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 100 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 and other types of ROVs in the company’s extensive fleet are designed and built at Oceaneering’s Morgan City, Louisiana facility.

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

The side-entry cage, with a capacity of 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.
**HYDRA® MAGNUM 100 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 50 hp Hydraulic Power Units (100 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
  - (Spatially Correspondent optional)

**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

**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: 50 hp
- Tether: 600 ft Standard
- Camera: 2 x B&W CCD
- Lighting: 2 x 250 watts