Azimuthing Electric Podded Propulsion

**RiSEA Propulsion Pte Ltd,** part of the RiSEA Group of companies is recognized as one of the world’s leading Electric Podded Thruster and Propulsion Systems Manufacturer and introduces its unique Electric Podded 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

Optional Carbon Fibre Propellers

**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)

**Design:**
RiSEA Propulsion Pte Ltd through-hull Electric Podded 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.
The Electric Podded Dives 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.

**Model Selection**

<table>
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<th>Model</th>
<th>Unit</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>MdN</td>
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<td>450</td>
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<td>250</td>
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<td>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.

**Integrated Bridge Controls**

**Integrated Bridge Controls** are inclusive of Navigation Screens, Electric Pod Status Screens, Diesel Gen-Set Status Screens, Emergency Gen-set and Switchboard Screens, Main Switchboard functions, AFE functions and all required alarm functions.