operates one of the largest fleets of Outland 1000 ROV systems in the United States. This system has been the “bread and butter” of SeaTrepid since our inception.

Due to our intimate knowledge with this small observation class system we have the ability to push it beyond the publicly accepted limits of an observational class ROV system.

The thrust to weight ratio of this system allows our operators to perform tasks that amaze our clients. We have used this 35lb ROV to push 60 ton sheers, guide P&A tools into subsea well heads, position diamond wire saws into their cut location, double wrap and half hitch a 15' nylon strap, and even untie a bowland knot in a rope.

SeaTrepid Outland 1000

PERFORMANCE / DIMENSIONS:

Depth Rating:	1,000 fsw (300 msw) standard
Payload:	5.0 lb (2.3 kg) lead ballast
Height:	10.5 in (260 mm)
Length:	26.0 in (650 mm)
Width:	15.0 in (370 mm)
Mass in air:	39 lb (17.7 kg)
Turning Rate:	270 degrees per second

CONTROL SYSTEM:

This system incorporates a Surface Control Unit (SCU) which communicates with the ROV's electronics housed in a one-atmosphere enclosure located on the vehicle.

The SCU incorporates:

- Pilot's control console and joystick
- Light dimmers
- Automatic depth and heading control
- Video overlay system
- Earth leakage protection system

SCU power requirements: 110 VAC, 50 / 60 Hz, 1800 WATT

The Outland 1000 ROV electronics are housed in an aluminum one-atmosphere enclosure, incorporating the thruster drive systems, light dimmers, telemetry system, compass, depth transducer, and camera controls. The housing also has spare electrical connectors to provide power and control for user interfaced equipment.

ROV power requirements: 165 VDC @ 10 amps.



This Outland 1000 was deployed into a 400 foot deep and 8 foot diameter fresh water surge shaft in order to perform four different tasks: Turning 14 lb bolts, cutting hoses, cutting wires, and observing cement operations. While on site, it also removed 17 lbs of debris.

CAMERAS AND SONAR:

- 1 x Compact 480 line color - 360° tilt camera
- 1 x Compact 600 line Black and White low lux - 360° tilt camera
- 1 x Compact 480 line color - fixed camera
- 1 x Imagenex 852 mechanical scanning sonar (standard)
- 1 x BlueView P900 imaging sonar (optional)

LIGHTING:

- 2 x 150 Watt halogen lamps, dimmer controlled
- 2 x 10 Watt Sartek HID Lights (optional)

PROPULSION SYSTEM:

The ROV is propelled by four Tecnydyne thrusters incorporating DC brushless motors, arranged for maximum efficiency:

- 2 x Model 520 horizontal thrusters (providing 23 lbf each)
- 1 x Model 300 lateral thruster (providing 18 lbf)
- 1 x Model 300 vertical thruster (providing 18 lbf)

OPTIONAL LAUNCH AND RECOVERY SYSTEM (LARS):

This ROV system is capable of being transported via helicopter to location and hand launched to complete the work required. This LARS system is most often used when working from DP vessels.

Winch:	500 ft (152 m)
Weight:	4,500 lb (2,040 kg)
Length:	14.0 ft (4.3 m)
Width:	6.5 ft (2.0 m)
Safe Working Load:	1,950 lb (885 kg)
LARS power requirements:	110 VAC, 50 / 60 Hz, 19 Amp



A custom Outland 1000 with an Imagenex 852 mechanically scanning sonar, BlueView multibeam sonar, cathodic potential probe, and modified Seabotix grabber. This system was customized for an inspection job in very low visibility.