Hector ROV

General specifications



Hector is a powerful and full customized work class ROV dedicated for cable works and designed to fullfil customers specifications for quality protection of submarine cables, umbilicals or flexible pipes. Those products have demonstrated theirs qualities during 12 years of experience all around the world. During this period SIMEC built 7 units of Hector upgrading each time the efficiency and the maintainability of these ROVs.

Work capabilities

- 300 hp ROV, with 200 hp dedicated to jetting , for high speed PLIB operations.
- Tracked or free-swimming ROV without modification / limitation.
- ⁿ Particularly safe for cables light weight and accurate positioning
- Between 0 and 1,200 kg in water, powerful vertical thrusters allows it to quickly fly over any obstacle
- Depth of burial measurement for survey operations
- A crane or an «A» Frame with heave compensation device and lift rope used for launch and recovery
- Integrated Navigation system using DGPS and Acoustic Positioning System with full data processing capabilities



Characteristics

Physical characteristics

- Depth capability: 2,000 m
- Lenght: 4.2 m
- **Width:** 3.3 m (with tracks)
- . Height: 2.0 m
- Weight with tracks: 7.7 t
- Meight without tracks: 7 t
- **Power:** 225 kW (305 hp), 60 Hz, 3kVolts
- **Payload:** 250 kg with tracks
- 650 kg without tracks

Instrumentation and tools

- Video & cameras: up to 8 cameras (3 pan & tilt units and 1 wide angle HD
- **Data:** 4x485 : 2x232 : Ethernet link (up to 6 data link in spare)
- Lighting: 6 spot lights (250 W) & HIT or LED light 1000 W
- Instrumentation: High Resolution Obstacle Avoidance Sonar, profiler (TRITECH), altimeter, cable sensor
- Navigation: acoustic positioning system / 2 x compass
- Tracking: TSS 440 (passive) & 350 (active) Cable Tracking System for actual burial depth measurement
- **Jetting:** HP and BP pumps / front and rear tools

Tooling for cable maintenance

- Manipulators: 2 x 7 functions Conan (shilling)
- **Tools:** 1 cutter & 2 grippers (up to 80mm cable diameter)
- **Auto functions:** altitude, heading, tracking cable, depth

Performances

- Flying mode: 2.5 knots forward / astern
 1.5 knots lateral & vertical
- Tracks propulsion: 0 to 1,000 m/h
- Vertical thrust adjustable: 0 to 1,200 kg

Jetting system performance

- High pressure on front tool
- High and low pressure on main tool
- Low pressure jetting arm
- Max trenching speed: 750 m / h
- Burial depth capability: up to 1.75 m depending on soil conditions. Specific extension of jetting tool at 2.0 m available









Additional datas

All characteristics are adjustable: we customize our products in order to meet our customer's needs.

The Hector ROV is part of a spread, to be mobilized on board a DP supply vessel. Such mobilization has already been carried out on :

TAT 14, Flag Atlantic, SEA-ME-WE 4 and AAG PLIB operations, for plough burial depth surveys and remedial burials.