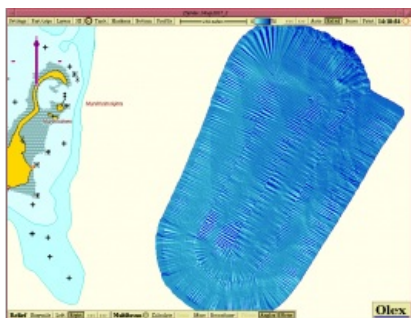


Olex Integrates Spatial Inertial Navigation System into Marine Vessels



[Nexans Olex](#) has successfully integrated [Spatial](#), an inertial navigation system, into its hydrographic vessel. Spatial is a ruggedised miniature GPS-aided inertial navigation system and AHRS that provides accurate position, velocity, acceleration and orientation. It combines temperature-calibrated accelerometers, gyroscopes, magnetometers and a pressure sensor with an advanced GNSS receiver.

Olex was seeking a new inertial navigation system in their multibeam sonar mapping systems for two key reasons. Firstly, they needed more accurate position and orientation data than their existing inertial navigation system could provide. Secondly, affordability was a central objective to help widen the market for inertial motion sensors and bring in customers who were previously lost due to the high costs.

Precise navigation data

One of the key advantages of Spatial is its high compatibility allowing it to be combined with Atec, Wassp, HGPS and many other solutions requiring inertial navigation. The use of the Spatial system resulted in higher resolution data and higher accuracy mapping. Precise navigation data is a key focus with Spatial, promising to deliver 0.1 degrees accuracy in pitch and roll, 0.2 degrees in heading, and 5cm or 5% in heave. All of this is done at a competitive price making it a popular choice in the hydrographic survey market.

Experimental testing from Olex demonstrates the easy installation, accurate data and wide range of compatibility of the Spatial system to existing set ups.