

Launch and Recovery System (LARS)

Oil & Gas

Overview

OceanWorks International supplies Launch and Recovery Systems for use with its HARDSUIT™ Atmospheric Diving Systems (ADS) and other custom systems, including Remotely Operated Vehicles (ROV) and sub sea work packages. As a system integrator OceanWorks typically develops the configurations and specifications required for the LARS to suit the project requirements. We then manage qualified subcontractors and other LARS suppliers to produce the required end product. OceanWorks typically designs and builds the system interface components and assumes responsibility for the overall design and integration. For example, OceanWorks has built multiple ADS Tether Management Systems (TMS); large deepwater electric drive ROV winches; launch packages for large subsea instruments and tool skids; passive heave compensation systems; fly-away LARS for military deployments, and a number of other systems.

Features

Power Distribution Unit (PDU)

- ▶ Allows switching from two input power sources

Hydraulic Power Unit (HPU)

- ▶ Redundant hydraulic assemblies provide backup for single point failures and ability to power two LARS systems
- ▶ Two electric motor pump sets
- ▶ Single or dual reservoirs

Tether Management System (TMS)

- ▶ Subsea hydraulic power pack
- ▶ Telemetry control system
- ▶ Tether winch & latch
- ▶ Variable length horizontal excursions
- ▶ Lights, pan & tilt, multiple camera options
- ▶ Sonar
- ▶ Auxiliary hydraulic valve pack for optional tooling

Optional Accessories

- ▶ TMS sonar system
- ▶ Deck communication system
- ▶ Deck camera(s)
- ▶ Subsea hydraulic tooling
- ▶ Passive heave compensation
- ▶ Spare parts & training

Certification

- ▶ System certified to DNV – others optional



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Features

Skid & Luffing

- ▶ Base skid supports winches and accessories
- ▶ A-frame of telescoping boom luffing
- ▶ TMS latching

Clump Weight System

- ▶ Provides stable water entry for the TMS
- ▶ Can be used for emergency recovery

Main Umbilical

- ▶ Steel armored
- ▶ Optical fibers for data & control
- ▶ Power conductors for TMS & subsea components
- ▶ Various lengths available to suit application

Control

- ▶ Surface control of all TMS & LARS functions
- ▶ Local control & display on LARS
- ▶ Remote control & display in control van

Power

- ▶ 460 VAC 60Hz or 380 VAC 50Hz
- ▶ 3 phase
- ▶ power level to suit system

Environmental

- ▶ Depth up to match system operation
- ▶ Sea state 4-5 (typical)
- ▶ Significant wave height 1.8m (6ft) (typical)
- ▶ Temperature -4°F to 122°F , -20 °C to + 50°C (typical)



Specifications

Typical ADS Configuration	Shipping (Road)	Shipping (Air)	Operational
Skid with Luffing System, Umbilical Winch, Clump Winch, TMS & TMS Winch	L 6,785 mm (267 1/8 in)	6,071 mm (239 in)	8,698 mm (342 7/16 in)
	W 3,150 mm (124 in)	2,438 mm (95 in)	3,150 mm (124 in)
	H 3,273 mm (128 7/8 in)	2,438 mm (96 in)	9,735 mm (383 1/4 in)
Electro Hydraulic Power Unit	L 1,676 mm (66 in)	1,676 mm (66 in)	1,676 mm (66 in)
	W 1,651 mm (65 in)	1,651 mm (65 in)	1,651 mm (65 in)
	H 1,906 mm (75 in)	1,906 mm (75 in)	1,906 mm (75 in)