

Towed Synthetic Aperture Sonar Survey



Survey Faster

- 3.5 km²/hr Area Coverage Rate
- Up to 400-meter swath
- Survey speeds up to 10 knots
- Integrate alongside other geophysical sensors



High Resolution Data

- Constant real-time 3 cm x 3 cm synthetic aperture sonar imagery resolution
- 25 cm x 25 cm co-registered bathymetry



Rapid Deployment

- System designed for fast modular installation and removal from survey vessels
- ISO20 footprint launch and recovery system available for vessel without A-frame

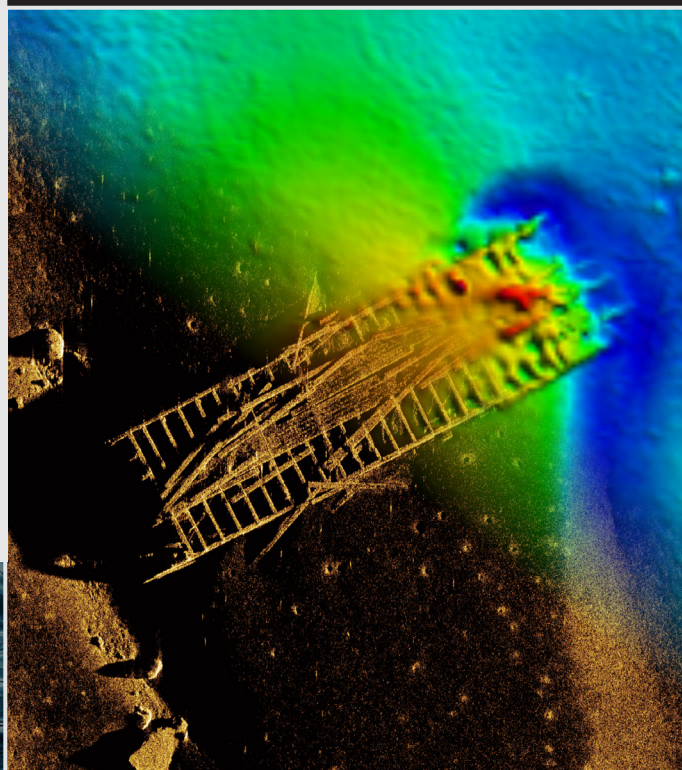


Derisk Offshore Development Projects

- High resolution, real-time data enables seabed classification, target discrimination, and faster identification of risks
- Interpreted results delivered by Kraken sonar experts

Unmatched Seafloor Resolution

Offshore energy projects are increasing, and the need for reliable survey data has never been higher. Kraken's KATFISH towed synthetic aperture sonar surveys can provide significant augmentation to existing survey operations, acquiring higher quality, wider swaths of data at faster speeds than towed sidescan sonar.



+10x Resolution
Compared to Towed Sidescan Sonar

Applications



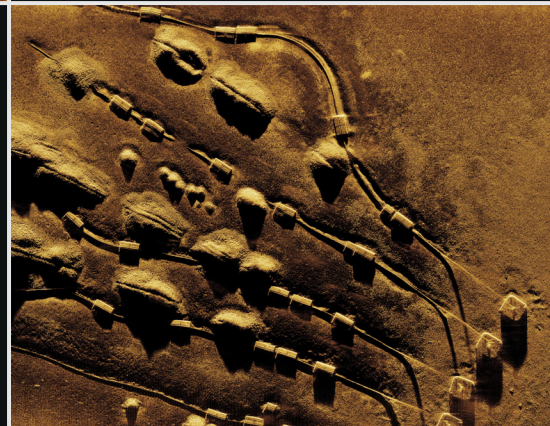
Underwater Infrastructure Inspection

- High-resolution data enables seabed change detection
- Provide seabed context along pipeline/cable routes including fishing activities and scour monitoring
- Conditional assessment of infrastructure



Pre- and Post-Construction Survey

- Pre-installation survey for high-resolution contact list
- Perform comprehensive site clearance
- Identify cable/infrastructure exposures
- Accurate boulder and seabed debris measurement



UXO and Mine Countermeasure Survey

- Target identification and discrimination, including small contacts on or near infrastructure
- Data clarity provides insight to decrease master target list
- Secure data management and transfer

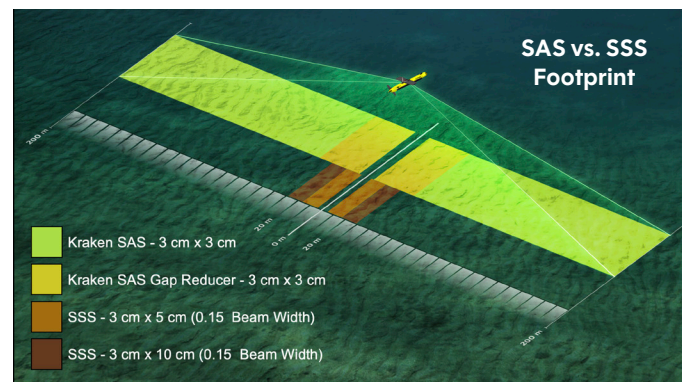
Our Technology

KATFISH Specifications

Towfish Dimensions	Hull: 2.9 m length x 0.3 m diameter; Wingspan: 1.20 m
Towfish Weight in Air	200 kg
Towfish Depth Rating	300 m
Data Deliverables	GIS-compatible target listing; Geo-referenced TIFF images and mosaics
Data Format	Kraken TIL (.til), XTF (.xtf), GeoTIFF (.tif / .kml), XYZ (.xyz), HDF5 (.h5)
Personnel Requirements	Minimum three per shift

Area Coverage Rates

Survey Speed	SAS Range	SAS AC	SAS + Gap Filler
4 kn (2.06 m/s)	200 m	2.18 km ² /hr	2.96 km ² /hr
6 kn (3.09 m/s)	183 m	2.99 km ² /hr	4.06 km ² /hr
8 kn (4.12 m/s)	135 m	2.94 km ² /hr	4.00 km ² /hr
10 kn (5.14 m/s)	107 m	2.91 km ² /hr	3.95 km ² /hr



Performance specifications represent maximum sensor values and may vary due to environmental conditions, vehicle stability, and operational specifics.