

DP-PHINS Adds to Acoustics



France-based iXBlue has expanded the functionality of its industry-leading PHINS inertial navigation system (INS). The new DP-PHINS is designed to interface with any third-party acoustic positioning equipment to provide INS-enhanced acoustic data input to marine dynamic positioning (DP) systems. DP-PHINS can also take data from a range of additional sensors, some not normally associated with DP, such as Doppler VelocityLogs (DVL), for use in maintaining vessel position.

Using INS with acoustics in this way produces positioning data that is smoother, more accurate and is updated at a higher rate. Consequently, station-keeping performance is significantly improved, vessels use less fuel, and wear and tear on the DP system components is reduced.

DP-PHINS was developed at the request of one of the world's leading subsea engineering and construction companies, which operates a large fleet of specialist vessels. The company was keen to improve the quality of the acoustic data provided to its vessel DP systems. This was because during GPS outages, purely acoustic data was not capable of controlling the DP systems with the reliability that the company desired. This was particularly the case when operating in deeper water, when acoustic data can often be degraded by excessive noise.

Jim Titcomb, Offshore technical manager, iXBlue, reports that acoustic positioning data delivered to the vessel DP desk was up to three times more accurate than the data produced when using acoustic equipment on its own.

PHINS (from photonic inertial navigation system) outputs position, heading, attitude, depth and heave data.

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