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Power Equipment – Australia, New Zealand & South Pacific

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With

YANMAR



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THE EXPLORE GROUP POWERS AHEAD WITH **YANMAR**



Brisbane based Aluminium Marine is widely regarded as one of Australia's most respected shipyards, designing and manufacturing aluminium catamarans for the passenger ferry and eco-tourism markets. Their latest launching is a 250 seat ferry, powered by a pair of 670kW Yanmar 6AY-WGT commercial marine diesel engines.



Yanmar 6AY-WGT In the engine room.

“As far as we are concerned as catamaran designers and builders, Yanmar is the only marine engine to specify as they are purpose designed for the marine environment. We looked over other brands and all we see are converted truck engines.”

Gaining the approval from the Explore Group to install the Yanmar engines was a mere formality. With another vessel in their fleet recently repowered with the Yanmar 6AY-WGT engine, the customer has already had a fair indication of the strong performance, low fuel usage and high reliability that other ferry owners have come to enjoy from these purpose built heavy duty marine engines.

The Yanmar 6AY-WGT is a six in-line cylinder engine with a displacement of 20.39 litres and a rated power output of 911 mhp (670kw) at 1,938 rpm.

The versatile 6AY Series is extensively used in many applications including heavy displacement work boats but also in many high speed applications such as passenger ferries, patrol craft and cray fishing boats.

Sea trials of the Yanmar powered Explore D6 have delivered impressive performance data. At wide open throttle the engines rev to 1970 RPM with the vessel recording a top speed of 29 knots. This was achieved with full fuel tanks of 4000 litres and a simulated passenger load of 100 people.

“This is a very slippery, efficient hull design” said Jack Louwerse.

“The Explore D6 weighs in at 53 tonnes light ship, but with the addition of 250 passengers an additional 20 tonnes is added to the total weight. Fully loaded we expect the hull will still achieve 26 knots.”

The Explore Group operates a fleet of ferries, charter vessels and former Americas Cup yachts across both the New Zealand and Australian markets. The confidence of the Explore Group in both Aluminium Marine and Yanmar is unquestioned.

When the keel was laid for this vessel, Aluminium Marine did not have a signed customer for the hull. The New Zealand based Explore Group, a repeat Yanmar customer, quickly signed on with Aluminium Marine when they decided to expand their operations into the ferry market in NZ and required a new vessel on a short lead time to commence operations in Auckland before Christmas 2014.

The design for this new cat at Aluminium Marine was again supplied by Sydney based INCAT Crowther Designs and was based on the highly successful Spirit of Queenstown which was powered by the 478kW Yanmar 6HY-WET engine series, and now in operation for over 12 months. To meet Australian maritime regulations, the hull was being built to a length overall of 25m for a passenger load of 150 people.

However, when the Explore Group signed on, the design parameters changed. New Zealand regulations permitted the hull to be longer and the passenger capacity was also increased to 250 people. As a result, the hull was lengthened in the aft area of the sponsons, providing a longer and well balanced hull design. The new boat was named Explore D6.

According to Jack Louwerse, Project Manager and Engineer at Aluminium Marine, the Explore D6 is a very efficient hull design.

“This hull is a ‘displaning’ design which is noted for an incredibly smooth ride and unsurpassed efficiency,” Jack Louwerse said.

A ‘displaning’ hull shape combines the best attributes of a displacement and semi-planing hull. Displacement speeds offer low fuel consumption and longer range, while semi-planing hulls are noted for higher performance. A ‘displaning’ hull delivers both.

“The vertical stems are more efficient than a raked entry as the vertical entry provides greater waterline length,” Jack Louwerse said. “The vertical stems also provide greater hull buoyancy for ‘ard.”



Contributing significantly to the success of the Explore D6 is the choice of Yanmar 6AY-WGT engines, one mounted aft in each sponson. The power train incorporates Yanmar YXH-240 transmissions with a 2.27:1 reduction ratio, which feed the power via conventional shafts fitted with five blade counter-rotating props.

The selection of the Yanmar 6AY-WGT engines was one jointly made by Aluminium Marine and the customer, the Explore Group.

“The Yanmar 6AY-WGT is a very durable, powerful engine,” Jack Louwerse said.



Plenty of Seating Positions to cater for all preferences.



Yanmar 4JH4-TE Engine



LADY DOUGLAS *25 years*



The Lady Douglas River Cruise has long been one of the iconic tours in Port Douglas. The sight of the paddle-wheel styled vessel cruising along the waters of Dixon's Inlet evokes the unique heritage of Port Douglas.

Much loved by both locals and tourists alike, the old girl is an everyday reminder of the historical roots of the town as a rollicking gold rush port where people, machinery and supplies were unloaded from the coastal trading ships onto the harbour-side before being transported to the Thornsborough and Kingsborough gold fields on the Hodgekinson River

Today the one and a half hour calm-water, eco-cruise includes a tour up Dixon's Inlet spotting wildlife such as saltwater crocodiles, seabirds, crabs, fish, turtles, dolphins and very occasionally, dugong. There is a very informative commentary on both the ecological and historical features of the inlet; and to finish each tour, the Lady Douglas cruises out to the heads and gives passengers a great view back over the Port Douglas hill, township, the historical courthouse, Sugar Wharf and St Mary's Church.

When The Lady Douglas first ran in 1989 it was a similar cruise to what it still is today. They spotted the same wildlife such as, crocodiles, white bellied sea-eagles, osprey



and the Brahminy kites. The mangrove forests, with their fascinating and important ecology, were a highlight then and still are today. The history was incorporated into the commentary and is even more so the focus of the commentary today.

After 25 years it has had four owners and it has recently been bought by local family Lucas and Kate Agrums in July 2014.

The Lady Douglas was favoured a very well earned refit in 2014, the cabin was re built with high quality rosewood throughout which was the same as the original materials used together with a new rooftop canopy, galley fridge and seating.

The original Yanmar diesel engine was replaced after many years of reliable service with a brand new 75hp - 4JH4-TE model supplied by their local Yanmar dealer Port Douglas Diesel.

Port Douglas Diesel provides local support to the many Yanmar commercial vessel owners operating in this region and are on call day or night to help local operators maintain their time critical schedules.

New owners Lucas and Kate are locals, Kate being born here, and have always admired The Lady Douglas. They are very excited with their purchase of the iconic Lady Douglas and are keen to keep the history and ecology as the main focus of the vessel.

They have changed very little at this stage as they feel it works very well doing what it is currently doing. The guests that go on Lady Douglas step off with big smiles, shaking the Captains hand and raving about what great value and fun it was. Lucas gives an informative and humorous commentary which includes a lot of facts about both the ecology and the iconic history of area.

Since taking over in July 2014 they have hosted several wedding groups and even dropped guests off at the Yacht club afterwards. They are enthusiastic to host local work-parties, Christmas parties and any evening functions. Over the busy season the Lady Douglas has been operating four tours daily thanks to the reliability of the Yanmar engine on-board.

Into the future Lucas and Kate hope to maintain the famous name and reputation of the iconic Lady Douglas and have many enthusiastic new ideas to keep them busy.

The team at Power Equipment have absolutely no doubt that the well proven and market leading Yanmar 4JH4-TE will allow them to expand their business and allow many more eager passengers to enjoy the sights of the Dixon Inlet in the low noise and low emission fashion that Yanmar engines are renowned for.

Thanks to Kate Agrums for providing this story. Further info www.ladydouglas.com.au

YANMAR EFFICIENCY DRIVES BRITEFORCE LED LIGHTING TOWERS



Briteforce LED Lighting Towers.

A massive swing to the latest technology LED lighting is the driving force behind the sustained growth of Western Australia based lighting tower specialist, Briteforce. Seeking greater efficiency, the Yanmar 3TNV70 has now become the diesel engine of choice at Briteforce.

Briteforce was established by Michael and Maria Maiolo in 2007. Quality was the cornerstone of the company and understandably success followed quickly. With success comes expansion and the new manufacturing facility was three times bigger than the original premises. Power Equipment has been supplying Briteforce with Yanmar industrial diesel engines since 2008, with Yanmar the exclusive power of choice for many years now.

Three years ago Briteforce was awarded a large contract with BHP for the supply of Yanmar TNV powered lighting towers fitted with metal halide lights, this contract was again secured for a further five years recently highlighting the performance of the lighting tower and power pack. Yanmar engines were chosen on the basis of the reliability of the engine and excellent performance traits. Three different Yanmar TNV models were

utilised by Briteforce, the 3TNV82, 3TNV84 and 3TNV88 in the original production models.

With the recent advent of LED Lights, Briteforce began development work with this new technology. It quickly became apparent that LED towers were far superior in performance and operational costs than the conventional metal halide lights.

"It was soon established that the LED Lights delivered very significant cost savings and performance benefits," said Dave Duddington, Sales Manager at Briteforce.

"The LED units are slightly more expensive to purchase new, but there is a 70% fuel saving on operational costs and a 70% saving on maintenance. The market acceptance of LED towers is now so compelling, that we offer metal halide lighting towers but no longer sell any."

Coinciding with the release of the new LED towers, the Australian mining industry moved from a construction phase into a maintenance mode. Mining companies began looking closely at their operational costs and readily accepted that there were massive savings to be had by replacing their entire fleet of Briteforce metal halide lighting towers, with the Briteforce LED models.

The BHP Iron Ore re-work encompassed much more than changing the lights. BHP returned their fleet of existing Briteforce towers in batches. Some units had extremely low hours logged while others had recorded 5000 hours of operation. All units were between two to three years old and all were 100% operational and functional when returned to Briteforce. This highlights the cost benefits and payback over a short period making the refurbishment



The Yanmar TNV Engine provides all the Power these towers need.

Power Equipment are pleased to announce that we have recently shipped out our **1,000th TNV engine** to Briteforce for use in their lighting towers. This is an impressive number and Michael and Maria should be congratulated on this achievement.



cost effective in the short term and provide major savings over the long term.

The re-work at the Briteforce factory in Perth required the lighting tower to be stripped back to the bare bones. The hydraulic mast, trailer, hydraulics and control panel were all recovered and used in the re-work.

All of the Yanmar TNV diesel engines were removed. A completely new Yanmar 3TNV70 engine matched to a new 48 volt/63 amp alternators were supplied and fitted to the re-worked lighting tower. The trailers were upgraded with a new 300 litre fuel tank (the old tanks were 125 litres) and a new fully bundled system was installed.

