



OFFSHORE TECHNOLOGY SOLUTIONS LTD.

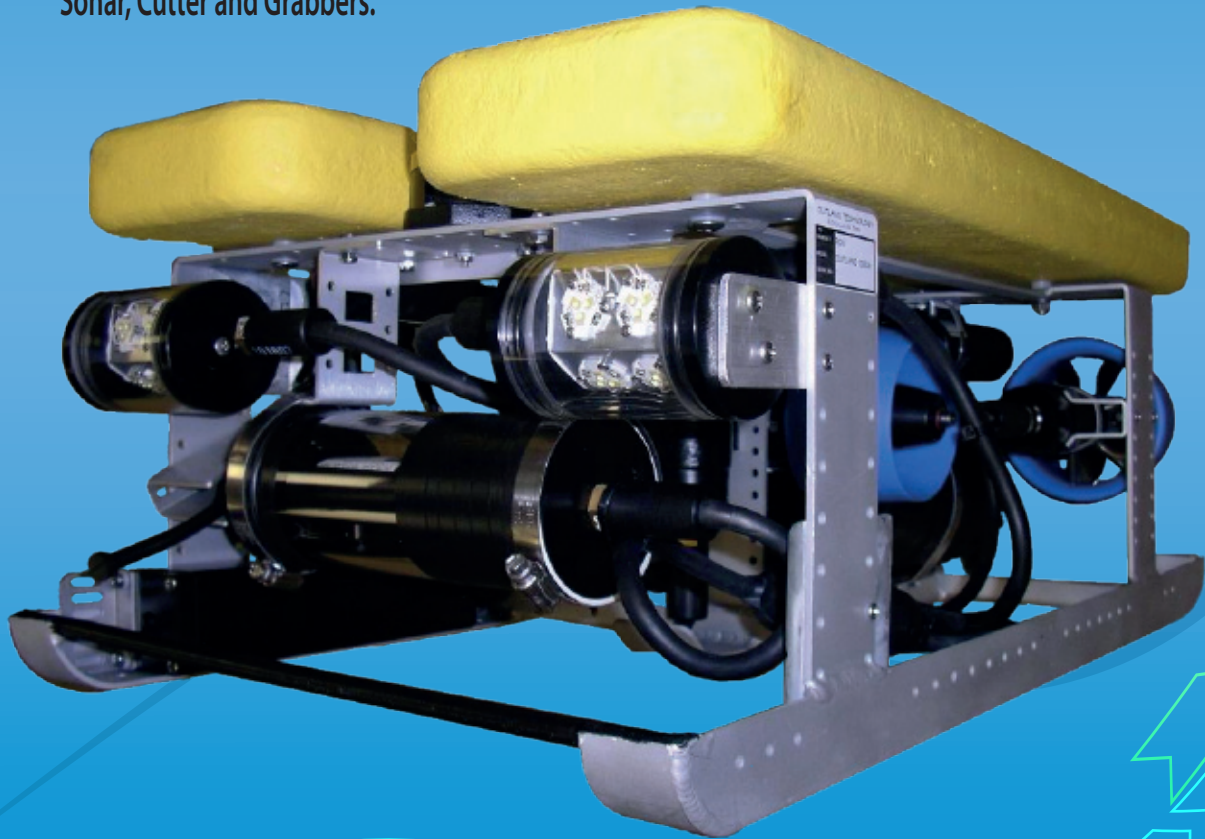
OFFSHORE TECHNOLOGY SOLUTIONS LTD. ROV - 2000 SYSTEMS

OTSL ROVFLEX Division OUTLAND 2000.

OTSL Outland 2000 ROV Systems are highly mobile, rapid response systems, which can be mobilized by traditional means of transport; commercial airline carriers and helicopters to work locations. ROV 2000 is capable of working in depths up to 1000ft. (300msw), deployable by hand or with the use of a LARS to overcome currents and heavy seas.

OTSL Outland 2000 is well equipped to handle many tasks and capable of developing in excess of 87lbs of thrust. For a small unit it has one of the best power to weight ratios in the market place.

OTSL Outland 2000 ROV system is capable of being tooled up with CP, UT, Multi Beam 2D and 3D Sonar, Cutter and Grabbers.



