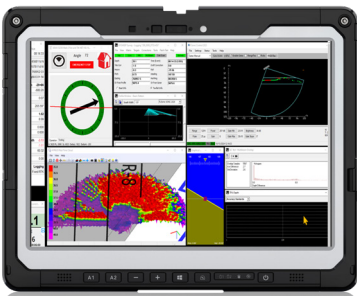




Multibeam on a Dredge

IMPROVE EFFICIENCY AND SITUATIONAL AWARENESS IN YOUR PROJECT'S CURRENT ENVIRONMENT WITH HYSWEEP® & DREDGEPACK®



HYSWEEP® and DREDGEPACK® are integrated software solutions engineered for high-precision hydrographic surveying, high-accuracy data acquisition, visualization, and real-time dredge monitoring in marine construction and dredging environments.

This solution offers dredging contractors, marine engineers, and port authorities the ability to reduce downtime, improve accuracy, and support the successful completion of marine infrastructure projects on schedule and within specifications.

HYSWEEP® enables full multibeam sonar integration, delivering high-resolution, real-time bathymetric mapping of the seafloor. Ideal for pre- and post-dredge surveys, HYSWEEP® provides full swath coverage, target detection, and terrain modeling essential for progress verification and compliance documentation.

DREDGEPACK® delivers real-time dredge monitoring and control, allowing operators to “see the cut” with precise visual overlays of the dredge tool, dig depth, and design surface. Designed to integrate seamlessly with most positioning and sensor systems on the market, DREDGEPACK® is compatible with a wide range of dredge types including: Bucket, clamshell, cutter suction, excavators, and trailing suction hopper dredges.

Together the HYSWEEP® & DREDGEPACK® solution provides new tools to:

- Optimize cuts and minimize over-dredging
- Track progress against design surfaces
- Monitor dredge production in real time with full multibeam visualization
- Document compliance with engineering and environmental requirements
- Detect hazards and confirm bottom clearance quickly and efficiently



BENEFITS

Using a multibeam on a dredge provides real-time, high-resolution visualization of the seafloor, allowing operators to see exactly where material has been extracted and where it still needs to be removed. This improves dredging precision, reduces over- or under-dredging, and helps meet design specifications more efficiently. Multibeam data also supports immediate progress tracking, hazard detection, and as-built documentation to save time, reduce costs, and increase confidence in project outcomes. For any dredging operation that demands accuracy and accountability, the multibeam on a dredge setup is a powerful, cost-effective solution.

FEATURES

- **PROGRESS VERIFICATION AND DOCUMENTATION:** Multibeam data offers high-resolution before-and-after updates to validate work completed, and support reporting to stakeholders or regulatory agencies.
- **OBSTACLE AND HAZARD DETECTION:** Operators can identify submerged debris, pipelines, or other obstructions ahead of time, reducing equipment damage and downtime.
- **REAL-TIME WORK SITE VISUALIZATION:** Multibeam systems provide a full swath view of the seafloor or dredge site in real time, allowing operators to monitor for material movement and adjust operations immediately.
- **SUPPORTS COMPLEX CONSTRUCTION LAYOUTS:** In marine construction, multibeam aids in structure placement, anchor points, or mats with precise seafloor mapping and elevation tracking.
- **PRECISION DREDGING CONTROL:** Accurate depth readings help guide dredging equipment, reducing over-dredging and ensuring the target design is met efficiently.

INCLUDED IN THE SOLUTION

HYSWEEP® & DREDGEPACK® or DREDGEPACK® OPERATIONS FOR MULTIBEAM ON A DREDGE SOLUTION

Real-time multibeam integration with industry-standard sonar manufacturers

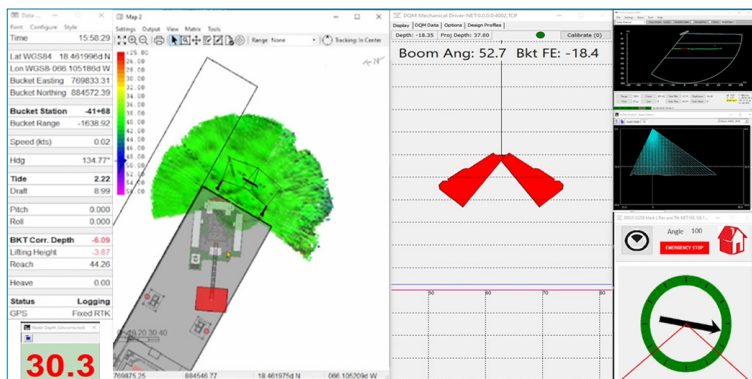
Live visualization of the seafloor and dredge tool relative to design surfaces

Precise control of dredging operations with automated cut/fill calculations

Continuous progress tracking and production logging

Comprehensive as-built data for engineering, QA/QC, and regulatory reporting

Adding a rotator to your dredge-mounted sonar enables you to scan the surrounding area without repositioning the vessel. This enhanced coverage allows you to verify your work in real time and proceed with greater confidence, ultimately increasing operational efficiency and production.



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