

Millennium® Plus

Heavy work class ROV

The Millennium® Plus ROV is a side entry cage deployed, dual manipulator 220 hp heavy work class ROV. The cage or Tether Management System (TMS) supplies an additional 110 hp and is capable of powering skids, and has thruster control and auto heading.



FEATURES

Fly-by-wire station keeping system

10,000 fsw / 3,000 msw depth rating (13,000 fsw / 4,000 msw optional)

220 hp

Specifications

Vehicle Specifications

Weight in air	8,800 lb / 4,000 kg
Dimensions (LxWxH)	10.8 x 5.5 x 6.3 ft / 3.3 x 1.7 x 1.9 m
Depth rating	10,000 ft / 3,000 m (standard) 13,000 ft / 4,000 m (optional)

Vehicle Power and Performance

Hydraulic power units	2 x 110 hp(E)
Propulsion	4 x vectored horizontal 4 X vertical
Thrust	
Forward/reverse:	2,000 lb / 900 kg
Lateral:	2,000 lb / 900 kg
Vertical:	2,080 lb / 950 kg

Vehicle Manipulators and Tooling

Manipulators (2)	5 or 7 function: rate, SC, or hybrid control
Hydraulic Tool Control	Multiple directional control valves with proportional pressure and flow control Maximum 40 gal/min

Vehicle Cameras and Lighting

Cameras	Standard definition (SD) High definition (HD) 3D HD (optional)
Lighting	Up to 8 x 250 W (quartz halogen or high-intensity LED)

Vehicle Control and Navigation

Automatic control	Fly-by-wire station keeping system Auto heading/depth/altitude/pitch Cruise control
Heading and altitude sensors	Survey-grade gyro Backup flux gate compass
Depth sensor	High-resolution digiquartz Backup analog depth sensor
Navigation sensor	Doppler velocity log
Obstacle avoidance sonar	Kongsberg 1071 or 1171 Tritech SeaKing

Vehicle Optional Power and Data Interfaces

Data links	Multiple RS232 and RS485 Ethernet Optical fiber
Power	24 V DC and 110 V AC

Tether Management System (TMS)

Type	Side entry cage or top-hat
Propulsion	2 x horizontal (cage only)
Hydraulic power unit	1 x 110 hp(E)
Electro-optical tether	2,000 ft / 600 m (cage) 4,000 ft / 1,200 m (cage) optional 1,300 ft / 400 m (top-hat)
Cameras	2 x charge-coupled device (CCD)
Lighting	2 x 250 W (quartz halogen or high-intensity LED)

Launch and Recovery Systems (LARS) (choice of)

Overboarding	
A-frame w/ or w/o docking head	
Heavy-weather overboarding system	
Cursor	
Winch	
Heavy lift winch with conventional or OHRA level wind	