



Electric Voith Schneider Propeller (eVSP) Sustainable mobility for maritime applications

With the electric Voith Schneider Propeller (eVSP), we are taking an important step towards the electrification of the drivetrain in marine applications and thus to a shipping industry that is even more eco-friendly. In our capacity as technology partner to our customers, we are actively driving the global mobility transition.

The eVSP combines all the advantages of the Voith Schneider Propeller (VSP) with the electric motor of the Voith Inline Thruster. The result is a reliable, energy-efficient, environmentally friendly and compact drive unit that is ideal for use in yachts, ferries, tugs, tenders and passenger vessels, and in offshore applications. Like the conventional VSP, the eVSP achieves maximum thrust in all directions, continuously variable and with maximum precision.

The powerful, directly integrated electric motor (permanent magnet motor) delivers high torque and a fast response without any gears whatsoever. This means that it ensures

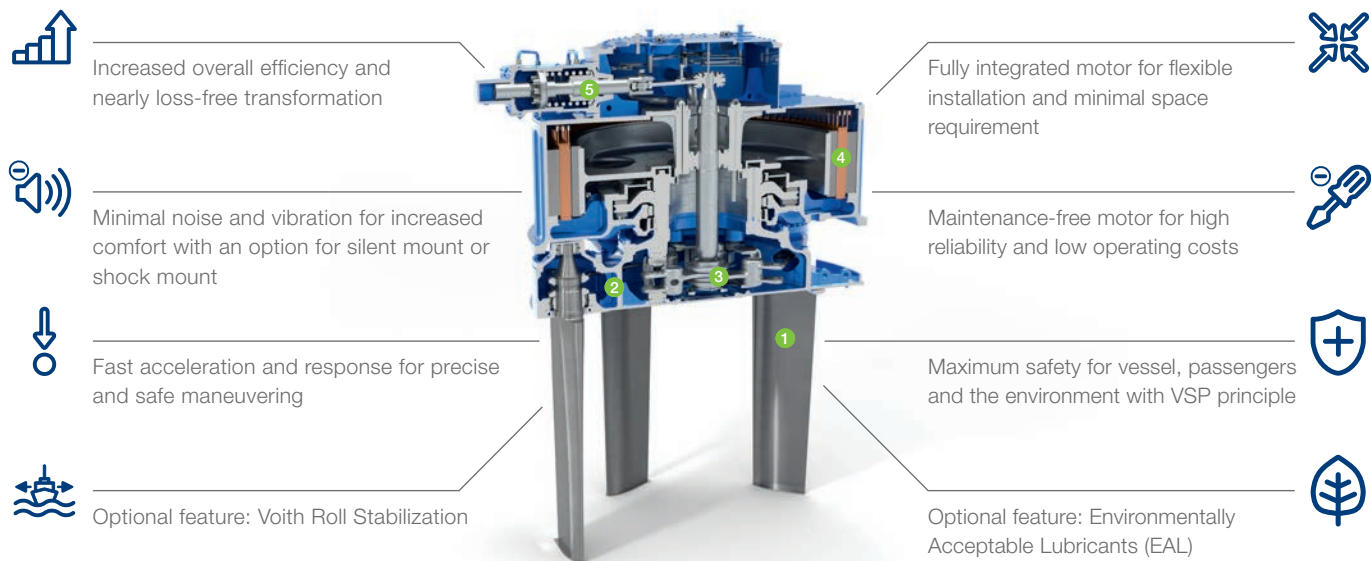
a more direct and almost loss-free conversion of the electrical drive power into thrust, while keeping noise emissions to a minimum. Due to the low maintenance requirement for the robust electric propeller, the subsequent costs for servicing are drastically reduced.

Customer benefits and advantages

- + Proven technologies for reliable performance
 - + Efficient electric drive system for maximum effectiveness
 - + Compact design to suit individual requirements
 - + Improved sustainability
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The electric Voith Schneider Propeller at a glance



Main components of eVSP

1 Blades 2 Wheel body 3 Kinematics 4 Electric motor 5 Hydraulic cylinder

Switch with ease to more sustainable technologies

We exploit our long-standing system expertise in the drivetrain to offer shipbuilders and ship owners an easy transition to alternative and more sustainable technologies, without having to compromise on performance, efficiency and safety. Like the mechanical VSP, the eVSP enables extremely fast response to steering commands and thus allows fast and precise maneuvering and positioning even under the most adverse conditions like strong swells.

In addition, the modified oil system of the eVSP requires a much lower oil volume, which reduces operating costs. Readiness for use of bio-oil improves the ecological foot-print. And thanks to its low weight and compact design, the eVSP can also be integrated in a very space-saving way, allowing for greater scope in the design of the engine room.

Product range electric Voith Schneider Propeller (eVSP)

Propeller type/size	Number of blades	Blade orbit diameter [mm]	Blade length [mm]	Housing height [mm]	Housing diameter [mm]	Weight without oil [abt. kg]	Oil filling [abt. l]	Electrical input power [kW]
eVSP 9	5	900	1 000	1 000	1 550	3 300	300	200
eVSP 12	5	1 250	1 200	*	*	*	*	375
eVSP*	*	*	*	*	*	*	*	500–800
eVSP 21	6	2 100	1 750	2 000	3 000	24 000	1 750	1 050
eVSP 26	5	2 650	2 300	2 500	3 450	40 000	3 200	1 850
eVSP 32	5/6/8	3 290	2 650–2 850	2 900	4 250	71 000–75 000	5 300	2 525–2 700

* Under development: Please get in touch for details

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