



Technique Description Using the latest interferometric swath bathymetry and 3D side-scan sonar technology integrated in the Ping DSP 3DSS-DX-450, Gravity Consulting is capable of collecting high-resolution multibeam elevation data simultaneously with full water-column 3D point cloud imagery. This cutting-edge, patented technology uses acoustic transducer array technologies, and advanced signal processing techniques to produce superior multibeam and 3D side-scan imagery. The sonar has proven bathymetric accuracy and repeatability (IHO Exclusive Order). The sonar is capable of a swath coverage up to 14 times water depth making it a very powerful and efficient high-resolution underwater surveying instrument.

The Ping DSP 3DSS-DX-450 3D side-scan bathymetric sonar is capable of surveying shallow waters of inshore ports, harbors, rivers, lakes, and reservoirs. Working in accordance with the standards set by the U.S. Army Corps of Engineers, NOAA and the International Hydrographic Organization, Gravity consulting exceeds the standards of accuracy, resolution, survey coverage, and delivery requirements set for every project

Project Applications

- Shallow Water Hydrographic Surveys
- Habitat Mapping
- Shallow Water IED or UXO surveys
- Dredging Operations
- Subsea Structure Surveying and Inspection
- Marine Debris Search
- Underwater Archaeology
- Port and Harbor Security

Gravity Consulting has the equipment, vessels, and experienced staff necessary to provide clients with their underwater imaging and mapping needs. Using the latest navigation, surveying and GIS processing software, Gravity Consulting will provide data in any desired product or format. Typical products include modeled 2D and 3D contoured elevation data maps paired and 3D side-scan images. The high resolution and substantial underwater coverage of the data can be easily included into a variety of computer-aided design (CAD), geographic information system (GIS) packages, and even ubiquitous visualization software such as Google Earth®. Engineers, contractors, and even less technically experienced personnel may view the data and better understand underwater conditions.

Our Approach Gravity Consulting has over two decades of in-water experience from complex NW local remediation projects to global large scale developments. We are a small group of biologists, chemists and engineers that support all phases of marine projects with significant dredge and marine development expertise. With Gravity's understanding of the industry, current technology and the significance of data quality objectives, we can help you choose the right tool for the job.