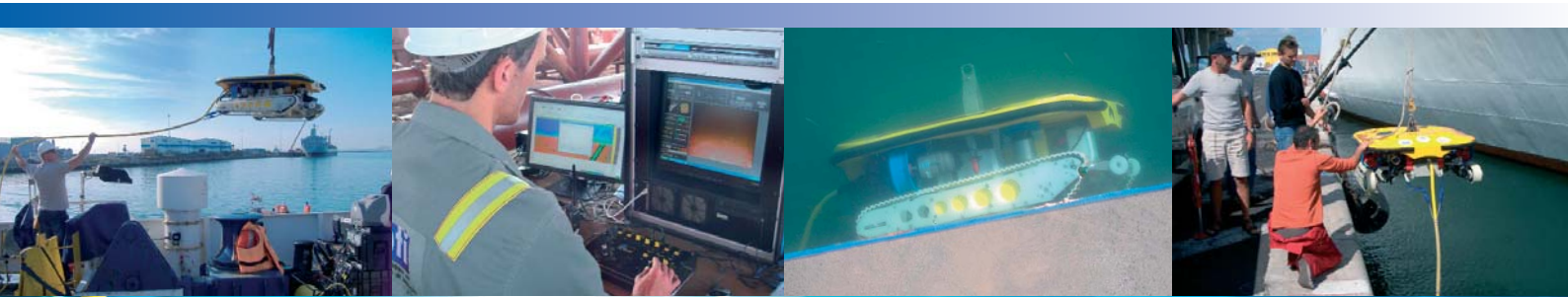
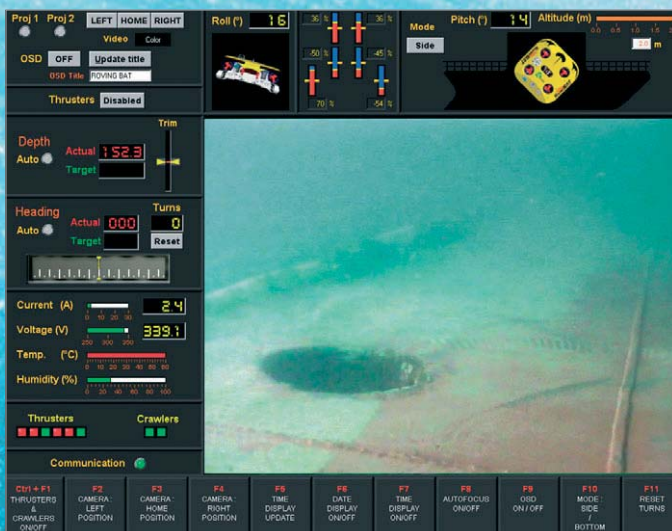
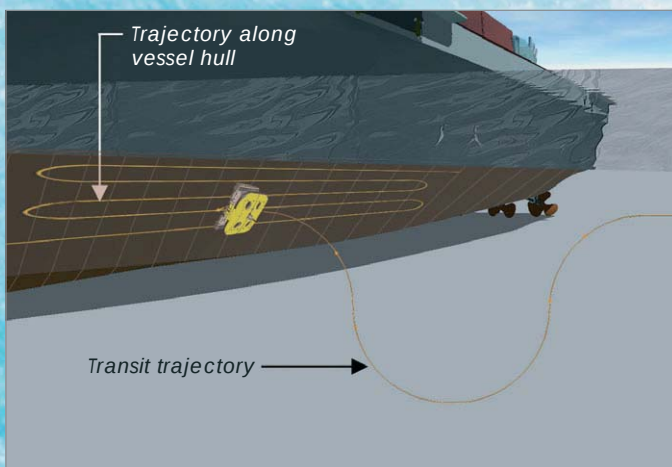
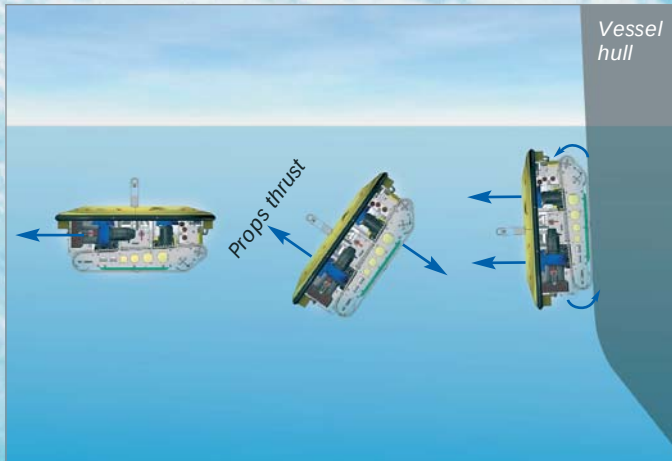


