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SuperYacht

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VEEM PUSHES THE BOUNDARIES

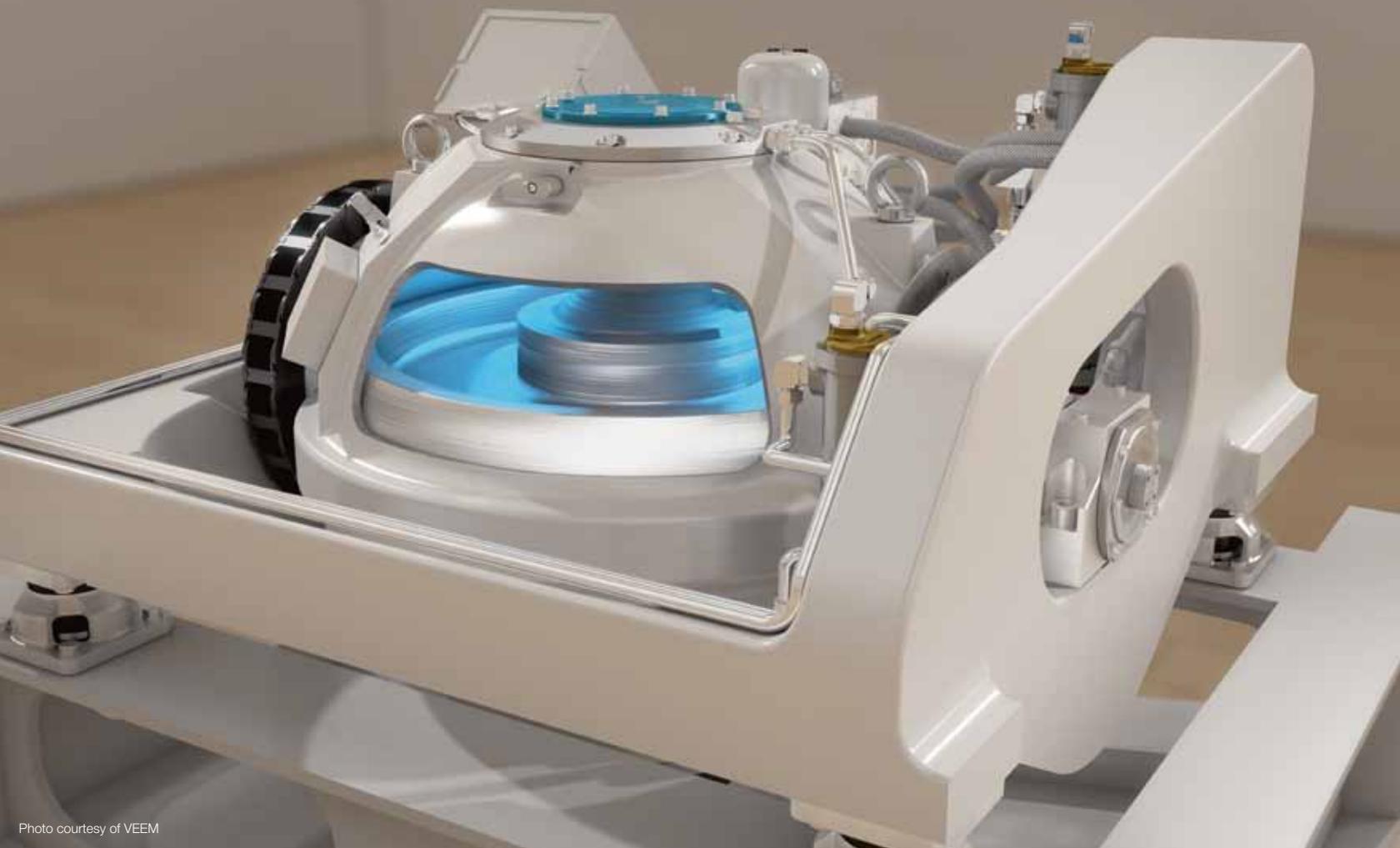


Photo courtesy of VEEM

Driving Innovation IN PROPULSION

FOUNDED IN 1968, AND OPERATING FROM ITS DEDICATED HEAD OFFICE AND PRODUCTION FACILITY IN Western Australia, VEEM Ltd is a leader in the field of high technology manufacturing of marine propulsion and stabilisation systems.

