

# HYDRA® MILLENNIUM PLUS

The Hydra® Millennium Plus is a powerful cage deployed remotely operated vehicle (ROV) that incorporates leading edge technology for improved performance and maintainability. The ROV's design features a dual manipulator, 330 hp work class system with an enhanced thruster configuration that increases lift capacity by more than 50% when compared to the standard Hydra® Millennium ROV work system.

The Plus model maintains the integrity of the standard Hydra® Millennium ROV while offering more serviceability, tooling flexibility and simple survey integration capabilities. These characteristics facilitate the more demanding needs of heavier construction and completion work scopes. As with the original Millennium design, the Plus system employs microprocessor based telemetry to minimize maintenance, decrease set up time, simplify troubleshooting and to provide more automatic control functions.

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.



## Vehicle

Length: 11 ft 5½ in  
 Width: 5 ft 4½ in  
 Height: 6 ft  
 Weight in air: 8,800 lbs  
 Frame: 6061 T6 Aluminum  
 Fittings: 316 Stainless Steel  
 Depth Rating: 10,000 ft (standard)  
 Payload: 900 lbs  
 Horsepower: 2 ea 110 hp Hydraulic Power Units (220 hp)  
 Propulsion: 4 x Vectored Horizontal  
 4 x Vertical  
 Thrust: Fore/Aft 1,450 lbs  
 Lateral 1,450 lbs  
 Vertical 2,000 lbs  
 Required Power: 480 VAC, 3 phase, 60 Hz  
 Lighting: 8 x 250 watts  
 Cameras: 1 x Digital Video & Stills Camera  
 1 x Low Level  
 1 x Color Zoom  
 1 x Domed P&R  
 1 x B&W CCD Aft  
 3 x Additional Camera Ports

## Navigation:

- Mesotech MS1000 Color Imaging Sonar
- 2305 High Resolution Sonar Head
- TSS Meridian Gyro
- Paroscientific Digiquartz Depth Transducer
- Auto Depth/Auto Heading/Auto Altitude
- Full-Time Bathymetry Display

## Manipulators:

- 2 x 7 Function Schilling Conan Rate Controlled
- Optional: Spatially Correspondent (SC) Packages

## Video & Data:

- 16 each RS232/RS485 Serial Channels (11 Spare)
- 8 Video Channels

## Standard Tooling Packages

- 1.25 in Wire Rope Cutter, 1 in Fiber Rope Cutter
- Ring Gasket Replacement Tool Package
- TP03 Dredge/Jet Pump, Rotary Grinder/Cutter/Buffer
- 1 x 2,500 psi @ 3.5 gpm Intervention Pump
- 2.5 gal Intervention Pump Reservoir
- 10,000 psi High Pressure Intervention Package
- Control Consoles
- Pilot & Navigator Stations
- DVD & SVHS Video Recorders
- Direct Accessibility to Video & Data Muxes

## Umbilical

- 10,000 ft High Strength, Armored, Opto-Electro-Mechanical
- Heavy Weather Deployment & Cursor System
- Dynacon 521XL Winch
- 7021 Docking Head A-Frame

## Subsea Deployment Cage

110 hp Hydraulic Power Unit  
 Cage Dual Thruster Package  
 Tether: 1,000 ft  
 Camera: 2 x B&W CCD  
 Lighting: 2 x 250 watts  
 Optional: Add-on Tooling Packages  
 Long Excursion Tether

