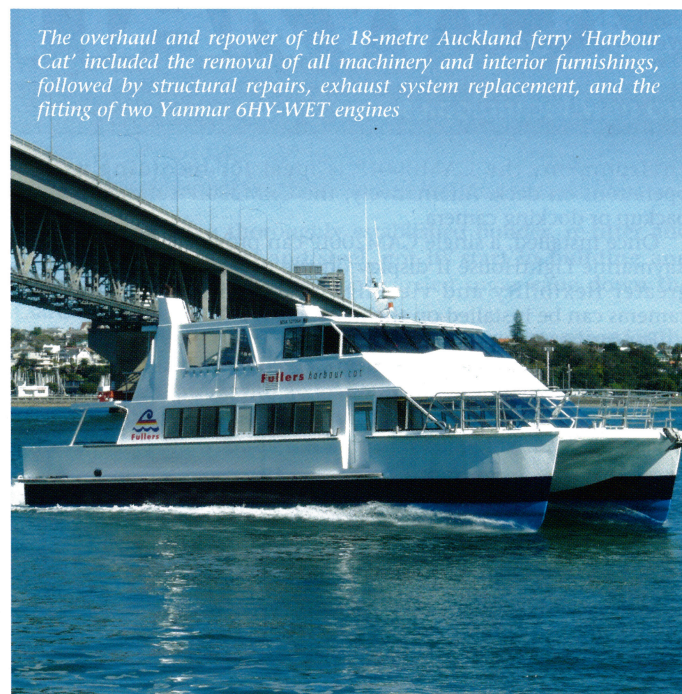


## Yanmar re-powers harbour commuter ferries

Rarely does a single commercial vessel go through such a transformation as the 'Harbour Cat', operated by Auckland ferry company Fullers in New Zealand.

Constructed and launched as an 18-metre ferry, the 'Harbour Cat' worked across various waterways in New Zealand until she wound up in the Fullers Auckland commuter fleet. Somewhere in her chequered past, the vessel was lengthened by two metres and re-powered. But with the lingering effects of that renovation long since worn off, modern Auckland commuters were beginning to regard her as a noisy and Spartan experience.

Fullers Auckland withdrew the 'Harbour Cat' vessel from the commuter run and handed her over to the team at Oceania Marine for a complete refit. This began at the keel and worked all the way through the vessel.



The overhaul and re-power of the 18-metre Auckland ferry 'Harbour Cat' included the removal of all machinery and interior furnishings, followed by structural repairs, exhaust system replacement, and the fitting of two Yanmar 6HY-WET engines

### GIVING A CAT NEW CLAWS

Having already undertaken a refit to the Fullers ferry 'Tiger Cat', which was also installed with the same Yanmar 6HY-WET series engines, Fullers' 'Harbour Cat' received a very similar makeover and overhaul treatment. This involved ripping out all machinery, the removal of everything in the engine room, and the removal of the air conditioning systems, carpet, seating, steering system, and even the glass-in cabins. Structural repairs were then executed, while air intakes and exhausts were also replaced.

In the 'Harbour Cat's' engine room, a fresh pair of Yanmar 6HY-WET marine diesels was fitted. A purpose-built commercial grade marine engine, Yanmar's 6HY-WET model includes Yanmar's latest combustion chamber design. Named ASSIGN, this system was originally pioneered by Yanmar on its range of large bore, low-speed propulsion engines.

When combined with Yanmar's own mechanical fuel system, the ASSIGN technology delivers impressive fuel consumption results and provides commercial operators with very good fuel savings over a vessel's remaining service life.

According to Power Equipment, the official distributor of Yanmar engines to Australia and New Zealand, the twin-turbo 441kW at 2,100rpm Yanmar 6HY-WET engine model is the ideal variant for operators that require an engine to run at full throttle for extended periods. With the cylinder head featuring a quad

valve design, the Yanmar 6HY-WET excels in this configuration and in conditions demanding continuous commercial use.

In regards to the 'Harbour Cat' overhaul, the two engines were then each coupled to conservatively rated 500-series ZF reduction transmissions, as well as hooked up to five-blade counter-rotating Tiger propellers. As part of the propulsion makeover, the 'Harbour Cat' also received a completely new driveline.

### REFIT RECEPTION

Commenting on the results of the refit, Power Equipment said that whereas the old 'Harbour Cat' was not the most popular vessel amongst commuters, post re-fit she is a "totally different beast".

"The twin Yanmar marine diesels emit a determined growl from the engine room, but the on-board noise levels are a marked improvement on the previous engines and the engine room fit out," said the company.

"The new Yanmar 6HY-WET marine diesels in their white livery look the part in a sparkling new engine room. Once fired up, this cat is ready to pounce. Easing the throttles forward, the Yanmar engines punch out 441kW a side, quickly pumping the 'Harbour Cat' up to a service speed of 23 knots.

"Post re-fit, the once-tired commuter ferry is now smart and well presented. The skipper, Lane Van der Linden, also rates the vessel as easy to operate."

With the extensive re-fit program completed, the vessel's service life has now been significantly extended, thus proving the "half life" refit concept as a practical and economic option for lengthening the service of hard-working vessels that typically put in up to 4,000 hours a year, said Power Equipment.

While the Yanmar engines have played their part in the transformation of the 'Harbour Cat', the all-embracing re-fit program has demonstrated that the commercial life of a vessel can be greatly extended. The extensive application of new, high quality replacement marine equipment means that Fullers of Auckland have two fully refurbished vessels destined to operate efficiently for many years to come.

For further information contact:

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441kW @ 2,100rpm variants of the Yanmar 6HY-WET engine were chosen for the 'Harbour Cat' re-power