

# Deep BV Takes Delivery of Sonardyne Mini-Ranger 2 Positioning Equipment



Deep BV, a Dutch survey company specialising in hydrography, marine geophysics and oceanography, has purchased underwater acoustic technology supplied by Sonardyne International, UK, to support its inshore, harbour, coastal and offshore activities.

The two Mini-Ranger 2 Ultra-Short BaseLine (USBL) tracking systems and WSM 6+ mini transponders were delivered to Deep BV's headquarters in Amsterdam within days of the order being placed and put straight to work during an operation to search for unexploded ordnance (UXO).

## Underwater operations

Mini-Ranger 2 boasts a number of features that makes it ideal for underwater operations such as UXO surveys which require high accuracy positioning but without the cost and complexity associated with a deep water USBL solution. It can simultaneously track 10 targets at very fast update rates, it is quick to install on small vessels and has a tracking range of 995 metres, extendable to 4,000 metres.

For its first project with Mini-Ranger 2, Deep BV installed one of the systems onboard their 15 metre, twin hull research vessel, *Deep Volans*, and configured it to track a WSM 6+ transponder mounted on a remotely operated towed vehicle (ROTV) named *Iron Lady*. Accurate positioning is paramount for the *Iron Lady*'s control software in order to 'fly' the six metre-wide, gradiometer UXO set-up just two metres above the seabed.

## Shallow water

Klaas Visser, chief technology expert at Deep BV said they have been a user of Sonardyne's pre-generation Scout USBL system for several years and pleased with the results it's delivered. However, now was the right time to replace these systems and upgrade to Sonardyne's 6G product family with all of its attractive features and performance gains.

Speaking about the contract, Sonardyne sales manager, Alan MacDonald explained that Mini-Ranger 2 is ideally suited to the type of work carried out by Deep BV. For example, the transceiver that's used to track transponders can be mounted alongside the multi-beam system in the moon pool of the *Deep Volans*. Then afterwards, it's simple to move it to a different vessel. And thanks to its excellent noise rejection properties, the system's optimised to provide reliable tracking in shallow water, near the surface where vehicles such as *Iron Lady* operate.

For more information on Sonardyne Mini-Ranger 2 USBL, click [here](https://www.hydro-international.com/content/news/deep-bv-takes-delivery-of-sonardyne-mini-ranger-2-positioning-equipment).