



H1000

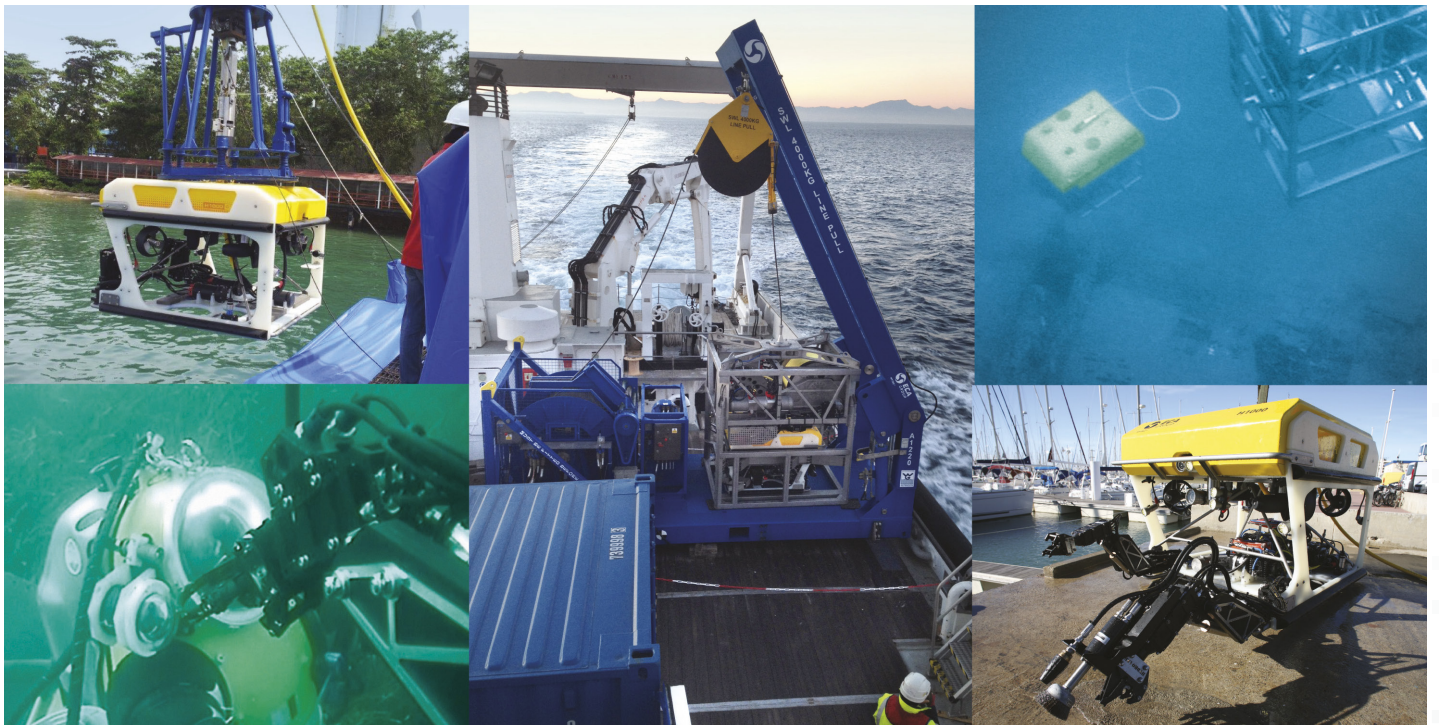
