



SISHIP eSiPOD

Siemens solution for a podded drive is a rotatable podded azimuthing diesel-electric propulsion system with a performance range of 5 to 12 MW per unit. Thanks to its outstanding hydrodynamic design and its permanently excited synchronous motor, the eSiPOD drive can operate considerably more efficiently than a conventional diesel direct drive. The enormous performance and excellent maneuverability make the SISHIP eSiPOD an attractive, cost-effective drive solution.

The advantages of SISHIP eSiPOD at a glance

- Higher degree of efficiency
- Elimination of rudders, crankshafts, bossings, etc.
- Space saved by eliminating most internal cooling elements
- More design flexibility for the ship's stern and engine room
- More passenger/cargo space
- Modular design
- Excellent maneuverability, especially at low speeds, without additional stern thrusters
- Safer voyage through minimized crash-stop time
- Low noise and vibration levels
- Simple design with few components, lowering maintenance costs

SISHIP eSiPOD – our solution in detail

Maneuverable, fully rotational single- and twin-propeller outboard systems are available with electrical power transmission of up to 12 MW per unit. The efficiency of these drive systems is comparable to conventional crankshaft systems.

The performance of the eSiPOD drive is the result of a combination of dual-propeller technology with a hydrodynamically optimized drive module and a permanently excited motor.

Two triple-blade propellers are set in motion by a mutual crankshaft, rotate in the same direction, and are mounted at the front and rear of the drive module. The advantage: the load is optimally divided between the two propellers.

The two fins located between the propellers additionally increase their efficiency.

The well-known, permanently excited synchronized motor is smaller in diameter than conventional electrically excited synchronized systems, and is also considerably lighter. As a result, it is possible to

decrease the diameter of the drive module in which the motor is housed. Given that the motor is neither electrically excited nor requires any external air ventilation system, its performance is enhanced by an additional 2 %.

Space-saving and flexible SISHIP eSiPOD diesel-electric, rotatable outboard drives are particularly well suited for ships requiring a high level of performance and maneuverability: cruise ships, large ferries and passenger ships, mid-sized transport ships, tankers, icebreakers, naval ships, etc.

The electrical properties of the permanently excited motor resemble those of a conventional synchronized motor, and can therefore be integrated without limitations in conventional drive systems. In the process, the higher level of availability of the diesel-electric outboard drives also leads to a marked increase in operational reliability.