ROVING BAT

Hybrid ROV for inspection and cleaning



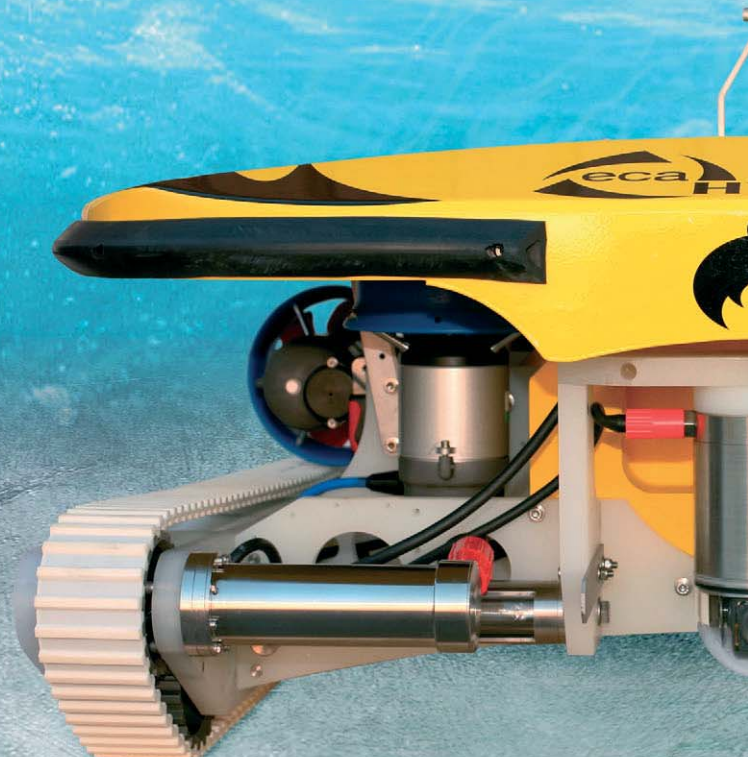
ROVING BAT



Multi-purpose hybrid ROV and crawler for close inspection and cleaning operations

- Very strong thrust: 6 powerful thrusters
- Two sets of motorized tracks
- TV cameras
- 100 m depth rating

Swims, tilts, rolls, sticks, crawls!



Main applications:

INSPECTION

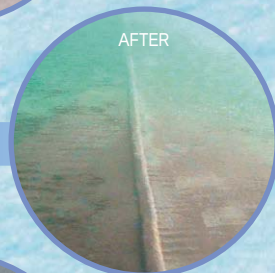
- Underwater hull and FPSO inspection
- Inspection of sea chest
- Inspection of immersed structures, hydraulic dams...

Sonar and digital still optional



HULL THICKNESS MEASUREMENT

- Ultrasonic sensor (UT Probe): non-destructive measurement system used to validate the conformity of a vessel, verify structural integrity, assess corrosion and wear.



CLEANING SYSTEM

- Cavitation cleaning technology: a high pressure steam of cavitation bubbles is directed towards the hull and removes all biological growth, without significant impact on antifouling coating.



HOMELAND SECURITY

- The basic vehicle can be easily configured with various sensors capable of detecting and neutralizing suspicious devices.



Control unit
with hand controller



ROVING BAT

Hybrid ROV for inspection and cleaning



TECHNICAL SPECIFICATIONS (basic system)

VEHICLE

PERFORMANCE

Movements

- Horizontal : Forward/backward; right & left rotation
- Vertical : Up/down
- Tilt : 0° - 360°
- Roll to one side : 0° - 360°
- Thrust : Vertical direction: 80 kg / Horizontal direction: 48 kg
- Forward speed : Flying mode: 2.0 kn
- : Crawling mode: 0 to 19 m/min
- Operating depth : 100 m

GENERAL CHARACTERISTICS

- Dimensions : L 1105 mm - W 1085 mm
- : H 646 mm including transponder & lifting bail
- Weight in air : 135 kg
- Material : Frame: polypropylene; fittings: stainless steel
- : Electronic pod: hard anodized aluminium 5086
- : Tracks: polyurethane

TELEMETRY UNIT

Communication through RS 485 data link - Spare data links for sonar or other

VIEWING SYSTEM

- Color zoom camera with panoramic viewing through dome
- Wide angle B/W camera with built-in LED ring
- Two halogen lights 150 W each

SENSORS

- Heading/pitch/roll : 3 axis magnetometer/accelerometer/gyro
- : Accuracy: +/- 1%
- : Auto heading function
- Depth : Piezoresistive type sensor
- : Accuracy: 0.1 m
- : Auto depth function
- Other sensors : Electronic pod: temperature, water ingress, amperage, voltage
- Odometer in crawling mode : Incremental encoder mounted on wheel
- : Accuracy 1 mm

UMBILICAL

- Zero buoyancy 120 m umbilical with low density polyolefin
- Diameter 25 mm - 485 g/m in air
- Manual storage winch available in option.

CONTROL UNIT

PC

17" LCD screen - Communication 9600 baud - Opto-insulated serial link

Digital controls on screen

- Camera selection and setup
- Lights power control
- Thrusters enable
- Video inserts enable : text - date - time - heading/depth

Navigation displays

- Umbilical number of turns indicator
- Depth indicator
- Heading indicator

ROV feedback

- Power supply (Amps)
- Voltmeter
- Electronic pod internal temperature
- Electronic pod internal humidity level
- Electronic pod water ingress alarm
- Vertical thrust trim indicator

Digital recorder

Hand controller

- Controls : Thrusters, 2 joysticks
- : Propulsion mode selection (thrusters/crawlers)
- : Vertical stabilization trimmer
- : Camera selection
- : Colour camera: focus, zoom, tilt/rotate movements
- : Lights on/off and intensity

Functions

- : Auto heading
- : Auto depth
- : Auto docking : 90° tilt up for docking onto vertical surfaces
- : 180° roll for docking underneath horizontal surfaces

OPERATING CONDITIONS

- Operating temperature : 0 to 50°C
- Storage temperature : -10 to 60°C
- Humidity : < 100% (80% for control unit)