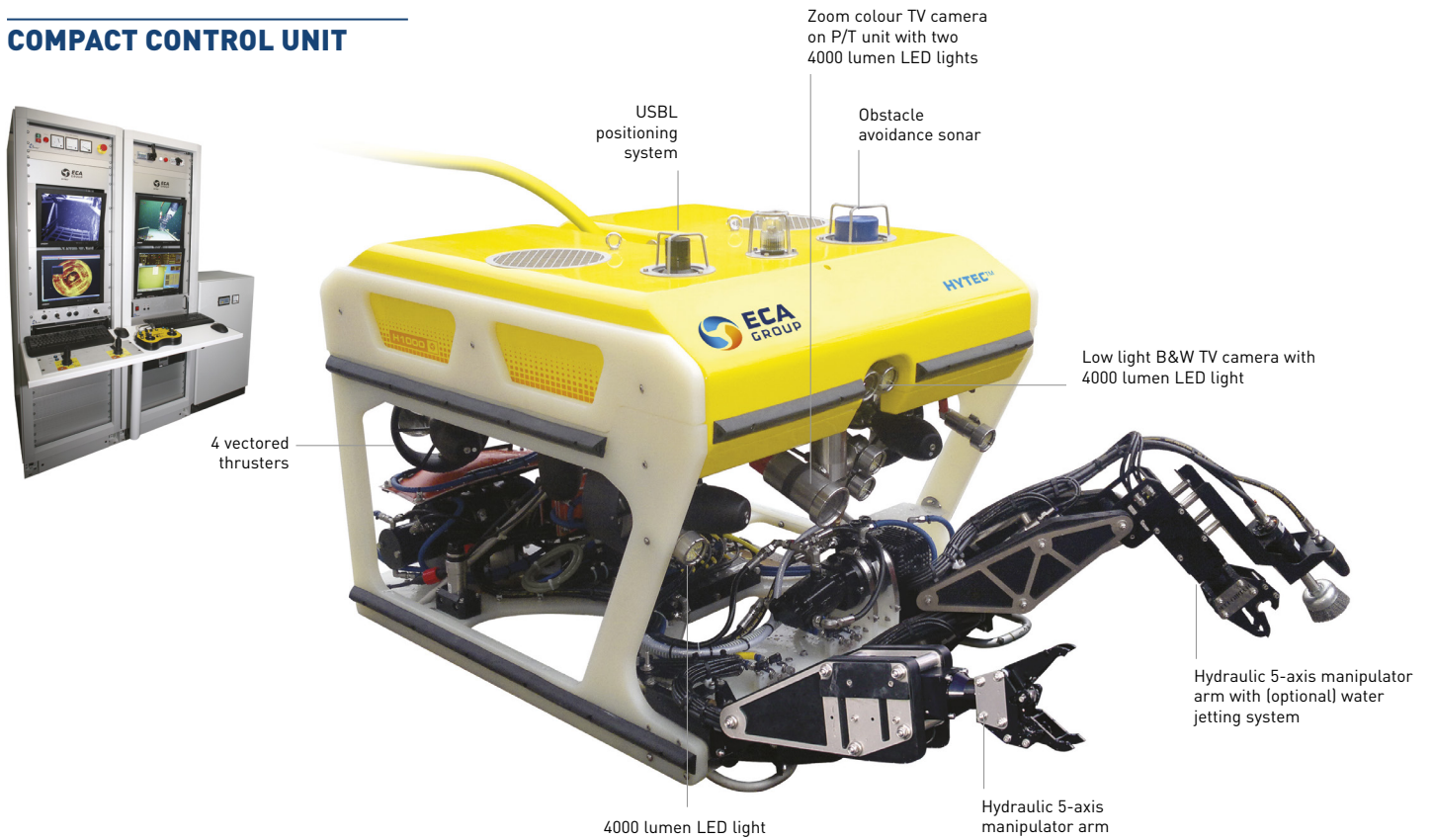
ELECTRIC WORK CLASS ROV

