



SAAB

MuMNS

Next Generation Mine Disposal



A Superior Choice for MCM

The Saab MuMNS system delivers a new generation of mine neutralization and immunization in a powerful, modular system based on proven Saab technology and Mine Countermeasures (MCM) solutions. It delivers unparalleled operational capability with greater flexibility that significantly improves operational tempo, and reduces the cost of MCM operations and risk to personnel.

MuMNS System

The ROV is highly maneuverable with six Degrees of Freedom (DoF), and is equipped with advanced sensors for correct mine identification.

The system may be installed on a range of craft, including Unmanned Surface Vehicles (USVs). System operation may be performed from a remote location at a safe distance from the mine field.

Mine Neutralization System (MNS)

The ROV may be equipped with up to three MNS charges at a time, including:

- **Pre-filled neutralization unit**
Insensitive shaped charge safely assembled in an encapsulated silo.
- **User-filled immunization unit**
Qualified charge container in an encapsulated silo. Appropriate explosive material is selected and assembled by the clearance team.
- **Training unit**
Dummy warhead in an encapsulated training silo, providing an economical, reusable solution for clearance teams to test a full end-to-end mission.

Capability You Can Count On

1. RELOCATE

The vehicle is remotely launched from its support vessel and piloted, automatically or manually, to a specified waypoint. It then relocates the target using its on-board sonar and cameras, and the pilot manually controls the final approach to the target.



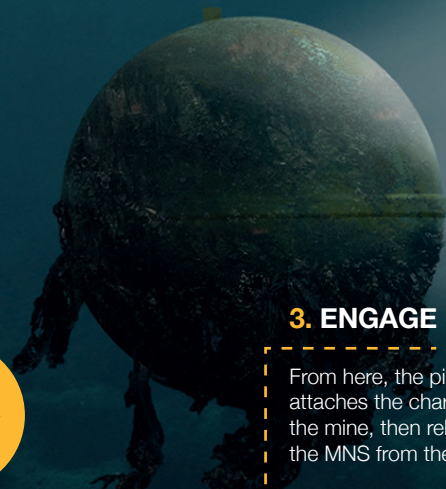
2. IDENTIFY

The vehicle's on-board camera is used to identify the Mine-Like Contacts (MILCO). If confirmed to be a mine, one of the MNS is selected and moved into the engagement position.



3. ENGAGE

From here, the pilot attaches the charge to the mine, then releases the MNS from the vehicle.



In-Service Support



Saab works closely with customers worldwide to secure their operational capabilities through our well-established and effective in-service support solutions. Our flexible and scalable range of offerings includes:

- Maintenance and repair
- Supply and logistics
- Operational and technical support
- Training
- Upgrades and modifications
- Obsolescence management



INITIATE

Once the deployed floats have reached the surface, the charges can be remotely initiated on command, using a coded radio signal to neutralize the mines. Detonation can be configured to clear one or many mines simultaneously. Timers for initiation are unique for each MNS.

4. DEPLOY

The MNS is released from its silo in the vehicle. It is left suspended mid-water until a configurable timer releases a float to the surface.



5. REPEAT

Up to three MNS may be deployed before surfacing and reloading. A mission may be aborted at any time up to mine attachment. Unused MNS may be disassembled safely and reused in future missions.

6. RELOAD

The MuMNS vehicle returns to the support vessel for reloading.



Live Operational Clearance



Graphical user interface (GUI) for remote operation



ROV which can be equipped with up to three MNS charges



Generator (optional)



Launch and Recovery System (LARS) (optional)



Winch with automatic tension control and forced cooling



Dedicated tether for power and communication



Wheelhouse surface unit with control software

Standard System Specifications (ROV)

Length	2.7 m
Width	1.0 m
Height	0.6 m
Weight in air	415 kg fully loaded
Speed	0–4 kt
Operational depth	300 m

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