The switch to LED technology for BHP has caused a reduction in the size of the alternator from 12 kVa to 48 volt/63 amps. As a consequence the Yanmar engine required to drive the alternator has also dropped in size to suit the power output.

Power Equipment supplies Briteforce with their 3TNV70 G-Drives completely built up with the radiators, air filters and exhaust system already fitted. This is a major time saver for Briteforce.

The Yanmar 3TNV70 is a three cylinder diesel engine rated at upto 19.4mhp at 3600 rpm. In G-drive configuration as used by Briteforce, the power developed is 9.0 mhp at 1500 rpm. Fuel economy and reliability are standout features of this model diesel engine.

“BHP has benefitted enormously from the re-work on our lighting towers,” said Dave Duddington.

“The outcome is that these towers cost much less to operate. They only need servicing four times a year and they operate for three weeks before needing a fuel top up. The labour savings are significant.”

“We rate the Yanmar TNV series of engines very highly and that’s why we use Yanmar

exclusively. There are no problems with the Yanmar engines and virtually zero warranty claims.”

“BHP has been very happy with the performance of the Yanmar industrial engines and had no issue with Briteforce supplying Yanmar again with their re-works.”

Briteforce manufacture two models of the LED lighting towers. The mining spec’d “Lite Star” is the exact unit supplied to BHP and others in the mining industry.

A more compact LED lighting tower, the “Compact Star”, is manufactured principally for the hire industry. This unit has the same hardware and components as the “Lite Star” but lacks some of the ‘heavy duty’ hardware. It is contained within a physically smaller trailer envelope. As a result seven “Compact Star” units can be fitted on a standard 40’ trailer and these are commonly used for events, traffic management and general hire applications.

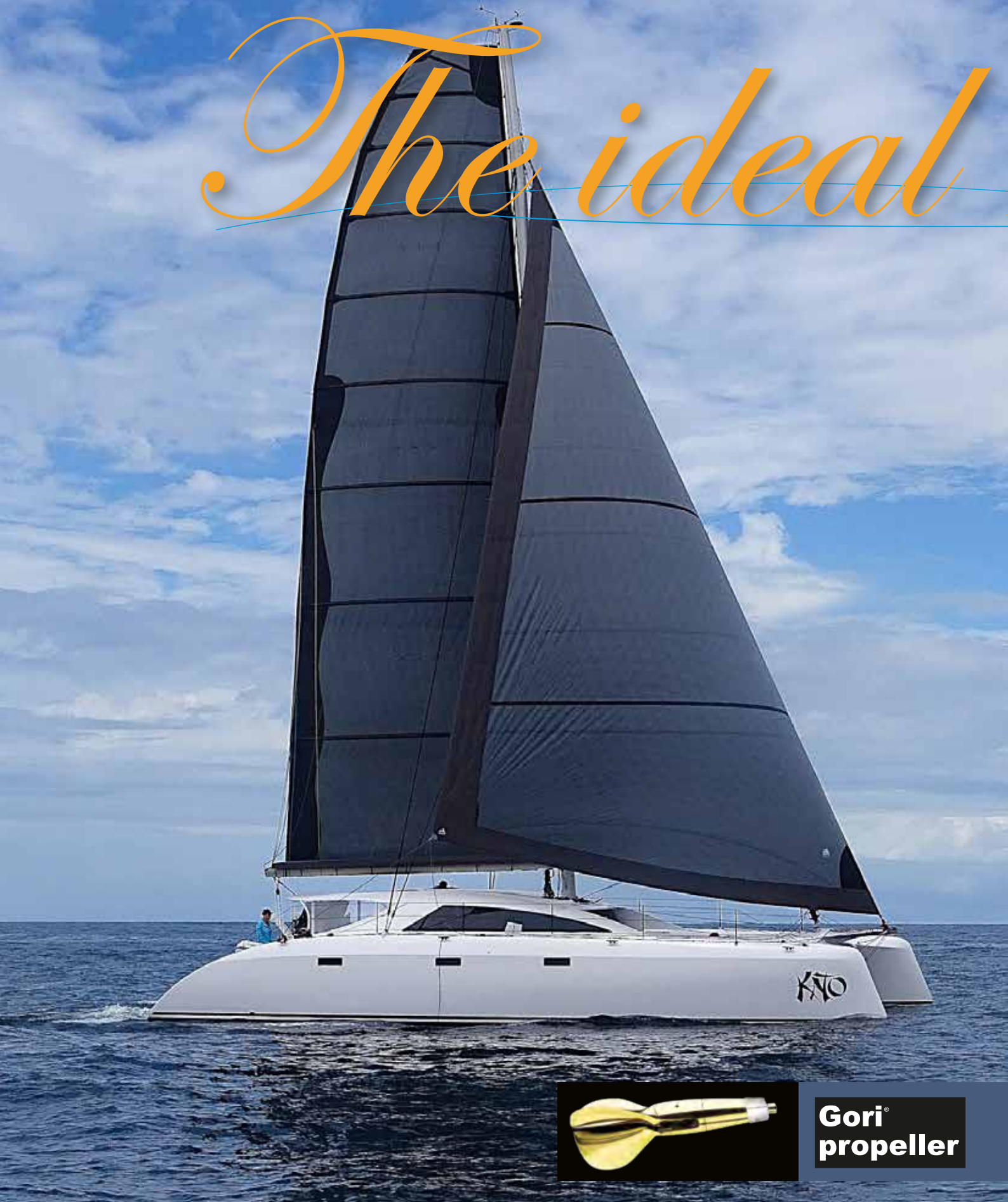


Dave Duddington with the Yanmar TNV Engine ready for install.



Lighting towers after they have been on a work site.

The ideal



Tony Longhurst is a man of action who has always led a fast life. A retired V8 Supercar driver, water ski champion and now the CEO of the successful Boat Works complex on the Gold Coast, Tony has recently taken delivery of his Yanmar 4JH4-TE powered luxury multihull, Kato.

match FOR MULTIHULL KATO



Tony Longhurst.

Kato is an impressive cat. Her vital statistics include a length overall of 18.0m, beam of 8.4m and displacement of 12,000 kgs. In each of the two engine rooms is a Yanmar 4JH4-TE matched to the new-model Yanmar SD60 Saildrive & Gori 3 Blade Folding Propeller. The Yanmar / Gori package pushes Kato along at a remarkable 15 knots under power.

Designed by Schionning Designs in NSW and custom built by Noosa Marine in Queensland over a period of 14 months, Kato is an imposing yet sleek hull. This is a hand crafted hull built from composite materials and without moulds. Through the intelligent application of these composite materials, Kato has the right blend of strength and light weight.

When designing their new multihull, Tony Longhurst and his wife knew what they wanted from their new boat. They were looking for improved sailing performance over their previous multihull. They also



wanted to combine great performance with comfortable accommodation and to ensure that the level of fit out and comfort was the best available.

Tony Longhurst and his wife intended to sail Kato alone most of the time on their extended cruises on the north-east coast of Australia and beyond.

The outcome is a customised version of the Schionning G-Force 1800. Kato has been built to sleep eight. The port hull is the guest side of the hull while the starboard side is dedicated entirely to the owner's suite. All the cabins are spacious, filled with natural light, uncomplicated and welcoming.

Between the two hulls is a spacious bridgedeck which houses the huge lounge and fully fitted galley. Easy open access to the rear deck brings the living area and cockpit together as one.

Every aspect of the design, construction and fit out of Kato was subjected to intense scrutiny; the engine room being no exception. Based on past experiences with Yanmar and further research into the power options, Tony Longhurst decided on the top of the range Yanmar 4JH4-TE engines driving the latest Yanmar SD60 Saildrives.

"We wanted engines that were very dependable, delivered top flight performance and had a good power to weight ratio," said Tony Longhurst.

"It was also vital that we selected a brand that has a world-wide support network for parts and service. Yanmar was the stand out brand and we remain very comfortable with our decision."

"Yanmar is a perfect match for Kato. We selected the biggest Saildrive package in the range and I'm glad that we have all that Yanmar power on tap for whenever I need it."

The Yanmar Saildrive is a purpose designed and manufactured drive, popular amongst owners of multihulls and keelboat yachts. The drive configuration provides a through-hull drive leg directly connected to the engine with no intermediate connection shafts to simplify the installation and reduce alignment issues. The SD60 Saildrive unit installed in Kato has a reduction ratio of 2.49:1.

The Yanmar 4JH4-TE engine develops 75mhp at 3200 rpm. This is a four cylinder, turbo charged engine which displaces 1.995 litres. Boasting four valves per cylinder, the Yanmar 4JH4-TE delivers more power with lower emissions. The standard 125 amp alternator produces maximum power for the high electrical demands of cruising boaters.



Helm Station is practical and Stylish.

Rounding out the propulsion package on board Kato are a pair of 3 blade Gori 20" x 15" folding overdrive props.

The 3 blade Gori propeller has a patented overdrive function, a second pitch which can be compared to the 5th gear in a car. The overdrive function can be used when motoring in calm waters or when motor sailing for noise reduction and lower fuel usage. When sailing and the 3 blade Gori propeller is folded, it has the lowest drag of all 2 and 3 blade propellers, fixed, feathering and folding with only 1.4 Newtons of drag at 6 knots. In addition, the 3 blade Gori propeller once folded does not auto rotate, so no shaft brake or transmission lock is required.

While the motoring performance of the Yanmar Saildrive package is remarkable, under sail Kato boasts exceptional performance. In light winds of just 8 knots, Kato recorded a boat speed of 9.8 knots. Under stronger winds of 16 knots, Kato has clocked 24 knots.

The key to the success of this cruising catamaran is the excellent power to weight ratio and a good waterline beam to length ratio. Of course the efficiency of the Yanmar 4JH4-TE, Yanmar Saildrive legs plus the sleek Gori folding props, also contribute to the success of this superb cat.



Quality Engineering makes for easy maintenance.

YANMAR and Pathfinder deliver 'Grace, Space & Pace' for Trans-Ocean Cruising



Rehab.



Ray Harris, Power Equipment and Peter Brady.



Yanmar 6LY3A-STP easily accommodated.

Brisbane designer and boat builder Peter Brady is not one to change a winning formula with every one of the last 18 displaning power cats that he designed and built powered by Yanmar diesels.

Currently under construction at Peter's Brisbane boatbuilding yard Pathfinder Power Cats is the first Pathfinder Passagemaker 14.4m power catamaran. Constructed from composites using a production moulded hull with custom deck and cabin, this boat is being constructed for another West Coast client.

