

# Automatic Target Recognition (ATR)

## Detect and Classify Mine-Like Objects

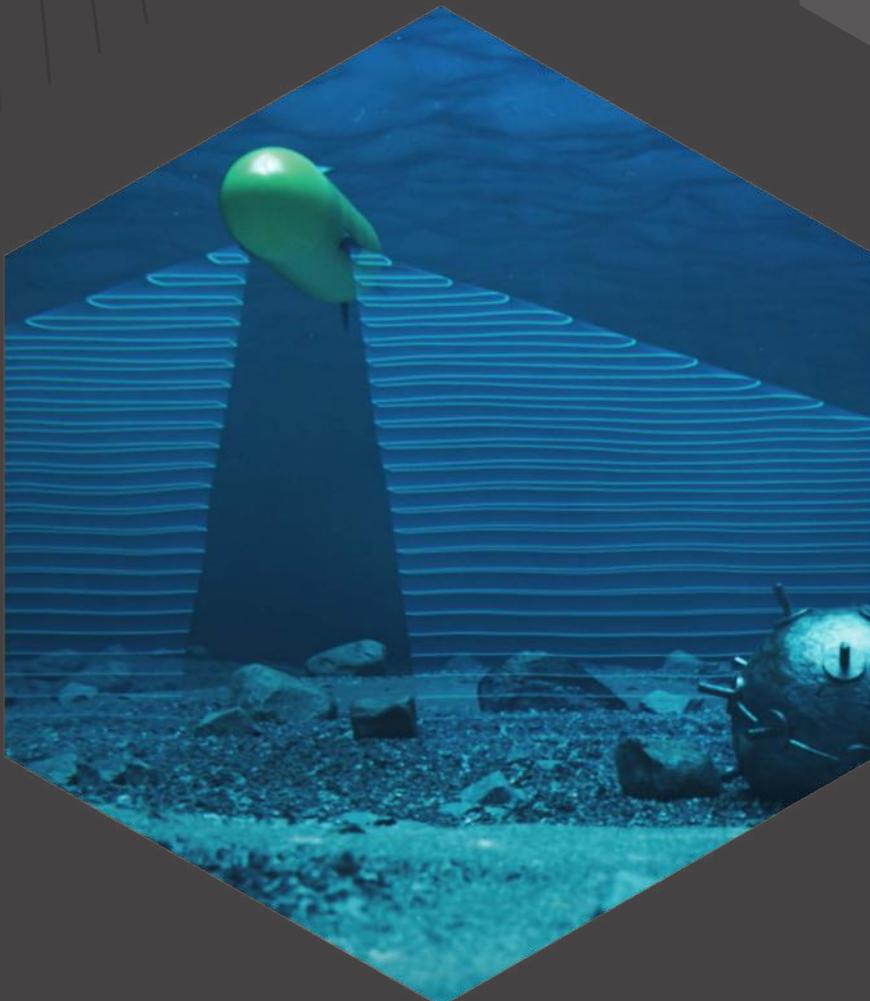
Automatic Target Recognition (ATR) is the tool of choice for analyzing side scan data from uncrewed maritime systems. Designed as an assist tool, the ATR provides a post mission analysis (PMA) workflow with robust, reliable results, regardless of the data volume.

Analysing large volumes of data over long periods of time can result in fatigue and impact on performance. Our ATR uses fast, machine learning techniques to detect and classify mine-like objects from the side scan sonar data. It provides a measure of how 'mine-like' each of the targets is and can be used to decide if the target is a mine or a false alarm. An updated workflow for common tasks, such as managing multiple views and fusing duplicate contacts, improves mission tempo.

MINE DETECTION



*We have worked with the US, UK, Dutch, Belgian, Australian and New Zealand Navies to provide them with our ATR.*



- **ATR Algorithms:** Allows the user to launch either an integrated Seebyte ATR algorithm or 3rd party algorithm, in a single workflow, to detect objects of interest.
- **Fusion Algorithm:** Allows the operator to run an algorithm to merge the detections generated by the ATR algorithms.
- **Software Development Kit:** As an open service-oriented architecture, it allows customers to plug their own ATR algorithms directly into the ATR system.

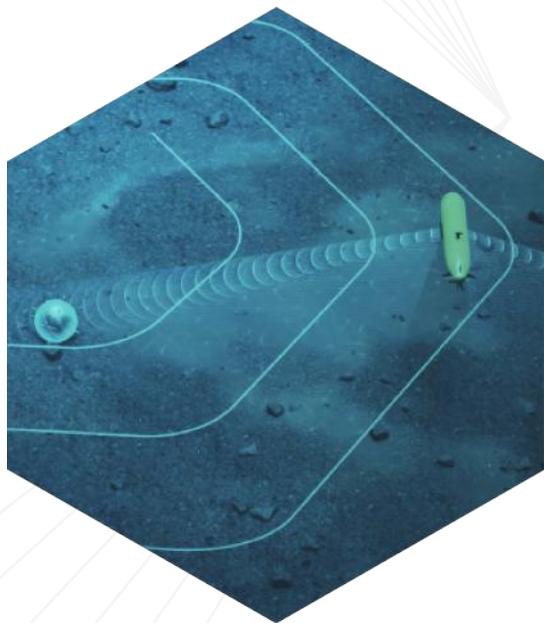
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A BATTELLE COMPANY

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## Contact Fusion

The fusion module enables you to merge the detections generated by the ATR algorithms. This removes the need to manually review the detections, to combine, or remove duplicates, and alternative views.



## Embedded ATR

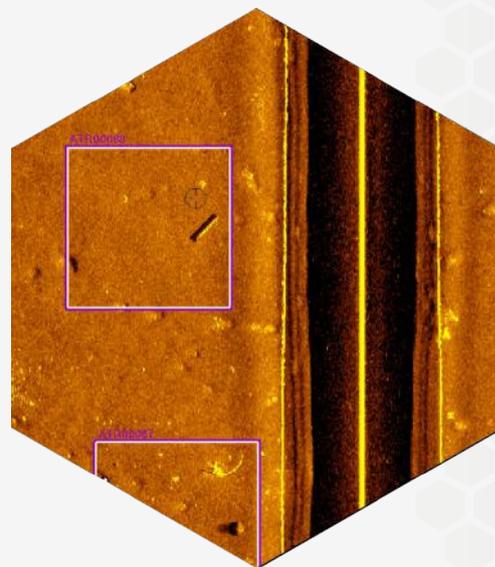
All of our products are designed to help manage uncrewed maritime systems, ultimately providing situational awareness across all assets within the battlespace.

Embedded ATR, that uses fast machine learning techniques to run real-time. SeeByte's Neptune autonomy logs all the contacts, including an image snippet, and can also optionally add dynamic reacquire tasks for any vehicle in the squad. The results are fully compatible with the PMA ATR System, and can be loaded directly upon mission completion.

## How can ATR support your project?

Contact our sales team on

+44 (0) 131 447 4200 or [sales@seebyte.com](mailto:sales@seebyte.com)



## Whitepapers



SeeTrack v4  
Technical



Multi-domain  
Integration



MCM Toolbox

## Specifications

- ATR requires Seetrack v4
- OS: Windows 10 (Pro 64-bit)
- Processor: Intel Core i5 (preferably Core i7)