A Discussion of Pod Drives and Their Application in the Pleasure Boat Market

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Abstract

Since being introduced to North America at the Miami Boat Show in 2005, Volvo Penta Inboard Performance System, or IPS has established itself as a leading propulsion choice among pleasure boat owners and builders. Other suppliers are following suit including the Cummins Mercruiser Zeus system. Pod propulsion offers benefits like increased efficiency, better performance, nimble handling, and low noise levels while allowing more people to successfully operate their vessel due to a friendly operator interface. Features of these commercial pod systems that also benefit builders include ease of installation and the integral underwater exhaust which helps to meet CE requirements, for both exhaust and noise levels.

Both IPS and Zeus are fully integrated pod propulsion systems. Existing vessels can be retro-fitted with these systems while many new vessels are being designed specifically for IPS or Zeus. Donald L. Blount and Associates provides consulting in regards to IPS integration with existing and new designs and has also been involved with designs employing the Zeus system.

The first portion of this paper discusses pod drives, particularly IPS itself. (Because the author has substantially more experience and background with IPS, much of the information herein is IPS specific). General information on IPS and Zeus is offered as well as some operational specifics. The paper then focuses on the application of pod drives in existing and new vessel designs. The discussion includes how hull forms can be evaluated for use with pod drives. A look at the integration of pod systems into various types of pleasure boats (cruiser, day boat, fishing yacht, etc) is also covered including the challenges which exist for each specific vessel type.

References