Once again, Peter has specified a pair of Yanmar diesels with 315mhp 6LPA-STP2 and 2.5:1 Yanmar gearboxes having already been delivered and are being prepared for installation.

This vessel is the second in the Pathfinder range with the first being the trans-ocean capable 17.4m Pathfinder Pilothouse "Rehab" that was launched in Brisbane in June 2014. Powered by dual Yanmar 6LY3A-STP (440mhp) engines packaged with Yanmar KMH61A marine transmissions, the delivery trip of 4,700nm was completed in effortless fashion. This incredible vessel averaged around 16 knots with an exceptional total fuel burn of 66 litres per hour. She is capable of 26 knots fully loaded, yet boasts a range of 3,000nm at 8 knots.

To put the 3000 nm cruising range into the context of the Brisbane to Perth delivery run, "Rehab" could have stopped just the once to fuel up. The capability to go long distances at a good speed on a single tank of fuel is what defines a vessel as being trans-ocean.

"Rehab" was the second Yanmar powered power catamaran Peter Brady designed and built for her Mandurah owner, the first being a Brava 45. Shown to the public for the first time at the Mandurah Boat Show, "Rehab"

generated a huge amount of interest with Peter currently working on new designs for clients he met at the show.

"The fast trans-ocean power boat cruising market is an emerging and potentially huge market," Peter Brady commented. "My new Pathfinder Pilothouse 17.4 is the first boat in Australia to be developed specifically for this market."

"With our long rugged coastline and lack of ports, cruising vessels need to cover long distances and do so quickly, efficiently and in comfort. A trans-ocean vessel operating from Australia has the capability to travel to many tropical Pacific Islands, the stunning fjords and sounds in New Zealand plus the enchanting waterways of Asia."

Pathfinder Power Cats ideally fit the bill offering the perfect blend of grace, pace and space with their range of boats. This hull is stunning to look at. It has a decent turn of speed at sea and has a huge amount of live-aboard space.

"Rehab" is an exceptional vessel which is deceptively huge, such are her balanced proportions. The manufacturer claims that the 17.4m Pathfinder Pilothouse "Rehab" can comfortably host 70 people on board for a cocktail party.

For such a function to be a success there has to be enough floor area, a galley capable of producing and serving food and drinks, plus enough flat surfaces for platters, glasses and bowls. Being a cat with an enormous beam, the hull is also very stable. "Rehab" has it all.

The Yanmar Connection

As Peter Brady's design emphasis is on long-range cruising, he prefers simple uncomplicated fuel injection and engine control systems for his power plants wherever possible. These engines have a greater tolerance to the "not so perfect" fuel and more

basic maintenance facilities often found in remote destinations, features proven and appreciated time and time again by Peter's long distance cruising clientele.

"The 4LHA, 6LYA and 6LY3A models we have mainly used are purpose built Yanmar marine models, not a marisined truck engine. Whereas the Yanmar 6LPA series, even though it is based on a marinised Toyota automotive block, it still maintains a mechanical fuel system and many other core aspects of Yanmar's proven marine heritage which I like" Peter Brady said.

"Even the high performance Yanmar 6LY3A series, as fitted to Rehab, has an electronically controlled governor with integral electronic controls & displays but still maintains a mechanical fuel injection system that suits my clients and my design philosophy perfectly. When I design and build trans-ocean capable vessels, 'strong, simple and reliable' are the key requirements of both the boat itself and the mechanical components specified."

"Yanmar diesels comfortably fulfill these requirements and so Yanmar is an excellent choice for us and our customers."

Commercial Too

With the Australian dollar coming back to more competitive levels, there is potential for export again. Peter Brady has a strong belief backed up by 42 years of design and boatbuilding experience that his displaning power catamarans with their exceptional fuel efficiency and load carrying ability will also be perfect for commercial applications such as crayfishing.

Peter Brady believes that Yanmar's commercial range of engines is an ideal match in this market, given Yanmar's reputation for strength and reliability growing all the time in this difficult-to-crack market.

Oceantech

Operating in Adelaide's commercial marine precinct of Largs North, specialist naval architects Oceantech Design are a passionate advocate of the Yanmar range of commercial marine engines.

Their latest launching, Shootingstar, is a beefy offshore utility cat, powered by a pair of Yanmar 6CXB engines. She's purpose designed, custom built and performs superbly with Yanmar marine diesel engines in the engine room.

The Oceantech Design association with Yanmar goes way back to beginning when Jon Kemp founded Oceantech in the late 1990's, eyeing an opportunity in South Australia for naval design work.

Today, Oceantech Design is a multi disciplined marine design firm that exports high quality pre-cut designs worldwide as flatpack boats. Utilising the latest in computer aided design and drafting techniques, and industry standard software, the company has extensive experience in most construction materials and methods. Projects can be completed in compliance with all major National and International classifications as well as local marine survey authorities.

The range of vessels designed by Oceantech varies from a one off work punt, through to a 24m crab boat, the Silver Spectre. Oceantech designs can be constructed by suitably qualified ship yards, or their sister company, Calibre Boats located alongside Oceantech's facility.

"We specify and have purchased a lot of Yanmar marine diesel engines for our boats," said in house naval architect, Richard Jeffries. "We are very happy with the reliability of the Yanmar's. They are generally smaller for their power rating so are exceptionally well suited for cat hulls due to the compact installation envelope."

"We buy engines right across the range, and then fit a variety of drive systems as appropriate, shaft drive, water jets and a few stern drives too. We match engines to hulls to performance for the optimum package."

Shootingstar was designed by Oceantech to be a high speed transfer vessel. Built by Calibre Marine, this is a 14.0m all alloy cat with a beam of 5.0m and displacement of 21 tonnes. The vessel is designed to be operated by a crew of two, but has the capacity to carry 23 passengers.



Oceantech's Facilities.



Shooting Stars well engineered starboard engine bay.

Installed in each of the sponsons is a shaft drive Yanmar 6CXBM-GT commercial diesel engine. This Yanmar engine is a purpose built marine commercial engine, rated to develop 374 KW (509MHP) at 2700 rpm. Transmissions are ZF 305-1 with a ratio of 2.5:1. Maximum speed is 27 knots while a comfortable cruise speed is 23 knots with fuel consumption at 60 litres per engine per hour.

Yanmar's 6CXB, weighing in at 856kgs, is regarded as a lightweight engine but packaged within a compact installation envelope. The appeal is superb fuel efficiency and an impressive power-to-weight ratio that makes it possible to attain a higher top speed and a longer cruising range.

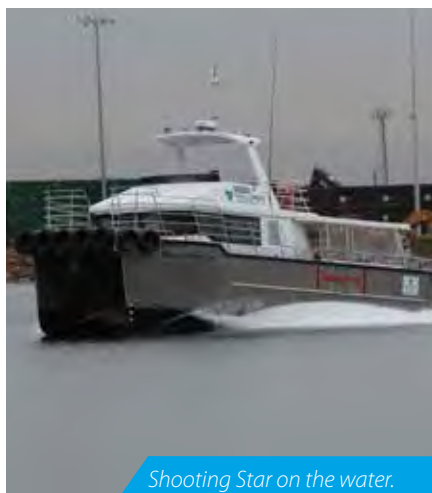
The Yanmar 6CXB is a mechanically governed, freshwater cooled, six-in-line marine diesel engine displacing 7.4 litres. It features a shrouded dry turbocharger, cylinder block inspection ports and is equipped with Yanmar's own proprietary fuel injection

equipment. Together with Yanmar's patented in-house designed combustion chamber & fuel injection technology it offers the end user with an IMO Tier 2 compliant engine package that also has the added benefit of simplicity resulting in blistering performance, superior fuel efficiency, low noise and a true commercially rated engine.

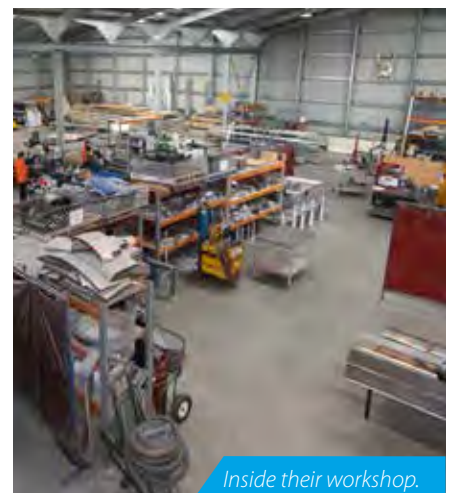
The new generation 6CXB series comes from a proven pedigree with the earlier 6CX series already establishing an excellent reputation with many Australian and New Zealand boat owners.

Shootingstar is now operating successfully in Mackay, transferring crew to bulk carriers, coal ships and the like. It has dual helms and boarding platforms for transfers both fore and aft.

Across trawlers, general work boats and crew transfer vessels, cat and mono hulls alike, Oceantech Design is a passionate advocate for the Yanmar brand of marine diesel engines.



Shooting Star on the water.



Inside their workshop.

YANMAR 6LY2A- Drive Gold Coast

Thrill



The notion of a high speed thrill ride for tourists on the glitzy Gold Coast used to be the exclusive domain of high powered, big revving V-8 petrol engines. Thanks to Yanmar 6LY2A-STP diesel engines, the stereotype has been smashed.



-STP Engines ill Seekers



Ocean Jet is different to most companies operating in the thrill a minute jetboat ride business. For a start, this boat is fully enclosed so that passengers stay dry. They certainly don't need to don wet weather gear and PFDs.

That is not to say the ride is any less exhilarating. Passengers still need a restraining harness. In fact Jet Boat Extreme, is the only company on the Gold Coast which heads offshore looking for rough water, hence the name emblazoned along the side of their hull 'Ocean Jet'.

The Ocean Jet boat operating on the Gold Coast was custom built in South Australia in 2008 and powered by a pair of Yanmar 6LY3-380hp engines driving Doen 130 jet pumps. It was operated by the original owners at Tweed Heads until 2011 when it was purchased by Michael Gilmore and his son Kegan at Jet Boat Extreme.

"Two of our other thrill boats were powered by Yanmar 6LY2A engines," said Michael Gilmore.

"We repowered Ocean Jet with the Yanmar 6LY2A to give us more power and standardise our fleet."

"We have operated our jet boats with Yanmar marine diesel engines for ten years and have had a great experience with these engines and the Yanmar brand."

