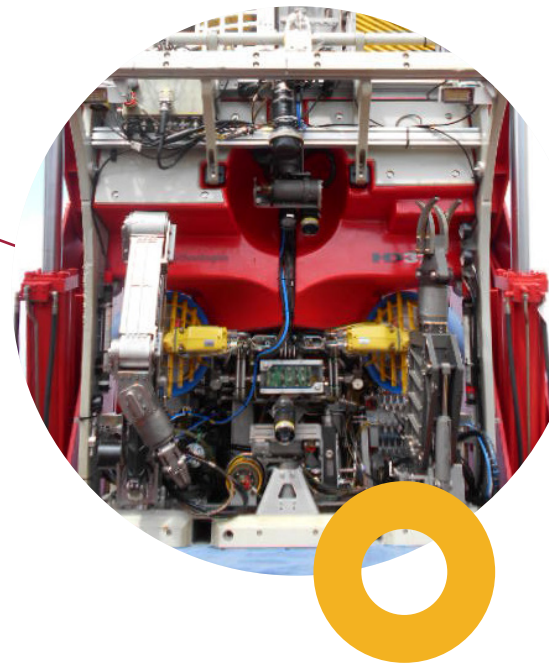


# Schilling HD ROV

Speciality marine contracting ROV system



# Schilling's **Heavy-Duty (HD) ROV System** is designed for performance, reliability, and maintainability.



The *Schilling Heavy-Duty (HD) ROV System* is designed for performance, reliability, and ease of maintenance. Innovative features in the frame design and modular sub-systems combine to produce a high performance vehicle suitable for IRM, drill support, and heavy-duty construction operations, while maintaining a compact system footprint ideal for rapid transportation and mobilization.

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The *Schilling Heavy-Duty (HD) ROV System* is designed to support IMR, drill support, and heavy-duty construction operations in 3,000 msw (optional 4,000 msw available) with 425 to 850 m tether capacity.



## Experience

Helix Robotics Solutions currently operates and maintains 54 work class ROVs, 5 trenching systems, 2 ROVDrill systems and 3 DP III support vessels and 1 DP II IMR vessel via strategic offices in key areas of the world.



## Innovation

Helix Robotics Solutions works closely with our clients and vendors to seek and resolve complex technical developments to engineer practical solutions and implement in the most efficient, safe and economical ways possible.



## Value

Helix Robotics Solutions is one of the most innovative and reliable specialty marine contractors in the world. Focusing on providing leading edge underwater, unmanned services in extreme environments, Helix strives to deliver the highest value to its customers.

## TECHNICAL SPECIFICATIONS

### ROV vehicle specifications

Through-Frame Lift	3,000 kg
Weight in Air	3,700 kg
Dimensions	2.5 m x 1.7 m x 1.9 m
Payload	250 kgf

### Thrust Performance

Forward / Aft / Lateral	900 kgf
Vertical - Up / Down	850 kgf

### Equipment Fit

Cameras	Various options
Depth Sensor	Digiquartz®
Heading Sensor	Schilling
Doppler	RDI Navigator 1,200 kHz
Strobe	ST400AR
Lights	(8) ROS 110AC
Pan and Tilt	Schilling Electric
Valve Pack	(2) 8-function

### Propulsion

HPU	150 hp, 112 kW
Operating Pressure	207 bar
Thrusters	(7) Sub Atlantic

### Hydraulic Requirements

Fluid	Mineral, glycol, or synthetic
Maximum Pressure	70 LPM

### ROV applications

150 hp HPU
3 t through-frame lift
250 kgf payload
StationKeep™ installed, standard
Compact footprint
High thrust performance
3,000 msw standard; 4,000 msw option
70 LPM auxiliary hydraulic system
Extensive tooling installation space

### Frame

The HD ROV incorporates high strength-to-weight ratio frame design that enables a very high specification within a compact footprint.

### Tether management system (TMS)

The HD Tether Management System (TMS) has been designed around a field-proven 'shuttling drum' concept that provides exceptionally simple tether routing. The complete tether drum moves on a carriage system allowing the tether to exit the drum directly above and through the payout sheave.

