

Millennium® Plus with RIPS IT3

220 hp Heavy Work Class ROV with Isolated Tooling

The Millennium® Plus ROV with ROV Integrated Pumping Solution (RIPS) IT3 is a side entry cage deployed, dual manipulator, 220 hp heavy work class ROV.

The RIPS IT3 solution delivers with an isolated tooling circuit capable of pressures up to 3,000 psi.



FEATURES

Maximizes ROV power and efficiency

High pressure, high flow isolated tooling capabilities

Optional auto hot stab capabilities via closed-loop position control

Specifications

Vehicle Specifications	
Weight in air	≈10,000 lb / ≈4,535 kg
Dimensions (LxWxH)	10.8 x 5.3 x 6.8 ft / 3.3 x 1.6 x 2.1 m (height increase of 6 in/.15 m with protective outerskins added)
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

RIPS Tooling Capabilities	
Isolated tooling	0-35 gal/min @ 0-3,000 psi (proportional)
Tooling reservoir	4 gal (standard)
Tooling valves (15)	3 x 35 gal/min proportional flow 1 x 20 gal/min proportional flow and pressure 6 x 6 gal/min proportional flow 5 x 6 gal/min rate function

High Pressure Intervention Capabilities (Add-ons)	
RIPS 20k kit	0-2 gal/min @ 0-20,000 psi with 20 gal bladder
10k duplex pump	0-2 gal/min @ 0-10,000 psi

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	