ROV 2000 Controller & Console



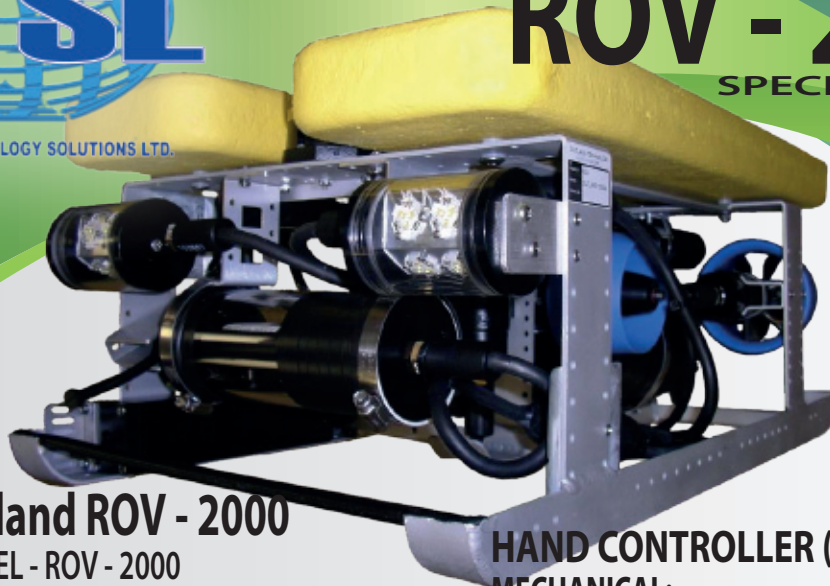


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ROV - 2000

SPECIFICATIONS



OTSL Outland ROV - 2000

VEHICLE MODEL - ROV - 2000

Vehicle rated for operation to 1000 ft. (300m)

Vehicle Attributes:

A. 4 Thrusters (2 Horiz., 1 Lateral, 1 Vertical)

Providing 38lbs of Thrust each.

Total Thrust: 152lbs.

B. UWC-360D (Dual Camera on Tilt Assembly)

360 degree, Color and Black & White.

(1 ea. Color 600 line, .001 lux)

(1 ea. B&W 600 line, .0003 lux)

C. Depth Transducer

(programmable to Fresh & Salt Water).

D. Electronic Compass, GYRO.

E. 4 ea. UWL-500 LED Lights (1740 Lumens ea.)

Total 6,960 lumens.

F. 1 ea. 8 Pin Spare Connectors.

(prewired for Sonar & Manip.)

G. Tritech Scanning Sonar.

MECHANICAL:

Size..... 28"L x 18"W x 15"H

Size..... 71.1cm x 45.7cm x 66cm

Weight..... 50 Lbs. (22.67 Kg.)

Thrust (per thruster) ... 0 - 38 Lbs. Variable.

Payload 20 Lbs (9.0 Kg.)

ELECTRICAL:

Motor Voltage 165 VDC input 10 amp.

CABLE * C - 3405

MECHANICAL:

Size.... 0.56" (13.7mm) Dia. x 500 ft. (150 mt.)

Breaking Strength 1000 Lbs (450 Kg.)

Jacket 80 Mils Green Cellular Polyurethane.

Weight UT is 49 Lbs. Dry, Natural Wet.

HAND CONTROLLER (HC-1000)

MECHANICAL:

Size..... 7.5"L x 4.5"W x 6"H

Size..... 19cm x 11cm x 15cm

Weight 1.1 Lbs. (0.5 Kg.)

ELECTRICAL:

Power In 12 VDC from Power Supply.

Data Output to Vehicle RS485

HAND CONTROLLER (HC-1000)

Joystick Controller Details

A. Single Joystick for 3 - axis control.

B. 16 Key keypad control for Vertical (up/down)

* Thruster Control * Camera tilt Control

* Light Dimmer Control

* Auto Hover ON/OFF * Auto Header ON/OFF

* Thruster Power Level

* 2 Manip * 4 Spare Keys for future application.

CONTROL SYSTEM

POWER SUPPLY (PS-1050)

MECHANICAL:

Size..... 22"L x 13"W x 23"D

Size..... 55cm x 33cm x 57cm

Weight 54 Lbs. (25 Kg.)

ELECTRICAL:

Power In 100 - 240 VAC (50/60 Hz.)

@ 1800 Watts MAX.

Power Out to ROV ... 165 VDC @ 10 amps.

Spare twisted pair.

Video Overlay, Time/Date, Depth, Heading, Text.

Includes: 12" 450 nit, LCD Monitor, Keyboard &

V 1000 Output. * GFI, LIM Isolation Protection.

ELECTRICAL: CAT5E 4 TP #24 AWG.

Conductors : 12 ea. #22awg.

