Azimuthing Electric Poded Propulsion Drives

PT. Marine Propulsion Solutions, is recognized as one of the world’s leading Electric Poded Thruster and Propulsion Systems Manufacturer. It introduces its unique Electric Poded Rotatable Propulsion Units for all types of Marine vessels.

Owner/Operator benefits:
- Propeller speed is independent of engine speed leading to better maneuverability
- Increased propulsion system efficiency
- Increased propulsion system redundancy and power availability
- Reduced total installed power generation
- Reduced noise & vibration levels

Shipyard & Construction benefits:
- Flexible machinery arrangement
- Modularized design
- Simpler vessel machinery installation
- Simpler hull form and structure

MPS Propulsion Systems through-hull Electric Poded Drives are engineered products of European design based on the latest marine propulsion technologies, ANSYS Finite Element Analysis and the most modern manufacturing technologies available. They are of very heavy duty design and incorporate many unique features to optimize reliability, longevity and easy maintenance.

Silent.... Dynamically Balanced.... and free of Vibration...
Integrated Propulsion Packages:
• Dual Azimuthing Propulsion Drives
• Water or Air Cooled Variable Speed Drives
• Diesel Generator Sets (Tier 2 & 3 – IP44)
• Main Switchboards with built-in Power Management System
• Integrated Bridge Controls with full system monitoring
• Fully Classed Systems (ABS, B.V., Lloyds and other available)

The Electric Podded Drive is designed for installation in wells. The wells (shipyard furnished) are large enough to allow top-side installation and removal of the completely assembled thruster unit. Installation and removal takes place through soft patches in the main deck. If practical, the top flange of the well is at an elevation slightly above waterline in light ship condition. This allows removal and installation of the Propulsion Drive while the vessel remains in the water, i.e., without dry docking. The thruster mount is provided with a top flange for bolting to the well flange. The well flange is also provided, along with the flange gasket and bolting, allowing easy and accurate installation without the need for any machining on the vessel well structure.

<table>
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<tr>
<th>Model</th>
<th>Units</th>
<th>A200E</th>
<th>A275E</th>
<th>A350E</th>
<th>A500E</th>
<th>A850E</th>
<th>A1000E</th>
<th>A1200E</th>
<th>A1500E</th>
<th>A2100E</th>
<th>A3000E</th>
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<td>MdaN</td>
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<td>300</td>
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<td>860</td>
<td>1950</td>
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<td>MM RPM</td>
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<td>1175 540</td>
<td>1250 500</td>
<td>1400 450</td>
<td>1750 360</td>
<td>1925 325</td>
<td>2300 265</td>
<td>2475 250</td>
<td>2800 215</td>
<td>3450 180</td>
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</table>

**Ease of Installation with reduced costs**

With the electric motor designed as part of the thruster pod and water cooled, there are no requirements for forced air ventilation of the electric motor, no shafting requirements with any couplings and alignments necessary.

**Noise Suppression Technology**

Because the electric motor is designed as an integral part of the thruster hub and attached directly to the propeller shaft, there are no gears boxes or gear reductions providing maximum system efficiency with lower noise and vibration levels produced.