

## Product Survey: Sub-bottom Profiling Systems

It is likely that you will find sub-bottom profiling equipment onboard most of the survey vessels involved in offshore investigations. Whereas the echo sounder is designed for top-layer investigations, with high-resolution and seismic equipment for deep penetration, sub-bottom profiling equipment covers the area in between and provides a glance into the first ten to hundreds of metres of the sea bottom. On top of this, the sub-bottom profiler is a thankful piece of equipment when it comes to enjoying onboard discussions between hydrographer and geophysicist regarding required penetration, frequency used versus data resolution, definition of the top of the seabed and features found.

Although the principles of these analogue systems have not changed, we see further development towards refined design and specialised technology, whether in single-frequency or in chirp systems. A great number of these instruments provide data results in digital format. Data analysis and processing techniques give the opportunity to introduce bottom classification. Together with specialised geotechnical investigations, we leave the sea-bottom with fewer secrets every time these instruments are used out on the sea.

The present survey covers some ?? (Martsje please advise) types of systems, each developed for their own specific purpose(s) and needs. Whether you need to know about the top of the seabed for accurate measurement of silt-layer thickness, or the location of boulders and bedrock, or if you are more interested in finding shallow gas in the deeper sea-bottom layers - you will find the right tool in this product survey.

Hydro International would like to thank all manufacturers who contributed to this Product Survey and responded to the questions about their products.

https://www.hydro-international.com/content/article/product-survey-sub-bottom-profiling-systems