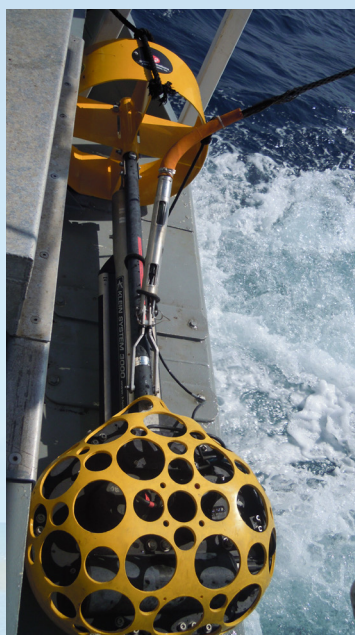


Sub Bottom profiler



ABT Marine is a part of the **AquaBioTech Group**, and as an independent marine hydrographic survey firm, we offer a broad range of capabilities in survey, construction support, precise positioning and project management within the marine industry.



Klein K-Chirp model 3310 and Klein model 3000 sonar

Our Sub Bottom technology is based on a combination of Klein K-Chirp model 3310 sub-bottom profiler and Klein model 3000 sonar that enable us to survey down to 40 meters under the seabed.

The K-Chirp Model 3310 SPB is a “Chirp” sub bottom profiler attachment for the Model 3000 Side Scan Sonar (Tow-Fish).

When sub-bottom information is required, powerful low frequency echo-sounding devices can be used to obtain information of the upper layers of the ocean bottom.

Klein K-Chirp model 3310 sub-bottom profiler specifications

Frequency (Chirp)	2-8 kHz
Beam	@ 5kHz 20° along track and 40° crosstrack
Selected Pulse Lengths	2.5, 10, 20, 30 msec
Resolution	To 12.5 cm
Power	1 Kw (peak)
Source level	204 dB re 1μPa @1m
Depth rating	600 meters
Weight in Air	123 Kg, 270 pounds incl. side scan
Software	SonarPro
Data Format	SDF, XTF, SEG-Y
Seabed penetration	5-50 meters, variable depending upon soil density
Digitization	24 bits A/D

Application

- Cable & Route Surveys
- Geophysical and Geological
- Surveys
- EEZ Surveys
- Sediment Classification
- Buried objects, cables and pipelines
- Dredging Surveys
- Hazards Surveys

Sediment and Water Sampling – Van Veen and Ponar - Type Benthic grabs

In addition to the sub bottom profiling **ABT Marine** is able to gather water and sediment samples. Our vessel ISIS II is equipped with benthic grabs Van Veen-Type of different size up to 70 Kg capacity. Furthermore, our laboratory unit based in Malta can provide sample analysis.

