The Dutch company of TBV Marine Systems, part of High-tech-Solutions & Design B.V., is using an innovative Wave Measurement System first shown at Europort 2015 by its Dutch manufacturer; Krohne.

TBV, in collaboration with the German Global Davit GmbH, a specialist in the global Survival and Deck Equipment market, has developed and implemented an innovative Fast Response Craft (FRC) Launch and Recovery System (L.A.R.S.) and it requires this advanced new measurement system to operate at optimum efficiency. This system can launch and recover FRCs longer than ten meters, weighing over eight tons in sea states up to SS4, which is comparable to a five Beaufort wind speed and waves up to 2.25 meters.

The L.A.R.S. system is to be installed on naval and coast guarding vessels. These vessels are often operated in open seas, facing a range of weather and sea states. To assure safety, waves should not exceed a certain height and the mother vessel’s heading and speed must be adjusted accordingly.

For the current L.A.R.S. wave measurement system project, the customer decided to implement the Krohne Optiwave 7300. This wave measurement system, which is to be mounted on the stern doors of the mother vessel enable the vessel’s crew to measure and analyse the waves, so that the crew does not enter the FRC when it is not safe, and the launch and recovery procedures are only executed in safe situations.

The Optiwave 7300 is positioned on the outer stern door and is mounted on a special movable measurement bracket which can be operated by the control panel of the L.A.R.S. Additionally, the system uses a combination of monitors and indication lights. The monitor provides information on the height of the waves, and the heading and speed of the mother vessel. The indication lights are used to inform the FRC crew with the moment at which it is safe to enter the FRC and when the launching or recovering procedure can set into action.

According to TBV the Optiwave 7300 enables naval and coast guarding vessels to be fully operational in every type of weather condition, and with that they are able to execute their mission safely at all times. Furthermore, due to the easy and convenient handling of the measurement system, and the clear monitoring and indication features of the system, launching and recovering procedures can be executed safely, even in the most hectic situations.

The Optiwave 7300 is a non-contact Radar (FMCW) Level Meter for distance, level, volume and mass measurement of liquids, pastes and slurries. It gives a more stable measurement than pulse radar and is well suited to agitated process conditions. The device can operate at very low and very high process temperatures as long as the process connection temperature limits are observed.

By Jake Frith

The Optiwave 7300 user interface

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