



New Yanmar Engines & Twin Disc “QuickShift” Transmissions Transform Training Vessel

A pair of new Yanmar 6CX-GTYE diesel marine engines mated to the recently released and revolutionary Twin Disc QuickShift transmissions have contributed to a remarkable makeover for Vic Goy, and his



Geelong (VIC) based training vessel.

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Delphinus is a 17m commercial fibreglass vessel, which began life in 1970 as a Fisheries Patrol vessel. The boat was sold to a Queensland recreational boating enthusiast, before being purchased by Vic Goy in 1999 and put to work as a training vessel.

“The delivery run from the Whitsundays to Melbourne took about two weeks,” current owner Vic Goy of Marine Training Services recalled. “And that included the breakdowns.”



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The vessel as purchased had the original engines fitted. These were old American two stroke diesels that were according to Vic, “pretty heavy on fuel, maybe 60 litres per engine per hour”.

Vic put Delphinus to work training skippers for various commercial qualifications. Then one engine died about 4 years ago and needed a re-build. When Vic realised that the second engine was also beginning to fail, he also found that parts for the re-build would be a problem so decided to investigate a repower.



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“I decided that it was time to get some modern day technology into the engine room,” Vic Goy said. “Of course the big problem was that nowadays most commercial diesel engines are in line 6 cylinders models and I was replacing a V8. The overall length with a gearbox attached was a practical consideration.”

“Some of my students were skippers who had experience with Yanmar and they were glowing in their endorsement. Then when I looked closer at the specific Yanmar engines I found they were lower at the front end than other engines, particularly with the heat exchanger fitted.”

“I looked at all the brands but settled on the Yanmar 6CX. Probably the best advice that I got was from the professional fishermen who recommended Yanmar by name.”

The Yanmar 6CXGTYE model is part of the Yanmar Hi Speed Commercial Engine Family which offers a fully IMO emission compliant power range between 12 and 911mhp . The 6CX-GTYE model is used extensively in fishing, patrol craft and passenger ferry applications and is renowned as a

reliable and economical performer. The conservative rating of this model is 294kw (400mhp) @2700rpm. It is a 6-cylinder in-line turbo-charged and intercooled model that displaces 7.413 litres and weighs in at only 850kg dry without the gearbox fitted.

Matched to the Yanmar engines are the latest transmissions from Twin Disc, the highly acclaimed QuickShift transmissions, model MGX-5065SC with a 2.43:1 reduction ratio. These are an offset or shallow case design, which assists in keeping the engines low in the vessel.



“These transmissions have to be experienced to be fully appreciated,” Vic Goy said. “When engaging gear there is virtually no drive line shock, it is so smooth.”



“When leaving the dock, the transmissions engage progressively until fully engaged and then further movement of the control increases engine rpm allowing slow speed control and manoeuvrability.”

The complete QuickShift system is a marriage of these innovative transmissions and the Twin Disc Power Commander EC300 electronic controls. This precise operator control is commanded through either one of the two Dual Leverhead

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stations which control engine throttles and gear shifting while also syncing the engines to run at identical rpm.

Twin Disc has solved the problem of slow, abrupt shifts and delayed actuation. Now skippers have fast and smooth shifts with instant thrust even at low rpm. This delivers precise vessel control. With



QuickShift fast vessels can now go slow when needed and heavy vessels can also be brought into and away from the dock smoothly and with greater precision.

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With the new Yanmar marine diesel engines and Twin Disc transmissions on board, the performance of Delphinus has changed remarkably and for the better. The 24 tonne vessel used to cruise at around 1400 rpm for a speed of 11 knots.

Now the engine revs have lifted to 2000 rpm for a cruise speed of 12 to 14 knots, but most significantly, the fuel consumption has halved and the noise levels much reduced. The original props have been retained.

“I’m a very happy Yanmar customer,” Vic Goy stated. “These engines and Twin Disc transmissions have delivered everything that I had hoped for and more.”

“Our training courses are running smoothly and on schedule and just as important our fuel costs have plummeted. That’s a win for my business which ever way you look at it.”

Power Equipment is the exclusive and authorised Australian, PNG and South Pacific distributor of Yanmar Marine and Industrial diesel engines importing product from Yanmar plants in Japan, Asia, USA and Europe. With an extensive marine dealer and branch network, Power Equipment has the expertise and experience to assist boat owners and boat builders for both new installations and repowers. Power Equipment also distribute the Yanmar powered MASE diesel marine generators range and Gori high quality folding sailboat propellers.

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