Yanmar's 6LY2A-STP engine is a turbocharged, direct injected, intercooled, in-line 6 cylinder displacing 5.813 litres to produce 440mhp (324 kW) at 3300rpm. With a dry engine weight of only 535kg (less gearbox) the 6LY2A-STP delivers industry leading power-to-weight Yanmar diesel performance.

The power output of 440mhp per engine delivers a massive amount of power to push this beefy, robust hull. This is a big boat which measures 9.0m LOA with a beam of 3.3m

and tips the scales at 7500 kgs. With a full passenger payload of twelve, an extra tonne is added to the weight.

If that's not impressive enough, one of the Yanmar 6LY2A-STP engines drives an air conditioning pump via a simple belt drive. The air con unit keeps the passengers on board cool in the enclosed cabin. On a hot summer day on the Gold Coast, that's an essential and formidable task in itself.

Despite the size and weight of the hull, not to mention the steep deadrise, the Yanmar engines have the brute power to get the Ocean Jet along at 45 knots or almost 85 km/h.

On most trips the skipper runs at close to wide open throttle of 3300 rpm for virtually the entire journey. Even in spite of this heavy operating cycle, total fuel consumption for both engines is under 70 litres per hour.

"We run the Yanmar engines harder than most would but we've not had any problems," Michael Gilmore said. "About the only concession to the hard work is that we change the oil at 100 hour intervals and not the specified 250 hours."

Undertaking the re-power proved to be a little more involved than initially thought with the local authorised Yanmar Dealer. Marine Mechanical Services managed by Rob Arnold helped with the repower and undertook a range of important changes in the engine room. There was a new exhaust system, electrics replaced, fuel system upgraded and new engine mounts built.

"There is a lot to like about those Yanmar 6LY2A engines," said Michael Gilmore. "A lot of other marine diesel engines that we looked at in this power category peaked out at 2700 rpm. Jet drives thrive on revs, so the higher revving Yanmar's are perfect for our application."

"The power to weight is also very impressive. In fact the brute power is remarkable, all 880 mhp of it under the hatch. With the engines immediately behind the passengers, it is amazing just how quiet they are."

The Ocean Jet rig is pushed to its limit on every thrill ride. This is a business that operates 365 days a year with two or three thrill runs most days depending on the season. In the high season with the corporates also booking rides with the tourists, the Ocean Jet can run up to five times a day.



Yanmar 6LY2A-STP Engine.

MOTORING AROUND AUSTRALIA (ALMOST) IN A **YANMAR** POWERED WOODEN BOAT



The Murray Pass.

“Thrifty” – that’s how Tim Phillips summed up the performance of the Yanmar 6BY2 engine after his voyage from Perth, across the top of Australia and back home to, Sorrento Victoria (Melbourne). Motoring the entire journey on a single engine, it is a truly amazing fact that the Yanmar engine burnt less than 4.5 litres per hour while running consistently at 9 knots.

Tim Phillips is a man who has a deep seated passion for designing and building exceptional wooden boats. His business, the Wooden Boat Shop, is world renowned for the unique, hand crafted boats which come from his yard in Sorrento, Victoria.

Tim is also a man who loves his time on the water, taking his own creations to sea. When he built a Cheviot 32 for himself in 2011, Tim had not yet conceived the voyage which he eventually undertook with his wife Sally. The hull (named Murray Pass) was built as a regular boat, complete with Yanmar 6BY2 engine, 800 litre fuel tank and 150 litre water tank.

The Cheviot is a day boat or weekend cruiser. The hull measures 9.75m long with a beam of 3.3m. She displaces 3600 kgs empty and with fuel and essential gear on board, displaces 5000 kgs.

As an authorised Yanmar Dealer, Tim Phillips is an enthusiastic proponent of the Yanmar

brand. Every one of his production boats is Yanmar powered, so when it came time to decide what engine to use, it was simply a case of which Yanmar model was best matched to the hull.

“The Yanmar 6BY2 is an exceptional engine,” Tim Phillips said. “During our long trip we put over 2000 hours on the clock and the engine never once faltered. The overwhelming feature of the Yanmar 6BY2 is how little fuel it used.... it never ceased to amaze us how far we travelled before refuelling.”

The Yanmar 6BY2 is a six-cylinder marine diesel engine which is rated at 260mhp (191kW) at 4,000 rpm. This is produced from a 2.993 litre, intercooled and turbocharged six in line cylinder block. All up weight of the engine including the Yanmar KMH50A transmission is just 362 kg.

Second-generation common rail direct injection technology, featuring magnetic vertical injectors, ensures optimum performance and outstanding fuel efficiency. The Yanmar 6BY2 engine and Yanmar KMH50A transmission package also incorporates a CAN bus operating system using NMEA 2000 protocol and offers electronic throttle and electronic gear shift controls for the main helm control.

When the ISAF Sailing World Championships were held in Perth in 2011, Tim Phillips had Murray Pass road freighted to Fremantle to attend and support the event. With Murray Pass in Perth, it proved to be an ideal launching place for the trip.

The boating adventure was conducted in six stages, Fremantle to Exmouth; Exmouth to Broome; Broome to Darwin; Darwin to Hinchinbrook; Hinchinbrook to Whitsundays and then the Whitsundays to Sorrento. At the completion of each stage, Tim and Sally Phillips flew back to Melbourne to attend to their business before heading back to meet up with Murray Pass. All up the trip took 18 months.

“People marvel that we could spend such a long time at sea on board what is essentially a weekender,” Tim Phillips said.

“If we were to do the trip again, I would build a bigger boat, only because it would allow us to have guests on board. This way we could share and enjoy this wonderful part of the world with friends.”

“By undertaking the trip, I learnt that it is really easy to have friends fly-in and fly-out for various segments. Sally and I are very sociable and we like to entertain on board. We also caught and ate lots of fish... it was a wonderful experience.”

While the adventure was short of a complete circumnavigation of Australia, the concept of travelling so far under single engine power in a 9.75 m timber hull remains an astonishing feat.

“We were on autopilot 99.9% of the time,” Tim said. “At 1800 rpm we made 8 to 9 knots. Each day I would check the oil and have a quick look over the Yanmar engine before setting off.”

“It was very easy boating. The Yanmar 6BY2 was serviced in Darwin and we did an oil change in Queensland.”

While the satisfaction of completing the journey remains fresh, Tim Phillips is already contemplating building a 13.5 m timber boat for the next trip... with a Yanmar marine diesel engine, naturally.

“The remote north of Australia is such an amazing region that it has to be experienced with friends next time.”



Tim Phillips and his Yanmar 6BY Engine.

The Experts in Water - Davey

NEW Diesel Firefighter® with Twin Impeller

Davey are proud to announce the release of the NEW Davey Firefighter® Twin model 5248Y. This new model utilises the high quality Yanmar L48 diesel engine and Davey's proven 5 Series Firefighter® Twin wet end, fitted with Davey's new patented impeller inserts.

Powered by
a Yanmar
L48 Engine



DAVEY® Firefighter®

Why choose the YANMAR diesel powered DAVEY self-priming firefighting pump?

The 5248Y has been specially designed with patented impeller inserts to provide high head performance at 3600rpm while still able to operate across the full pump curve without overloading the engine. In fact, the maximum power usage of the pump end has been limited to ensure the engine has significant power reserves. In the event of adverse environmental conditions, such as extremes of temperature, altitude and/or humidity, power reserves are vital for the continued reliable operation of the engine.

Power reserve is very important in the event of bush or wildfire, where engine power reserves may be required for the safe and reliable operation of the pump unit. The 5248Y features Davey's unique and patented clamped impeller design to enable longer impeller life, improved performance and easier disassembly in the case of blockage.

Published performance data actually shows real pump performance, which is regularly checked by Davey's ISO9001 certified QA department. Key features also include:

- Thrust balanced impeller design to extend engine life.
- Pump casing, diffusers and impellers manufactured from quality corrosion resistant marine grade aluminium for long life.
- 4 way discharge port providing easy installation with a choice of plumbing sizes.
- Epoxy coated pump casing, exterior and interior, for added corrosion resistance.

- Patented floating impeller neckrings front and back. The front neckring helps improve pumping efficiency, the back neckring helps extend seal life and dramatically reduce engine wear.
 - Self priming up to 7m at 3600rpm for more versatile installation options.
 - Large priming and drain port with bayonet fit plugs. Plugs have a safety retention system and are available with 1/4" tapping to accept pressure gauges or drain cocks.
- Viton seal and oring kit available for herbicide/insecticide spraying.

Power Limits

One of the challenges with equipping a traditional fire pump wet end to a diesel engine has always been the different ways in which petrol engines and diesel engines respond to load. While a petrol engine can adjust its speed to match its power capabilities, a diesel engine will attempt to match the power needs while still maintaining speed. This can result in serious and terminal engine overloading issues when diesel engines are not correctly matched to wet ends, particularly as the speed (and head) is increased.

Davey's 5210YE/HP is a working example of successful engine matching to wet end through the use of lower flow impellers, thus allowing for 3600 rpm pump speed and the resultant higher head capacity.

Solution

Davey's NEW 5248Y applies the same principle of lower flow for higher head. To create a lower flow wet end, Davey have developed a unique patented set of impeller inserts allowing the use of their standard and proven twin impeller stack.

Official Yanmar engine matching was carried out to ensure the wet end and engine are perfectly matched at the "out of box" speed setting of 3600 rpm.

The result is a compact and lighter diesel engine model, capable of doing a great number of basic pumping duties:

- Operate a single fire nozzle with identical performance to a 5155H running the same nozzle.
- Pump 3000 l/hr to 35m elevation through 2000m's of 50mm PN10 poly pipe
- Produce 50 lpm at 58m head

The new 5248Y is available for delivery NOW! Contact www.davey.com.au to find the closest stockist.

DAVEY



YANMAR

POWERS AUSTRALIA'S LARGEST WATER TAXI

Fantasea 8 Seasons is touted as the largest water taxi in Australia. Offering a hop-on hop-off service on Sydney Harbour, Yanmar 6HY-WET marine diesel engines were specifically selected to power this new 24 meter purpose designed aluminium catamaran.

Whereas most ferry services are tasked with operating to a brisk and tight timetable, Fantasea 8 Seasons is quite different. This is a leisurely tourist service which typically operates at a very sedate 8 knots. In addition to servicing the tourist market, the vessel is chartered for weddings, corporate functions and group tours.