- DEPTH RATED TO 1000 M OR 2000 M
- EQUIPPED WITH 2 MANIPULATORS & HYDRAULIC TOOLS
- HIGH PERFORMANCE VIEWING SYSTEM & SONAR
- EASY ACCESS TO ALL SUB-SYSTEMS FOR MAINTENANCE
- AIR TRANSPORTABLE
- LAUNCH & RECOVERY SYSTEM
- CONTROL UNIT & SERVICE CONTAINER
- VALIDATED & USED BY FRENCH NAVY



DISCOVER H1000 INSPECTION AND LIGHT WORK ROV

COMPACT CONTROL UNIT



H1000 is an inspection and work class ROV electrically powered, depth rated to 1000 m or 2000 m. Its open frame design, high performance viewing system and sonar, and its capacity to embark two 5-function manipulator arms make it the ideal solution for a range of underwater missions, such as:

- Underwater work requiring manipulators and set of NDT tools
- Seabed survey, cables inspection and monitoring
- Pipeline survey, assistance to riser operations
- Cable tracking (energy & telecommunication cables), pipelines tracking
- Expertise and intervention on aircrafts and ship wrecks
- Object recovery such as wrecks fragments, black-boxes, sunken bodies

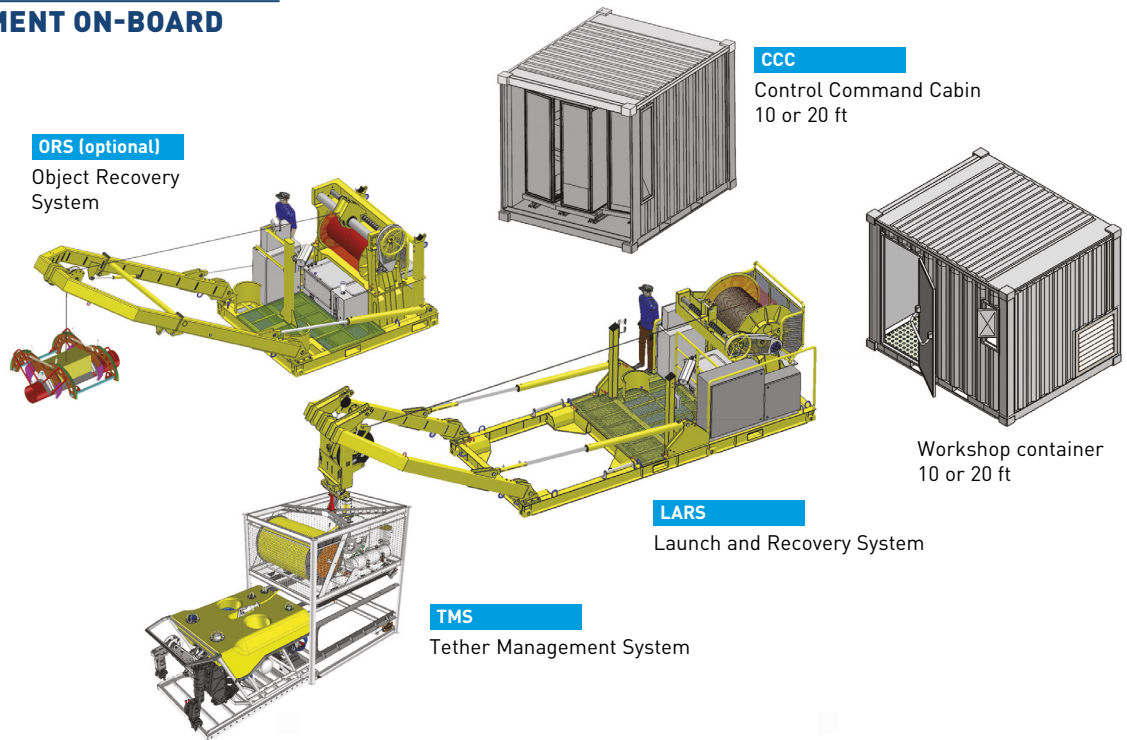
- Oceanography and inspection missions requiring high performance viewing system.
- NSRS (Nato Submarine Rescue System) & SRS

The whole system includes in standard:

- The ROV
- Service containers with surface control equipment (one or two 10 ft containers, or one 20 ft upon request)
- A Launch and Recovery System (LARS)
- A Tether Management System (TMS)

A lighter configuration with free swimming tether is also available, for shallow water operations up to 300 m depth.

SYSTEM DEPLOYMENT ON-BOARD



The 20 ft H1000 control unit and service container allow to control the ROV/LARS/TMS from the surface, and visualize in real time data brought by vehicle's sensors.



The LARS main function is to launch and to recover both ROV and TMS aboard the ship thanks to an A-frame allowing 3,50m overboard deployment.



The Tether Management System (TMS) stores the tether cable and deploys the ROV at working depth for a larger operational radius.



H1000

ELECTRIC WORK CLASS ROV

OPERATIONAL PERFORMANCES

- Movements: in three axis, plus rotation on its own axis
- Forward speed: 4 knots (in 0 knot current)
- Operating depth: 1000 m in sea water (2000 m optional)
- Stability: inherent low center of gravity
- Payload: 30 kg

TECHNICAL SPECIFICATIONS

H1000 ROV VEHICLE General characteristics (1000m version)

- Length 1.55 m
- Width 1.28 m
- Height 1.50 m
- Weight in air: 700 kg

Propulsion

6x DC thrusters:

- 4x horizontal vectored (140 kg forward thrust)
- 2x vertical (50 kg thrust)

Viewing & navigation system

- Hydraulic pan & tilt unit with:
 - 1x colour zoom TV camera with laser
 - 2x variable intensity LED lights
- 2x low light Black & White TV camera
- 5x fixed LED lights with variable intensity
- Pressure and electronic sensors
- Auto heading/Auto depth
- Altimeter with auto altitude function
- Double frequency sector scan sonar 325/675 kHz

Tooling

- Hydraulic power unit and valve pack
- Dual 5 functions heavy duty manipulator with mini TV camera and lighting
- Jetting and brushing system

OPTIONAL EQUIPMENT

- USBL positioning system
- Xenon strobe and acoustic pinger recovery unit
- Jetting and brushing tool system
- Multibeam sonar for thorough search in zero visibility
- 3D sonar or laser system for truescale 3D points cloud scanning
- Electric arms for SAR missions
- Object recovery system
- 300 m free swimming configuration

TETHER MANAGEMENT SYSTEM INCLUDING:

- 120 m of neutral tether on hydraulic winch
- ROV safety locking system
- 2x low light Black & White TV cameras

LAUNCH & RECOVERY SYSTEM

With 1100 m of electromechanical umbilical cable

- Hydraulic winch and A-frame
Overall dimensions:
 - Length: 6.05 m
 - Width: 2.44 m
- A-frame deployment: 3.5 m



Fully electric free swimming configuration, for shallow water operations up to 300 m



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