

Seakeeper gyro ups the ante

The new Seakeeper M8000 gyro stabiliser is “the most powerful unit on the market on a per-kilogram, per-cubic metre and per-kW basis,” according to Twin Disc’s Glenn Frettingham.

The new unit was released by Twin Disc (Pacific) at the Sydney International Boat Show. The spherical unit delivers 8,000 Newton metre seconds of righting force to stabilise any vessel up to 31.75 tonnes displacement.

Frettingham said the gyro’s power comes from Seakeeper’s newly-designed, high-strength, single-piece forged flywheel. The new M8000 spins at 8,000 rpm in a near-vacuum to eliminate the significant negative effects of air drag. Spool-up time to stabilisation is 20 minutes and 35 minutes to rated rpm.

The new model, which replaces the successful M7000, is on display at the Riviera and Sunseeker on-water stands at the Show.

“The new M8000 is easier to install and requires less power to operate,” said Twin Disc (Pacific) Managing Director Glenn Frettingham.

“The gyro motor drive box is now pre-mounted on the unit and pre-wired at the factory, reducing installation labour and wiring. The M8000 is 14 percent more powerful and 44 percent quieter than the M7000A it replaces. The M8000’s operating status and diagnostic information are accessed from the display panel and keypad mounted on the boat’s bridge.

“Installation is simplified with a new pre-filled, self-purging coolant design. Built to last, with minimal required scheduled maintenance, the M8000 also features heavy-duty gimbal shafts and bearings, as well as cast-aluminum saddle beams.

“Unlike fin-based, roll stabilization systems whose performance decreases sharply at less than cruising speed, the Seakeeper gyro stabiliser works equally well from zero to full speed,” said Mr Frettingham.

Riviera CEO John Anderson said the company is delighted to partner with Twin Disc in displaying the new gyro at the show.

“The Seakeeper has been a strong addition to our client offerings,” he said. “This new model is easier to install in our boats



Twin Disc (Pacific) Managing Director Glenn Frettingham explains the improvements in the new Seakeeper M8000 gyro to Riviera’s John Anderson.

because it is now a self-contained unit delivered direct from Twin Disc (Pacific).

“Our owners appreciate the fact the gyro works effectively whether the boat is at speed or at anchor or in their marina.

“The improvements in the M8000, including faster spool-up time and the new closed coolant system, will deliver better performance and lower maintenance.”

Mr Anderson said the company had recently installed a larger Seakeeper M21000 gyro in the latest of its flagship 70 Enclosed Flybridge boats.

Weighing only 525kg, measuring 922 mm long, 997 mm wide and 705 mm high, the compact M8000 gyro can be installed as a boat is being built or easily retrofitted into an existing vessel and does not necessarily need to be aligned with the for/aft centreline of the hull.

“A Seakeeper gyro can be installed to the hull structure in the engine room, lazarette or anywhere aft of midship where there is

a minimum area of 800(L)x977(W)x671(H) mm of available space,” said Mr Frettingham.

The unit requires 3KW to spool up and as little as 1kW to operate.

The high-tech Seakeeper gyro spins a forged, high-strength steel flywheel at 8,000rpm in a near-vacuum to generate an unmatched 8,000 Newton Metre seconds of angular momentum to counter roll motion in the boat. It has no drag-producing protrusions from the hull that can be damaged by impact or affected by seaweed snags.

The Seakeeper gyro is actively controlled by state-of-the-art motion sensors and computer processors to optimize torque.

Resistant to the harsh marine environment or corrosion, the low-maintenance gyro’s main components are sealed inside a cast aluminum enclosure. It features an active hydraulic brake, heavy-duty gimbal shafts and bearings and sturdy cast aluminum saddle beams. A display panel and keypad provide status and diagnostic information.