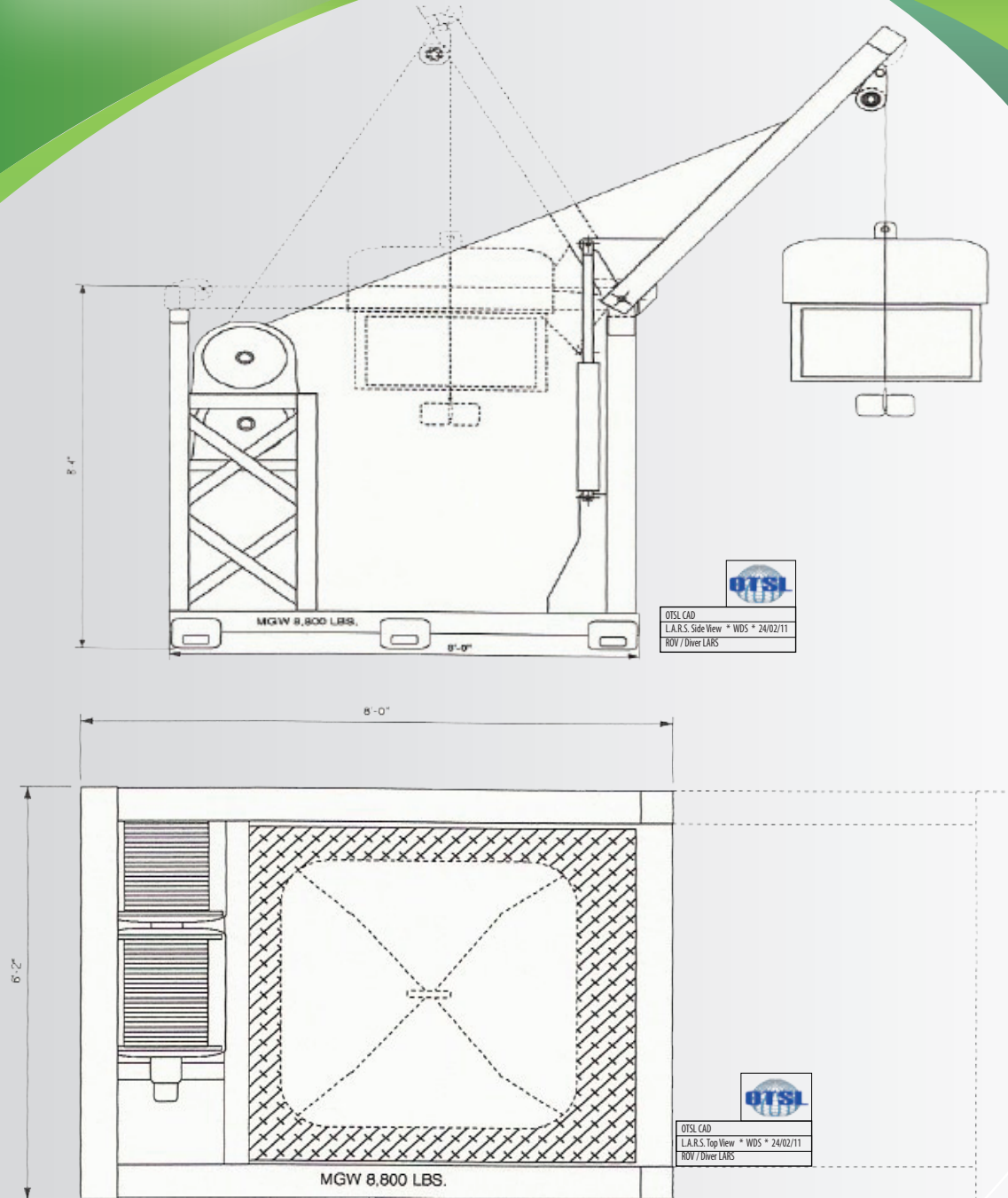


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ROV - 2000 Options.

1. 1000 ft. C-3410 Cable. (Cable reel with slip rings).
2. Sonar Unit. Trittech micro Nav Scanning sonar.
3. Grabber (Seabotics).
4. Cable reel w/slip rings.
5. Multibeam Sonar blue view P900.
6. Many other options: i.e.
 - Cygnus UT System
 - Cathodic Potential Probe
 - Rope Cutters.

LARS (Optional)

This ROV System is more suited and capable to heavy sea states and high currents. Deployable using LARS system setup on DP Vessel, Platforms and anchored structures.

Dimensions - 8' L x 6.2' W x 6.4' H
Winches - (2) Hydraulic powered 600ft. Cable.
Clump Weight - (700, 480, 350) 1,400 Lbs.
LARS Weight - 8,800 Lbs.
SWL - 4,000 Lbs.
LARS Power Requirements - Hydraulic 20GPM @ 2000 PSI.