Designed by naval architects One2three, Fantasea 8 Seasons was built in Brisbane by Marine Engineering Consultants. Drawing on the successful catamaran design adopted by Fantasea Crystal and Fantasea Spirit, the hull shape and passenger configuration were refined for operation on Sydney Harbour.

"Fantasea 8 Seasons has a retractable roof which allows our passengers to take in an uninterrupted 360 degree view of Sydney Harbour," said Kelvin Parkin of Fantasea Adventure Cruising.

"The electronically operated roof enables guests to view the Sydney Harbour Bridge, fireworks and the stars during our evening cruises."

On a technical level, the Fantasea 8 Seasons hull was re-designed as a low draft, low wake vessel. This ensures that this giant water

taxi can access the shallow areas of Sydney Harbour.

With a length overall of 24m, beam of 7.6 m and displacement of 70 tonnes lightship, this is a sizeable vessel. Throw into the mix a passenger payload of up to 196 people, or an added weight of over 15 tonnes, and this becomes a big vessel to move around efficiently.

"The choice of engines was arrived at by carefully considering all the key elements of design and operation," said Kelvin Parkin.



Practical and Functional Helm Station.

"The Fantasea 8 Seasons is designed to operate as a dual purpose vessel, often at speeds of just 8 knots in water-taxi mode or at speeds up to 22 knots as a medium speed passenger ferry. As a water-taxi and mid speed ferry, big horsepower in the engine room was not a requirement. What was vital however was having the right engines that a Master 5 skipper could both operate and service. The right size engines would deliver optimum fuel burn for economical operation."

The Fantasea Company operates a fleet of ten large passenger ferries on Sydney Harbour. The operator has a large amount of performance, service and fuel data compiled allowing management to compare the different make and models of engines in their fleet. In arriving at the decision to power the Fantasea 8 Seasons with Yanmar, the overriding issue was the reliability factor of the Yanmar brand.

"Reliability is a huge factor with our organisation," said Kelvin Parkin. "Our experience with the Yanmar brand in our vessels has been first rate. The engines in their own right are very reliable and they are exceptionally well supported by technical people from Power Equipment in both Sydney and Melbourne."

In choosing the Yanmar 6HY-WET model specifically, it was felt that this engine delivered all the right elements of power, fuel consumption, performance and service interval all at the right purchase price.

Yanmar's 6HY-WET model is a purpose built commercial grade marine engine. It is a 6 cylinder in-line configuration engine, displacing 13.733 litres and weighing 1385 kg, without a transmission.

It includes Yanmar's latest combustion chamber design, named ASSIGN, a system originally pioneered by Yanmar on their large bore, low speed propulsion engines.

This technology combined with Yanmar's own mechanical fuel system delivers impressive fuel consumption results and provides commercial operators with excellent fuel savings. When combined with the unique twin turbocharger design, skippers benefit from quick acceleration and very impressive fuel economy right across the full operating speed range.

The 600hp twin turbo (441kW) develops maximum power at 2100 rpm and is the perfect engine for operators who may require their engine to be run at full throttle for extended periods. The cylinder head is a quad valve design. In this configuration, the Yanmar 6HY-WET excels in conditions demanding continuous commercial use.

Rounding out the shaft drive propulsion system are heavy duty ZF transmissions combined with a ZF Mathers Electronic Control System and VEEM 4 blade propellers.

An important aspect of the Yanmar 6HY-WET engines is the 500 hour service interval. This is more than double the schedule of competitive brands and it ensures that Fantasea 8 Seasons is working on the water for longer.

David Howells, one of three skippers to take control of Fantasea 8 Seasons, rates the new vessel as easy to handle with plenty of torque in the low rpm range.

"The Yanmar engines deliver a lot more bite down low, than our other commercial engines," said David Howell.



Yanmar 6HY-WET + ZF500 – A well proven combination

"In the course of a normal day we can log up many hours of running in water-taxi mode at just 8 knots. Fuel consumption is just 10 litres per hour per engine."

On the delivery run from Brisbane down to Sydney, Kelvin Parkin ran the Yanmar 6HY-WET engines at 1800 rpm for a speed of 20 knots. Fuel consumption was recorded at 70 litres per engine per hour.

Fantasea Adventure Cruising is a division of Riverside Marine. The Riverside Marine group has a diverse range of marine operations which includes ferries, marinas, dockyards, charter boats, dredges and tugs.



Sydney Harbour Bridge provides a Spectacular for Fantasea 8 Seasons.



YANMAR Powers Rapid Response Vessel

Auckland Airport is a busy intercontinental hub, located on the shore of Manukau Harbour. With a constant stream of aircraft approaching and departing across the water, a new Rapid Response Vessel powered by dual Yanmar 6LPA-STP2 engines has been commissioned.

Designed by one of New Zealand's foremost designers, Scott Robson, the design brief for this vessel was very specific. It needed to be fast, operate across the shallow waters of Manukau Harbour, handle the nasty chop experienced on the harbour and of course have the capability to rescue air crash survivors from the water.

The design which Scott Robson settled upon is an all alloy hull measuring 10.75m loa with a beam of 2.8m. The draft at rest is an exceptionally shallow 0.6m. The shallow draft has been achieved through the use of dual Hamilton 213 jet drives mated to Yanmar 6LPA-STP2 engines, combined with a low deadrise hull form.

In the event of an aircraft ditching into Manukau Harbour, the new Rapid Response Vessel is tasked with being the first boat to arrive at the scene. Operated by a crew of two plus an observer, the Rapid Response Vessel is required to pinpoint the location of the wreckage and rescue survivors from the water.

The Rapid Response Vessel has a drop down boarding ladder mounted at the bow and the hull has been designed so that people can also be pulled over the side.

In situations where there are more people in the water than can be brought aboard the Rapid Response Vessel, life rafts carried on board can also be deployed to assist those

in the water. The second tier of support is a large purpose designed catamaran powered by dual Yanmar 6LY3 engines. Once directed to the scene of an incident, the catamaran is tasked to act as a command centre and also take on board a larger number of survivors.

While the tender specification was explicit in terms of design and performance, the selection of engines was left to the designer, Scott Robson. He had no hesitation in opting for a pair of Yanmar 6LPA-STP2 marine diesel engines.

Yanmar's sophisticated 6LPA-STP2 engine is a true hi-performance and well proven package. It is a direct injected, mechanical governor equipped turbocharged and intercooled straight 6 cylinder engine pumping out 315mhp at 3800 rpm at the flywheel. The 4 valve per cylinder engine boasts a 4.2 litre displacement for sustained torque through the mid rev range while still offering an impressive power to weight advantage. The dry weight is only 408kgs without the transmission.

According to Scott Robson, Yanmar was the obvious engine choice because it met all the key criteria for this application. Just as important in the build process, was the choice of Christchurch boat builder, Icon Custom Boats, who delivered a first rate product.

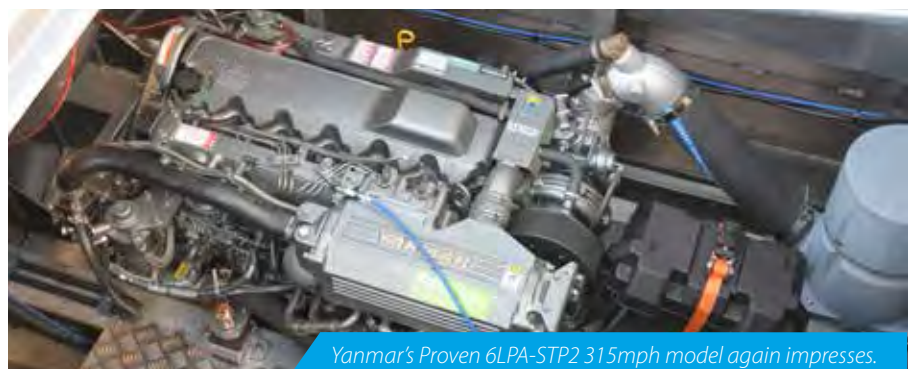
"The Yanmar 6LPA-STP2 is a winner in terms of weight, performance and reliability." Scott Robson said.

"We also needed to match the engines to the size of the hull, the required performance and a tight budget. The Yanmar 6LPA-STP2 engines proved to be absolutely ideal."

"The performance of the Rapid Response Vessel has exceeded all of our expectations. With 700 litres of fuel in the tanks and the designed payload of 1000kgs on board, the vessel achieves a top speed of 39 knots at 3900 rpm. The handling and ride are both excellent."

While the Yanmar engines deliver an impressive top end speed, they also hold the hull on the plane at just 12 knots. It is the balanced combination of the jet-specific hull design, Yanmar engines and Hamilton Jet pumps all working in harmony, which makes this vessel so successful.

The Rapid Response Vessel is built on a conventional frame and stringer system with the addition of pressed, internal panels. The hull is fabricated from 8mm plate aluminium, with 4mm material used on the sides and 3mm on the tubes. The hull was built by Christchurch boat builder Icon Custom Boats.



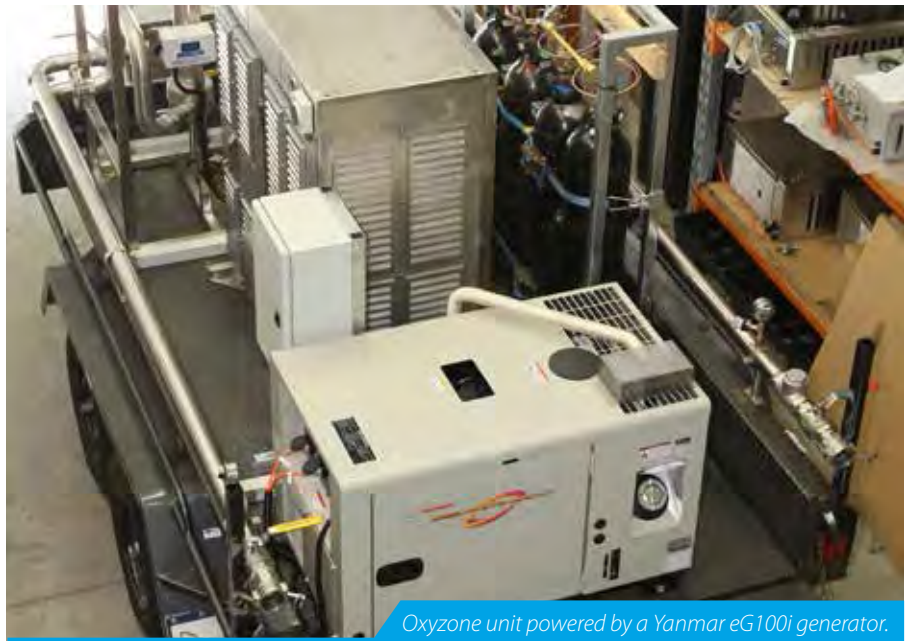
Yanmar's Proven 6LPA-STP2 315mph model again impresses.