Supplying critical components to the Royal Australian Navy, and manufacturing technically intensive, large stabilisation hydrofoils for superyachts, commercial vessels and fast ferries, VEEM has also revolutionised fixed pitch propeller technology for boats and yachts with their Interceptor propellers. This allows the effective pitch to be altered at any time by a diver, in a matter of minutes, without slipping the vessel.

Pushing Boundaries

The VEEM propeller range is designed and manufactured with precision and perfection, delivering exceptional performance every time.

Having pushed the boundaries of propeller manufacturing innovation for decades, VEEM consistently aims for higher speeds, better fuel economy, and lower noise and vibration – in turn, driving advances within the marine propulsion market.

By redefining the limitations of pattern molding to produce high performance propulsion systems, VEEM has become the leading brand within the marine propulsion industry around the world. Using advanced Computational Fluid Dynamics (CFD) and Finite Element Analysis (FEA) software together with patternless molding, VEEM can warrant propeller performance of every vessel and guarantee



VEEM gyros offer a genuine step change in performance compared to existing systems.

absolute repeatability every time.

In addition to achieving speeds in excess of 50 knots, VEEM's innovative patternless molding techniques enable its team of propulsion design specialists to specify exactly what the vessel needs to meet its specific performance requirements. This means every VEEM propeller is custom designed without manufacturing constraint. These bespoke designs are further supported by decades of real-world experience, in-house CFD and FEA software, and a first-class team of highly qualified and experienced designers.

Manufactured to Perfection

The benefit of VEEM's truly bespoke integrated design and manufacturing process is that performance and efficiency is always optimised for the specific application. Its propellers are 100% machined by 5-axis CNC machinery to hair thickness accuracy over every square inch, including the boss and high BAR overlapping blade propellers. Each one is S-class as a minimum, while the blades are lustre polished to maximise propulsive efficiency. This level of accuracy means that identical propellers are produced every time, therefore guaranteeing propellers that are perfectly balanced from side to side.

Combined Understanding

VEEM is also one of the only propeller manufacturers in the world that undertakes metal alloying in-house, guaranteeing that all materials are of the highest quality, and diminishing the effects of cavitation on the blades which can hinder performance. It is VEEM's combined understanding of hydrodynamic design and analysis, advanced foundry methods, machine programming, and integrated design and manufacturing processes that results in its propellers being faster, smoother, more efficient, and able to be effectively re-pitched without lifting the vessel. Its evolution in propeller technology extends propeller performance into applications previously dominated by water-jets, and is a feature of VEEM propellers that is becoming more and more important as engine manufacturers increase power density and shipyards optimise hull designs.

The Era of Stabilisers

The same set of VEEM propellers can be optimised for long-range cruising or for flat-out speed, according to the owner's requirement, but equally as important is the ability to enjoy being aboard while at anchor. Wave motion is one of the few external forces that has the capacity to negatively impact time on board, regardless of the size of vessel, and even the most sheltered harbours can suffer from unpleasant wave induced motion, causing discomfort and seasickness in many. Following six years of research and development, VEEM now offers its clients significant improvements in roll stabilisation thanks to the launch of its VEEM Gyros. The new range offers a genuine step change in performance compared to existing systems and was neatly exemplified when 42.5m aluminium motor yacht Tango, built in 2006 by Oceanfast

Yachts in Western Australia, was fitted with VEEM Profile 1 gyro installation in November 2016.

Originally built with traditional Naiad fins, the rolling motion caused by transverse waves proved to be particularly problematic for Tango. Gyro commissioning and sea trials were carried out in the yacht's normal operating environment of Sydney Harbour, after which several specific improvements in the yacht were noted. These included a more stable swim platform making guest transfer from the tender faster and more comfortable, reduced sloshing in the fore deck pool, and a general reduction in rolling motions making the onboard experience more comfortable. Tango is now reported to be reviewing options for widening its operational area due to the improved comfort in waves.

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