

Integrating Dynamic Positioning Systems with Remote Thruster Controls

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Abstract

A positioning system, such as dynamic positioning (DP) and joystick, is the 'end-user' of other equipment on a vessel and plays also the role as an integrating factor for the vessel operation.

Rolls-Royce is today one of the major players in the marine market with a large portfolio of products, such as thrusters, rudders, steering gear, stabilisers, engines, switchboards, automation products and ship design. The company has more than 30 years experience in operation of DP vessels.

As a consequence of the strategy of becoming a *total solution provider* Rolls-Royce will extend the product range to comprise positioning systems. A complete range of positioning products – from independent joystick control systems to IMO DP Class 1, 2 and 3 systems is now being rolled out.

The trend today is towards higher level of system complexity onboard vessels, requiring a higher level of integration. To cope with these challenges, many of the existing Rolls-Royce products are now in the process of migration to a *Common Control Platform*. This common hardware and software technology is the foundation for future integrated solutions. The first example of such solutions is the integration between Remote Thrust Controls (RTC) and dynamic positioning systems.

This paper addresses the general aspects of integration, with particular focus on the integrated RTC and DP solution. In addition, the design and configurations of new remote control systems and new positioning systems are described.

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