OXYZONE is a winner

Power Equipment would like to Congratulate Oxyzone for their recent joint entry win with Sydney water in the Sydney Engineering Excellence awards. Taking home the Product, Manufacturing Facilities and Process – Excellence Award Winner.

Sydney Water and Oxyzone Pty Ltd collaborated to design and build an innovative mobile ozone trailer to improve the efficiency and effectiveness of the new water main disinfection.

Designing a system to operate under varying water pressure and topography posed engineering challenges. The ozone trailer design has succeeded in: reliable production



and dissolution of ozone; disinfection of water mains under various pressures; mobile and automated operation; cost effectiveness and an efficient alternative to chlorination; minimising environmental impacts; improving occupational health and public safety.

An auxiliary device has been developed for improved operatability and automatic paperless transfer of operational data. The field trials comparing the disinfection

performance of chlorination versus ozonation showed that the ozone trailer reduced the job disinfection failure rate from between 21-29% to only 3% during the trial period.

It is expected to provide an annual savings of approximately \$1.4 million. The ozone trailer has been granted an Australian innovation patent and commercialised. Three such ozone trailers are currently being used in Sydney Water operations.

GORI – NZ DEALER VISITS THE HEART OF PROPELLERS

Recently NZ Gori Dealer Ralph Kearton from Marine Solutions Gulf Harbour was on holiday in Europe visiting family who lived in Esberg about 80kms away from the Gori Head office in Denmark .

As one time the biggest seller of Gori propellers in New Zealand, Ralph took the opportunity to pop in and visit Lars Pedersen and the Gori head office facilities. Apparently Lars and his team were most welcoming and Ralph found the trip very useful. In fact he claims Lars helped clear up several questions that he had which has just helped him sell another prop.



**Gori®
propeller**

*“ We could not have chosen a better engine than **YANMAR** ”*



An endorsement of the Yanmar marine diesel engine brand could not be more succinct, nor more powerful. Coming from an experienced commercial operator, the support is indeed powerful.

Bill Coombe has operated Amaroo Cruises out of Forster for the past 36 years. His latest whale watching vessel is powered by a pair of Yanmar 6HYM-WET marine engines, each engine rated at 650 mhp.

“We are very, very happy to have chosen Yanmar,” Bill Coombe said.

“The Yanmar 6HYM-WET diesels are so smooth, quiet and vibration free. They start instantly and are devoid of complicated and hard to service electronics. The Yanmar’s are of extra heavy construction but the surprising feature is their fuel economy.”

Following rigorous sea trials, the fuel data confirms that under a variety of loads and

speeds up to 25 knots, the fuel burn is only 15 litres per engine per hour. For a vessel of the size of Amaroo, the economy according to Bill Coombe is “unbelievable”.

Amaroo Cruises enjoys a long standing relationship with Incat Crowther, the Sydney based specialist catamaran designers. The first Incat design was built for Amaroo in 1981, the second hull followed in 1998 and now the third and current hull is a 2014 build.

Incat Crowther developed a hull a full 4m longer than the previous hull, without adding to the already shallow displacement. Amaroo’s daily dolphin and whale watching run presents many design challenges as the



Plenty of room on the box for Dolphin Watching.

for up to 5 wheel chairs. Indeed Amaroo is a 'next generation' vessel meeting the latest regulations for access, wheel chair capable lavatories, wide aisles and dedicated priority seats.

Prior to selecting Yanmar to power the new vessel, Bill Coombe spent considerable time with Ray Harris from Power Equipment who explained the benefits and advantages of Yanmar diesel engines. This involved a visit to inspect Yanmar engines and transmissions at the Power Equipment Coomera branch office. Bill Coombe then went further and spoke to existing Yanmar customers to assist in the research process.

Once the hull was complete and the engines installed, Bill Coombe was on hand for the sea trials and was impressed with the process and attention to detail.

"Sea trials were comprehensive," Bill recalled.

"Three senior Yanmar representatives attend, each testing and ticking off every engine parameter. They spent many hours making sure everything was perfect, before signing off."

In sea trials a top speed in excess of 27 knots was achieved and the hull has a service speed of 25 knots. The speed trials both light ship and fully loaded, exceeded the designer's forecast by 15%. Boat handling is both predictable and easy, with a very low wash.

"We could not have chosen a better engine than Yanmar."



Fold Down Bimini and Mast caters for low bridge heights.



Comfortable seating & Spacious interior.

trip originates in the shallows of Wallis Lake, before passing under a low bridge and then entering the open ocean.

With Amaroo built by Aluminium Marine in Brisbane, the hull boasts a length overall of 23.9m, a beam of 7.5m and a maximum draft of 0.85m. Propulsion is conventional shaft drives.

On board Amaroo, the facilities are amongst the best in the business. The superstructure is isolated from the hull on resilient mounts. The isolated deck house ensures exceptional low noise and vibration characteristics.

The vessel is rated to carry 147 passengers spread across 101 passengers inside, 70 seats on the upper deck and additional space



Plenty of room makes for easy maintenance.

MILLS CHARTER YANMAR RE-POWERS ANGLERS DAY-CHARTER BOAT'S

Dependability is everything in the charter boat business. Mills Charters, (Perth's leading Charter Company specialising in Deep Sea Fishing, Whale Watching and private function vessel hire) were seeking the ultimate in dependability when they choose to re-power their purpose built vessel, "Blue Strike" with a single Yanmar 6AYM-WGT commercial engine.

"Blue Strike" is a custom built 70ft (21.3m) Conquest built in 1995 specifically for the fishing charter market and currently operating from Hillarys Boat Harbour in Perth. She stands high out of the water and offers unsurpassed levels of comfort and stability. With a displacement of some 30 tonnes, a beam of 5.5m and a licence to carry up to 30 anglers on each day trip she has provided thousands of anglers a day they will never forget.

Like all boats, age eventually caught up with "Blue Strike". The original V12 European marine diesel engine was due for a rebuild. With an expensive rebuild looming the option to re-power with new technology and a comprehensive factory warranty appealed to the owner.

The decision to re-power, refurbish and re-fit was made and an off-season window of two months was allocated to take "Blue Strike" out of service. It was an ambitious program with just 4 weeks allocated to the Yanmar re-power aspect.

Following consultation with various marine engineers, propeller suppliers and Power Equipment, the decision was made to fit a Yanmar 6AYM-WGT.

The Yanmar 6AYM-WGT is a six in-line cylinder engine with a displacement of 20.39 litres and a rated power output of 911 hp (670kw) at 1938 rpm. Engine weight (without the gearbox) is 2365 kilograms.

The Yanmar 6AYM-WGT offers strong performance, low fuel consumption and low emissions. The versatile 6AY Series is extensively used in many applications including heavy displacement work boats but also in many high speed applications such as passenger ferries, patrol craft and cray fishing boats.

Re-powering the "Blue Strike" was undertaken by Yanmar Dealer, Aquadisiac Marine Services. Business partner Rowan Horch and David Norton-Smith approached the task with a simple process in mind... to completely strip the engine room, install the



Rohan Horch and David Norton Smith, Aquadisiac Marine.

new Yanmar 6AYM-WGT engine and re-fit new electrics and exhaust system to suit.

"The Yanmar engine and transmission slipped into the engine room relatively easily," said Rowan Horch.

"Most re-powers require modification to the bearers and engine beds, but in this case it all went smoothly. All up the Yanmar is 400 kgs heavier than the old engine and we positioned it slightly further for'ard in the engine room."

A Yanmar YXH-240 transmission was also installed to complete the power train. The original prop shaft and rudder were re-used but a new prop was fitted, being a 5 blade 39" x 38" unit supplied by M & J Engineering in Fremantle.

Once slipped back into the water, sea trials on "Blue Strike" proved once again, the benefits of re-powering with Yanmar. Compared to the old V12 diesel, the new Yanmar 6AYM-WGT delivered impressive results.

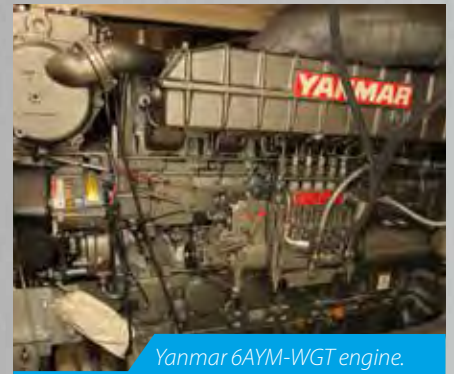
The Yanmar while slightly heavier, delivers an extra 176 mhp to provide a boost in on-water performance; 18.5 knots with the Yanmar compared to 16.5 knots with the old engine.



On time Departures are assured with Yanmar.



Anthony Doupain, Blue Strike Skipper.



Yanmar 6AYM-WGT engine.

The staggering aspect to this re-power is that all of the benefits are achieved with a reduction in fuel consumption.

According to Blue Strike's skipper Anthony Doupain, the benefits of the Yanmar re-power go well beyond the raw performance stats.

"The Yanmar has made a big difference to "Blue Strike", said Anthony Doupain.

"It is 10% quieter on board and there is no turbo whistle. With the Yanmar spinning over freely, the hull gets up and planes easily. In a following sea the hull doesn't bog down and there's always plenty of power on tap to punch the bow up."

In terms of service the Yanmar 6AYM-WGT is also a winner. The service interval on the old engine was 250 hours, but the new Yanmar is now double that at 500 hours. The inline 6 cylinder configuration certainly has made servicing and engine room access a lot easier which is also appreciated by the crew. This means that costs are reduced and "Blue Strike" can spend more time at sea with anglers enjoying their day fishing.

Following on from the success of the re-power of "Blue Strike's" Mills Charters recently repowered "Aussie Warrior", a vessel regarded as the aristocrat of their fleet. The Aussie Warrior which was built by the renowned West Australian boat builder, West Coaster, displaces some 35tonnes and at 75ft (22.8m) makes her the biggest fishing charter boat in West Australia.

