

HYDRA® MAGNUM PLUS SYSTEM

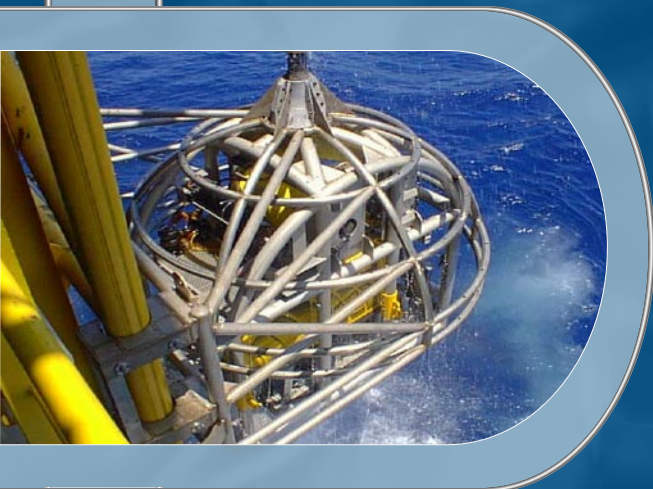
The Hydra® Magnum represents the backbone of Oceaneering's fleet of high-powered remotely operated vehicle (ROV) work systems with deepwater capabilities. Reliable and easily maintained, the ROV provides a 170 hp, high-thrust, cage-deployed system that is designed to accommodate underwater intervention 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.

Fiber optics are used as the primary transmission link for all video and data signals between the vehicle and the surface control console. This allows extremely high quality video technology as well as plug and play installation of sensors and equipment.



The side-entry cage, with a capacity of 1,600 ft of neutrally buoyant flying tether, provides protection during launch and recovery, makes deployment and recovery more efficient in marginal weather and high currents, provides additional tooling capabilities and storage, and provides additional payload for the deployment and recovery of subsea equipment.

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 85 hp Hydraulic Power Units (170 hp)
Propulsion:	4 x Vectored Horizontal 2 x Vertical

Thrust:

Forward/Reverse:	1,600 lbs
Lateral:	1,600 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:	8 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
- Honeywell HMR3000 gyrocompass
- Dinsmore directional heading sensor
- Paroscientific Digiquartz depth sensor

Manipulators:

- 1 x 7 function Schilling Conan
- 1 x 7 function Schilling Orion
- (Spatially Corespondent Optional)

Umbilical

- High-strength, armored opto-electro-mechanical 10,000 ft

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:	50 hp
Tether:	1,000 ft Standard 1,600 ft Optional
Camera:	1 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	

