An unrivalled detection and classification performance for stealthy mines from shallow to deep waters

- Proven capabilities in harsh environment and high sea-state.
- Enhances dramatically the operational abilities vis-à-vis severe environmental conditions and reduces the crew exposure to the mine danger.
- Highly manoeuvrable vehicle designed to approach closely to the target for short range super-classification.
- Final identification with embedded colour TV camera.
- Unique versatility and effectiveness proven during many search and rescue operations and inspections conducted over the past ten years.

**PVDS Propelled Variable Depth Sonar**

**Multi-Frequency Wide Band Sonar**

**PEDIGREE**

Installed in:

- 10 French Navy ROV (TSM 2022 MkII PVDS)
- 9 Dutch and Belgium ROV (TSM 2022 MkIII PVDS)
**PVDS Propelled Variable Depth Sonar**

**Multi-Frequency Wide Band Sonar**

**OPERATIONAL HIGHLIGHTS**

The PVDS is a top class operationally proven ROVS sonar. This innovative MCM system dramatically enhances operational abilities vis-à-vis severe environmental conditions and reduces the crew exposure to the mine danger.

The TSM 2022 Mk III PVDS combines the latest wide-band generation mine hunting sonar technology with a powerful and highly manoeuvrable vehicle. It is able to cope with modern stealthy mines in deep waters and adverse environmental conditions as well as in shallow waters. Its effectiveness has been proven for more than one decade during various demanding operations.

Powered by its tether cable, the PVDS can cruise indefinitively up to 100 meters deep and 150 meters in front of the mother ship at a speed of 4 knots. Distance from the ship increased to 300 meters at 3 knots. Cruising speed up to 6 knots available with the Double Eagle Mk III vehicle (4 engines version).

**MAIN CHARACTERISTICS**

- HF Detection
- HF MDV Detection & Tracking
- VHF Shadow Classification
- Data Recording and replay
- Sonar operator’s aids
- CAD, CAC, Echogram

**TECHNICAL FEATURES**

**HF Detection:**
60° horizontal coverage and high resolution (48 kHz BW), providing superior detection performance against stealthy bottom and moored mines

**HF MDV Detection & Tracking:**
over 60° in HF horizontal field of view at long range

**VHF Shadow Classification:**
12° horizontal sector, accurate shadows to assess the target shape, using the CAC process to measure target sizes

**HF and VHF Route Survey:**
using the sonar in the side-looking mode

**LF detection and Moored Mines Classification:**
available with the double Eagle Mk III vehicle version