Again the Yanmar 6AYM-WGT was the engine of choice for the "Aussie Warrior", a choice that was made somewhat easier for the Mills Charter team by having the performance and fuel economy results of the Yanmar as fitted to "Blue Strike" well documented at the time of their decision making and providing consistencies and economies within their fleet.

YANMAR L Series key driver in **Pumps Australia Expansion**

Pumps Australia is enjoying unprecedented growth with the Perth based company relocating to substantially larger premises. Much of the growth is attributed to the success of the high pressure cleaner range powered by the Yanmar L Series diesel engine.

The new Pumps Australia location is a high profile corner site in the suburb of Welshpool. This 4300 m² site has a massive showroom, administration centre and an enormous manufacturing area with adjacent warehousing.

From the moment a customer enters the showroom, Pumps Australia presents as a highly professional company. The showroom is open plan with the extensive Pumps Australia product range on display.

At the end of the showroom is a spare parts counter and beyond that the factory floor. Here, almost 2000 m² of floor space is dedicated to production and warehousing. It's a busy area, well laid out and with room for even further expansion as the business continues to grow.

In the warehouse, an impressive number of Yanmar L Series diesel engines are stacked in the bays, stacked from floor to ceiling.



Plenty of L Series engines in stock for upcoming orders.

"We moved to the new property with a view to gaining both greater manufacturing capacity and greater efficiencies in production," said John Warne, MD of Pumps Australia.

"To achieve our production and delivery objectives we need to carry better-than-average stock levels of components. We essentially manufacture to order, so we need to have a big supply of Yanmar L series engines on hand to draw on when needed."

The signature range at Pumps Australia is the series of diesel powered, high pressure water pumps. These mobile pumps are powered by the Yanmar L series diesel engine, specifically chosen by Pumps Australia for this demanding application.

The Yanmar L Series of engines carried by Pumps Australia includes the Yanmar L48, L70 and L100. These are supplied by Power Equipment as electric start, single cylinder industrial engines that are all air cooled.

When matched to the Pumps Australia pump unit, the end user applications include fire fighting, trash pumping and high pressure cleaning applications.

"Our point of difference is quality," said John Warne.

"Pressure pumping is a highly competitive market. We leave the bottom end of the market to the cheap overseas imports which are manufactured to achieve specific price points."

"Our association with Yanmar and the L Series engines is about quality. Many of our Pumps Australia products end up in very remote locations or down a mine. The reliability of the Yanmar engine is reflected in our warranty claims which are exceptionally low."

According to John Warne, Yanmar is the perfect match to the company's premium end pumping products.

"There's no question that Yanmar is a high quality product. It has a superior finish and is the best of the diesel engines available in terms of design and operation."

In terms of the future, John Warne is confident that his family business has the vision and drive to flourish over the next 20 years. Together with sons Gareth and Ben, John Warne is looking to expand upon the existing range of pumping products.

"We believe that our business model is solid. We have a proven product range and there are further expansion opportunities that are open to us," John said.

"Our R & D department is dynamic and proactive. We are currently investigating other products which can be applied to our manufacturing capability. Our vision for the future includes industrial grade products which go beyond pumping. We also foresee Pumps Australia branches in the Eastern states too."

"Yanmar will certainly be a part of this next phase of development," John Warne concluded.



John Ware, MD Pumps Australia.

YANMAR HISTORY

Yanmar is a company rich in history that strives to provide sustainable solutions for needs which are essential to human life. Yanmar focuses on the challenges that their customers face in food production and harnessing power, thereby enriching people's lives for all our tomorrows. Now over 100 years old we would like to share with you a brief history of the company that delivers the market leading diesel products that we all know and love.

▶ 1912

Yamaoka Hatsudoki Kosakusho (Engine Manufacturing Company), forerunner of Yanmar Diesel Engine Co., Ltd. founded by Magokichi Yamaoka in Osaka.

▶ 1921

The brand name "YANMAR" adopted. By coupling an engine with a rice huller, Yanmar started selling a Powered Rice Huller. This was to be the first powered rice huller in Japan.



▶ 1927

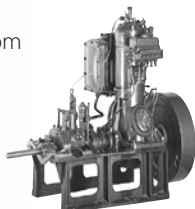
After tying up with Mintol Ironworks in the Philippines, Yanmar started exporting its Horizontal Kerosene Engine to that country.

▶ 1928

Commended by Prince Fushimi, the representative of The Japan Industrial Association, for Yanmar's great contribution to Japan's industrial development through the manufacture of engines. Following the ceremony celebrating the succession to the throne of the Showa Emperor, a Yanmar offset type kerosene engine and power rice huller were purchased by the Imperial Household Agency for use in the Imperial Family's paddy field.

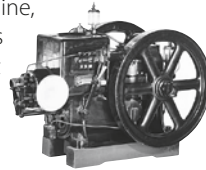
▶ 1930

Developed vertical 2-Cycle 5HP Diesel Engine. This was the first diesel engine made by Yanmar, and the first model was purchased by the Ministry of Agriculture. (The engine is now on display in the showroom at the Yanmar Nagahama Plant).



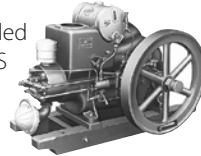
▶ 1933

The world's first small horizontal diesel engine, Model HB 5-6hp, was developed and went into production.



▶ 1936

Large new investments allowed the setting up of production facilities for diesel engines at the Yamaoka Internal Combustion Engine Co., Ltd. on the present Amagasaki Plant site. Released compact, horizontal, water cooled diesel engine Model S



▶ 1937

Released "Rikuogo" (Land King) Tiller, New Horizontal Engine and Okada-Type Simple Tractor. These were sold throughout Japan and enjoyed a very high reputation with farmers.



▶ 1938

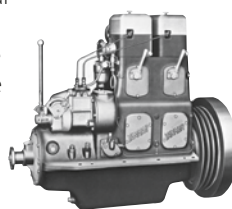
Started exporting Yanmar Diesel Engines to the Philippines and India.

▶ 1942

Nagahama Plant established. This remains a key Yanmar plant.

▶ 1947

Yanmar's war-damaged plants renovated and the mass-production of small marine diesel engines started. These early Yanmar marine diesels practically laid the foundation for the motorization of small Japanese fishing boats.



▶ 1948

Re-started exports to South East Asia, as well as to India and Pakistan.

▶ 1949

Established Nagahara Precision Plant and started production of parts and components for fuel injection pumps for small diesel engines.

▶ 1950

Started exports to Brazil Commended by the Minister of Trade and Industry on the occasion of the 1st Japan Agricultural Machinery Export Promotion Exhibition. Exports to India greatly expanded.

▶ 1951

President Magokichi Yamaoka awarded the Blue Ribbon Medal by the Japanese Government for Yanmar's meritorious efforts in developing the industry, and its contributions to improvements in the standard of living. Awarded First Prize at the 2nd General Purpose Internal Combustion Engine Contest organized and sponsored by the Ministry of Trade and Industry.



▶ 1952

Company name changed to Yanmar Diesel Engine Company Limited and recapitalized at 300 million yen. The world's smallest 4-cycle horizontal water-cooled engine developed.



▶ 1955

President Magokichi Yamaoka was awarded the Gold Diesel Medal by the Inventors' Association of Germany for his creation of the small diesel engine.



▶ 1956

In response to a request, President Yamaoka donated one unit of the world's smallest diesel engine to the German National Museum.



▶ 1957

A 100% Yanmar-owned company (Yanmar do Brasil S.A.) was set up in Sao Paulo, and started local production and marketing. President Yamaoka was awarded the Great Cross Medal for Meritorious Service by the Ambassador of the Federal Republic of Germany, in recognition of his contribution to Japanese-German relations. Nagahama, as a designated JIS plant, was commended by the Ministry of Trade and Industry for its contribution to industrial standardization and quality control. 1961 Yanmar concluded a technical licensing agreement on rotary engines with Wankel and N.S.U. in West Germany. Yanmar Agricultural Equipment Co., Ltd. established in Osaka to expand sales of agricultural-use diesel engines.



▶ 1962

Vice-President Yasuhito Yamaoka assumed the Executive Directorship and Presidency.

▶ 1963

Executive Managing Director Tadao Yamaoka assumed the Presidency upon the death of his brother.

▶ 1966

Yanmar concluded sales and service agreement with Rolls Royce. Yanmar service station opened in Bangkok, Thailand.

▶ 1967

Yanmar (Malaysia) Sdn. Bhd. established in Kuala Lumpur. Kinomoto plant established and started production of small diesel tractors.

▶ 1968

Yanmar awarded the prestigious Deming Prize, the first time it was given to a Japanese diesel engine manufacturer. Vietnam Power Products (VINAPRO) established in Saigon.



▶ 1970

Yanmar entered into sales agreement with Perkins Engines Ltd., U.K. and began sales of "Yanmar-Perkins" engines.

▶ 1972

P.T. Yanmar Diesel Indonesia established in Jakarta, Indonesia.

▶ 1975

Europe Liaison Office opened in London. P.T. Yanmar Agricultural Machinery Manufacturing Indonesia established in Pandaan, East Java, Indonesia.

▶ 1976

Rotterdam Liaison Office opened in the Netherlands. Yanmar Agricultural Machinery Corporation (YAMACO) established in Manila.

▶ 1977

Yanmar-John Deere Engineering Yugengaiisha (Limited Company) established. Liaison Office opened in Piraeus, Greece.

Amagasaki plant becomes the first plant in Japan to be designated as an authorized mass production works of marine engines by the Japan Maritime Association (NK Nippon Kaiji Kyokai).

▶ 1978

Amagasaki Plant received certification as an engine manufacturer from both the American Bureau of Shipping and Lloyd's Register. This became the first factory in Japan to receive certification from all of ABS, Lloyds and also the Nippon Kaiji Kyokai (NK). Yanmar Thailand Co., Ltd. established in Bangkok.

▶ 1979

Yanmar Tractor (U.S.A.) Inc. established in Illinois.

▶ 1980

U.S.A. Liaison Office opened in Chicago. Singapore Liaison Office opened.

▶ 1981

Production of horizontal water-cooled small diesel engines topped 5 million units, a world record.

U.S.A. Liaison Office incorporated; Yanmar Diesel America Corp. established.



▶ 1982

Yanmar's 70th birthday, 70th Anniversary celebrated at the newly completed Yamaoka Memorial Building in Osaka.