425 m tether capacity standard, 850 m capacity EXE model, option

28 mm lightweight tether

Electrically driven without hydraulics

Duplex stainless steel construction

Shock absorbing docking snubber unit

9.7 t safe working load

6.7 t lower latch capacity

### TMS specifications

Safe Working Load	9,700 kg
Through-Frame Lift	6,700 kg
Weight in Water	1,580 kg
Dimensions	1.85 m x 2.19 m
Haul in Speed	50 mpm

### Tether

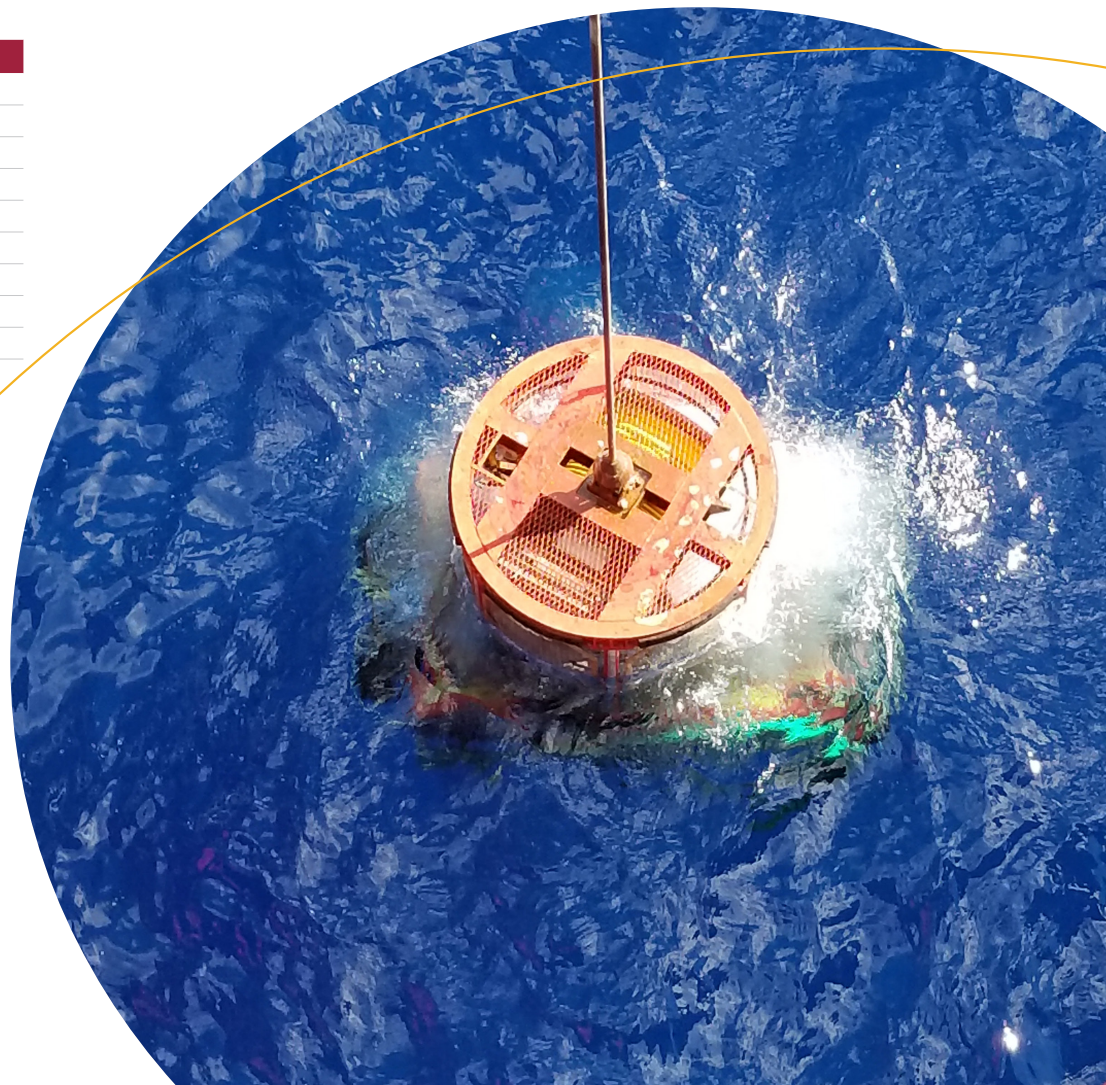
The 28 mm tether takes advantage of reduced conductor size at 4,160 VAC to enable a durable, light-weight TPR yellow jacket.

Capacity	425 m or 850 m
Depth Rating	3,000 to 4,000 msw
Manufacturer	Nexand RT 528
Minimum Band Diameter	425 mm
Safe Working Load	20 kN
Minimum Break Load	110 kN

### Tether handling

The HD ROVs tether management system (TMS) utilizes a shuttling drum concept to ensure that the tether always spools from the drum directly in line with the TMS exit point.

A simple tether routing path through the pinch wheel and sophisticated software control of motor torque provide exceptional tether handling performance, regardless of the conditions created by any tether surface contamination.





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