### Heavy Duty (HD) ROV

- **StationKeep™**
- Reduced deck space
- Reduced maintenance/replacement and repair time with modular design
- 150 hp HPU
- Improved thruster performance

The HD ROV has a smaller design while still providing high performance for subsea operations, making this ROV ideal for tasks in tight spaces. Designed with the most advanced technology, this system leads the industry in reliability and performance. The vehicle’s modular design decreases maintenance time by a factor of 6-to-1 compared to standard industry vehicles.

Since the HD ROV is compact, it requires less deck space while still providing high performance with a 150 hp HPU and 551 lb payload for subsea operations. Its smaller size coupled with its closed loop control system and station-keeping makes the HD ROV easy to maneuver in tight situations. As for environmental impact, the stainless steel tubing used throughout the hydraulic system offers the most reliable method to avoid leakage.

### General Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Classification</strong></td>
<td>Heavy-Duty Work Class ROV System</td>
</tr>
<tr>
<td><strong>Payload</strong></td>
<td>551 lb / 250 kg</td>
</tr>
<tr>
<td><strong>Through Frame Lift</strong></td>
<td>6,614 lb / 3,000 kg</td>
</tr>
<tr>
<td><strong>HPU Motor</strong></td>
<td>150 SHP (shaft horsepower)</td>
</tr>
<tr>
<td><strong>Depth Rating</strong></td>
<td>9,843 ft / 3,000 msw (optional 4,000 msw)</td>
</tr>
<tr>
<td><strong>Main Hydraulics</strong></td>
<td>4,000 psi @ 64 gpm / 257 bar @ 242 lpm</td>
</tr>
<tr>
<td><strong>Aux Hydraulics</strong></td>
<td>3,000 psi @ 20.6 gpm / 207 bar @ 78 lpm</td>
</tr>
<tr>
<td><strong>Hydraulic Functions</strong></td>
<td>8 Station Proportional Valve Pack 3 Station High Flow Valve Pack</td>
</tr>
<tr>
<td><strong>Telemetry System</strong></td>
<td>Digital Telemetry System (DTS) GB Ethernet</td>
</tr>
</tbody>
</table>

### Maximum Speed

- **Fore/Aft**: 3.15 knots • **Lateral**: 2.3 knots • **Vertical**: 2.43 knots

### Bollard Pull

- **Fore/Aft**: 1,984 lbf / 900 kgf • **Lateral**: 1,984 lbf / 900 kgf
- **Vertical Up**: 1,874 lbf / 850 kgf • **Vertical Down**: 1,874 lbf / 850 kgf

Specification details listed are for marketing purposes only. Any reproduction in part or as a whole without the written permission of C-Innovation is prohibited. Equipment may change due to product improvement or other reasons. Confirm equipment specification and performance at time of order placement.
**SPECIFICATIONS (continued)**

**Instrumentation**
- **Depth Sensor:** Paroscientific, Digiquartz Series 8000
- **Heading/Attitude Sensor:** Fiber Optic Gyro or Ring Laser Gyro
- **Doppler Velocity Log:** RDI Workhorse Navigator 1200
- **Sonar:** Kongsberg Simrad MS1171
- **Cameras:** Imenco (HD available)

**Auto Control Modes**
- **Heading:** \( \pm 2^\circ, 360^\circ \) Range
- **Depth/Altitude:** \( \pm 6 \text{ in} / 15 \text{ cm} \)
- **Pitch:** \( \pm 2^\circ, 12/5^\circ \) Range
- **Roll:** \( \pm 2^\circ, 6^\circ \) Range
- **StationKeep \( \text{TM} \):** 3.9 in / 10 cm Watch Circle

**Manipulators**
- **Port:** Atlas (7 function rate control)
- **STBD:** Atlas (7 function rate control) or Titan 4 (7 function spatially correspondent)

**Tether Management System (TMS)**
- **Type:** Top Hat
- **Depth Rating:** 13,123 ft / 4,000 msw
- **Tether Line Pull:** 220 lbf / 100 kgf Minimum
- **Tether Line Speed:** Variable, 0-164 fpm / 0-50 m min
- **Latch Capacity:** 19,842 lb / 9,000 kg @ DAF 3g
- **Tether Capacity:** 2,789 ft / 850 m x 1.38 in / 28 mm OD
  
  Work / Maintenance platforms are integrated into the TMS frame

**Launch & Recovery System (LARS)**
- **A-Frame:** Standard Over Center or Heavy Weather Low Dip
- **Winch**
  - **Type:** Electric AHC or Hydraulic Standard
  - **Heave Reduction:** 90%
  - **Umbilical Length:** 9,843 ft / 3,000 m Standard (4,000 m available)
  - **3 Control Stations:** Remote / Deck Control Van • Fixed / Winch Back Panel

**DEPLOYMENT SYSTEM CERTIFICATIONS**

- **C-INNOVATION** • 985.612.1700 • www.c-innovation.com

**GENERAL**

**DEPLOYMENT**

**HANDLING SYSTEM**

**CERTIFICATIONS**

Specification details listed are for marketing purposes only. Any reproduction in part or as a whole without the written permission of C-Innovation is prohibited. Equipment may change due to product improvement or other reasons. Confirm equipment specification and performance at time of order placement.