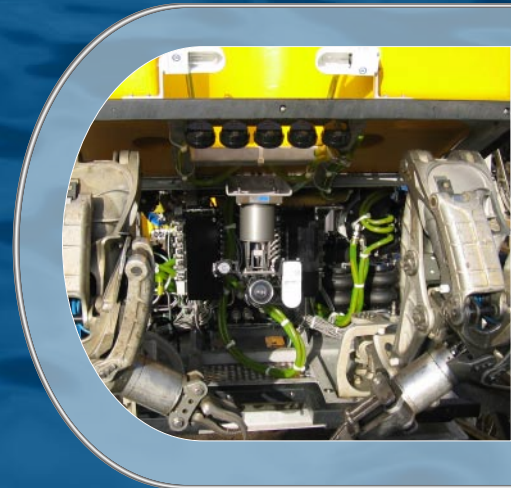


HYDRA® MAGNUM 120 HP SYSTEM

The Hydra® Magnum represents the backbone of Oceaneering's fleet of high-powered remotely operated vehicle (ROV) work systems with deepwater capabilities. Reliable and easily maintained, the ROV provides a 120 hp, high-thrust, cage-deployed system that is designed to accommodate underwater intervention tasks in support of oil and gas drilling, construction, and production activities. The Hydra® Magnum evolved from years of experience in deepwater work class ROV operations. The ROV delivers performance in water depths to 10,000 fsw and also in severe weather conditions.

Oceaneering maintains a world leadership position in providing deepwater work class ROVs to the oil and gas industry. The Hydra® Magnum ROV is one several types of ROVs in the company's extensive fleet that are designed and built at Oceaneering's Morgan City, Louisiana facility.

- Field Proven
- Ultra Reliable
- High-Powered
- Easily Maintained



HYDRA® MAGNUM 120 HP SYSTEM SPECIFICATIONS

Vehicle

Length:	8.5 ft
Width:	4.8 ft
Height:	6 ft
Weight in air:	5,600 lbs
Frame:	6061 T6 Aluminum
Fittings:	316 Stainless Steel
Depth Rating:	10,000 ft
Payload:	500 lbs
Horsepower:	2 ea 60 hp Hydraulic Power Units (120 hp)
Propulsion:	2 x Fore/Aft 2 x Lateral 2 x Vertical
Thrust:	
Forward/Reverse:	1,250 lbs
Lateral:	1,185 lbs
Vertical:	1,000 lbs
Power Requirements:	480 VAC, 3 phase, 60 Hz
Telemetry/Control:	Asynchronous serial data transmission microprocessor control for auto heading, depth, altitude, & cruise, data displays
Lighting:	5 x 250 watts
Cameras:	1 x Wide angle Low Light, 1 x Color CCD 2 x B&W CCD tooling 1 x B&W CCD aft

Navigation:

- Mesotech MS900 color imaging sonar
- KVH or Honeywell HMR3000 gyrocompass
- Dinsmore directional heading sensor
- Paroscientific DigiQuartz depth sensor

Manipulators:

- 1 x 7 function Schilling Conan
- 1 x 7 function Schilling Orion
- (Other options available)

Umbilical

- High-strength, armored opto-electro-mechanical

Subsea Deployment Cage

Length:	11 ft
Width:	6.6 ft
Height:	12 ft
Weight in air:	7,400 lbs
Weight in water:	4,050 lbs
HPU:	60 hp
Tether:	600 ft Standard 1,600 ft optional
Camera:	2 x B&W CCD
Lighting:	2 x 250 watts

Deployment System

Dynacon 421/421D3 Winch	
Length:	14 ft 10 in
Width:	10 ft 8 in
Weight (w/cable):	48,000 lbs
Dynacon 6021 Docking Head A-frame	
Length:	38 ft
Width:	11.5 ft
Weight:	65,000 lbs

Standard Tooling Packages

- 1.25 in Dia. wire rope cutter
- 1 in fiber rope cutter
- Ring gasket replacement tool
- TP03 dredge/jet pump, Rotary grinder/cutter/buffer

Control / Work Vans

Lengths:	14 / 16 ft
Width:	8 ft
Height:	8 ft
Weights:	9,960 / 14,000 lbs

Constructed of Aluminum

Options include stacking and Positive Pressure vans