▶ 1983

The HWC 50 years old and still going strong. Cairo Liaison Office opened.

▶ 1984

Yanmar Diesel Engine (U.S.A.) Inc. established in Anaheim.

Developed the world's smallest air-cooled diesel series, the L series (4.2~6.0hp).

Amagasaki Plant certified by NV (Det Norske Veritas).



▶ 1985

Release of the TF series, all-new horizontal water-cooled small diesels.

The new multi-purpose industrial TN series (16.5~45hp) released (photo).



▶ 1986

Total tractor shipments to Deere & Co. in the US pass the 100,000 mark.

▶ 1987

Pace-setting D27 series diesel outboard. Post-war diesel engine production tops 8 million.



▶ 1988

Yanmar S.P. Co., Ltd. established in Bangkok, Thailand. L series shipments exceed 100,000.

▶ 1989

Yanmar Europe B.V. established with its base in the Netherlands. Tuff Torq Corp, established in Tennessee, U.S.A.

▶ 1991

Yanmar Asia (Singapore) Corp. Pte. Ltd. established in Singapore. Production level of large-sized engines reached 100,000 units. Amagasaki plant certified by RINA (Registro Italiano Navale).

▶ 1992

Yanmar celebrated 80th anniversary. Amagasaki & Nagahama Plants received ISO 9001 certification. Post-war production reached 10,000,000 units. Yanmar Diesel America Corp. in Chicago merged with Yanmar Diesel Engine (U.S.A.) Inc. of California.

▶ 1993

Vietnam Liaison Office opened in Ho Chi Minh City. China Liaison Office opened in Shanghai. Kinomoto Plant received ISO9001 certification. L70A air-cooled diesel received CARB certification.

▶ 1994

TNE series engines received CARB certification.

▶ 1995

New Biwa Plant is established in Siga.



▶ 1996

Yanmar Cagiva S.P.A established in Varese, Italy. 4TNE 94 and 98 general-purpose small diesel engines certified to meet the emission standards of U.S. Environmental Protection Agency (EPA).



▶ 1997

Certified under ISO14001 (International Standard for Environmental Management System) by LRQA in June, first among Japanese engine manufacturers.



▶ 1998

All plants of General-Purpose Machinery Div. obtained ISO14001 certification from JQA. Managing Director Takehito Yamaoka assumed the Presidency. Three series of Yanmar marine engines certified first in Japan by IMO (International Maritime Organization) for complying with its NOx emissions in regulations in August.



▶ 1999

Yanmar Agricultural Equipment (China) Co., Ltd. established in Jiangsu, China. Yanmar Manufacturing America Corporation established in Georgia, USA.

▶ 2000

New Central Research Center Opened near Nagahama Plant.

▶ 2001

P.T. YKT Gear Indonesia established.

▶ 2002

Company name changed to Yanmar Co., Ltd. from Yanmar Diesel Engine Co., Ltd. Yanmar Marine International B.V. established in Netherlands.

▶ 2003

Yanmar Engine (Shanghai) Co., Ltd. established in China. Shandong Shifeng Yanmar Engine Co., Ltd. established in China.

▶ 2004

Yanmar Marine U.S.A. Corp. established in Georgia, U.S.A. 2005 Yanmar Agricultural Machinery (Thailand) Co., Ltd. established. Yanmar Agricultural Machinery Korea Co., Ltd. established. Yanmar India Liaison Office opened in Delhi. Amagasaki plant certified by BV (Bureau Veritas).

▶ 2006

Vertical Industrial Engines production reached 5,000,000 units.

▶ 2007

CUT Supply Co., LLC, a joint venture company with MTD of the U.S. established to market compact utility tractors. Operations in North American market reorganized and Yanmar Agricultural Machinery America Corporation (YAMA) established. Yanmar Kota Kinabalu R&D Center, Yanmar's first overseas research institute, opened in Sabah, Malaysia. Yanmar Russia Representative Office opened in Moscow.



▶ 2008

Completion of YANMAR America's No.2 Factory and new office building. Opening of YANMAR Logistics Service CO., LTD.'s Kobe Center. YANMAR ENGINE (SHANGHAI) CO., LTD. opens a technical center.

▶ 2009

YANMAR AGRICULTURAL EQUIPMENT CO., LTD. is merged into YANMAR CO., LTD.

▶ 2010

100% of shares of AMMANN-YANMAR S.A.S. are acquired and YANMAR CONSTRUCTION EQUIPMENT EUROPE S.A.S. is established.

▶ 2011

YANMAR INDIA PRIVATE LIMITED is established. A new plant for YANMAR S.P. CO., LTD. is built, and Thailand-based tractor production begins. YANMAR AGRICULTURAL EQUIPMENT SALES CO., LTD. and YANMAR MARINE SYSTEMS CO., LTD. facilities sustain serious damage during the Great East Japan Earthquake, including the loss some facilities. The company carries out relief activities. YANMAR's first Europe-based research institute, YANMAR R&D EUROPE S.R.L. is established in Italy.



▶ 2012

Ceremony commemorates the 100th anniversary of the founding of the company.

Became the world's first manufacturer to be awarded Tier IV certification for vertical water cooled diesel engines by the California Air Resources Board (CARB). Yanmar Honorary Chairman, Tadao Yamaoka, passed away.

▶ 2013

YANMAR MUSEUM opened in Japan. Became the world's first manufacturer to be certified by Swiss Federal Office for the Environment (FOEN) for engines in the 19~37kW class.

▶ 2014

Acquired naming rights to the Nagai Stadium, Osaka, Japan.

YANMAR Powered Generator Drives Custom Irrigator System



Bill Bowen and his irrigation unit.



Yanmar Powered CPG unit.

Irrigating a long and skinny paddock provided a challenge which has been successfully met by the Yanmar Dealer at Boonah, (Qld.) Dover & Sons. With a Yanmar 4TNV98 at the heart of the system, crop farmer Bill Bowen is impressed with the efficiency of the new irrigation system.

Bill Bowen's property, Glenroy, is located between the Condamine River and Glengallen Creek just outside Warwick, Qld. While Glenroy has a water rights allocation from the river, bore water is also available on the property at a depth of 18 meters.

Until recently this paddock was watered with a side roll irrigator, a cumbersome and labour intensive system. Finding a solution to the task of bringing water to a paddock that measured roughly 400m wide by 2000m long, one which is also off the power grid, was met by Bob Dover and his team.

The solution to Bill Bowen's application was to supply a single centre pivot irrigator, some 200m long. A series of five concrete pads were installed in line and evenly spaced down the centre of the paddock, with a water feed line and hydrant run to each pad in series.

The irrigation unit selected for the task is a US built Zimmatic Four-Wheel Mobile Pivot. This is ideal for Bill Bowen's application where pivot points are arranged in a straight line, allowing the whole 200 long irrigator to be easily towed from one pad to the next. With the exception of the water supply, this is a completely self-contained irrigator.

Mounted to the frame of the Zimmatic unit is a purpose built Yanmar Centre Pivot Generator (CPG) pack. This is supplied as a complete turn-key system by Power Equipment.

The Yanmar CPG unit installed at Glenroy comprises a Yanmar 4TNV98 diesel engine which drives a three phase Sincro alternator. The unit is rated at 16.5 kVA at 1500 rpm

continuous. The 4 cylinder Yanmar 4TNV98 diesel engine is a robust and durable water cooled diesel engine, which in "G" configuration is specifically configured for gen set operation.

The complete Yanmar CPG package includes a 400 litre in-built fuel tank, radiator, Power Equipment's EC150 Engine Protection System and weather proof canopy. The added benefit of the Yanmar CPG pack is that by simply undoing a few bolts, the whole unit can be lifted off the irrigator and used wherever there is the need for power on the property. This is a real added plus for the property owner.

When the irrigator is started, the Yanmar CPG unit generates the electrical power that drives the motors which turn the wheels on the irrigator. Each tower on the irrigator has two $\frac{3}{4}$ HP electric motors which gradually move the irrigator through its 360° arc. There are four towers down the line.

The fully programmable system allows Bill Bowen to specify the amount of water to be applied on his land. Typically at Glenroy this would amount to an application of 37 mm through Nelson low pressure sprinklers and at this rate, it takes the irrigator 2 ½ days to go through the 360° arc. The system has the capacity to pump up to 67,000 litres of water an hour when required.

With a rotation completed, the water feed line to the irrigator is removed from the hydrant and the entire system is towed 400m down the paddock to the next concrete pad. The water



Zimmatic four wheel mobile pivot.

line is hooked up to the hydrant and irrigation can commence watering straight away. It is a very simple and easy system to operate.

With 870 hours already logged on the system, Bill Bowen rates this as "a great system."

"I couldn't be happier," said Bill Bowen,

"The Yanmar engine is set to operate at 1500 rpm with noise level impressively low so there is no impact at all on my neighbours."

"I'm also impressed by the fuel economy with the Yanmar. The fuel usage is quite minimal and the service intervals of 250 hours make this an easy system to own and operate."

Bill Bowen's farm is situated on low lying land, prone to periodic flooding. Because the irrigator is portable, it can be towed to higher land when necessary. The crops grown at Glenroy include beans, barley, chickpeas and sorghum.

YANMAR POWER DOMINATES THE AUSTRALIAN WOODEN BOAT FESTIVAL



Power Equipment/Yanmar Stand at the 2015 Wooden Boat Festival.

As a boating event, the bi-annual Australian Wooden Boat Festival is without peer in the Southern Hemisphere. With more than 500 boats on display both on water and on land, in excess of 200,000 visitors and free admission, this event held over 4 days is a robust showcase for the Yanmar brand and Yanmar customers.

As a point of difference to other boat 'shows', the Australian Wooden Boat Festival is a genuine exhibition. This is the place where boat owners come from all across Australia to proudly show-off their wooden boats to an appreciative public, many of whom have travelled from New Zealand and from all mainland states of Australia to join the many wooden boat admirers and boat owners from Tasmania.

The general public are respectfully welcomed aboard to take a closer look at the commercial sea going fishing boats and pleasure-boats alike. Friends and family often take up residence on board their pleasure boats for the day, sipping wine and generally enjoying the ambience of the festival. From time to

time, boats depart for a short trip on the Derwent, then return to their berth. It's a very relaxed atmosphere in Hobart.

Power Equipment once again attended the Australian Wooden Boat Festival with a prominent display of Yanmar marine diesel engines, a MASE generator set, PSS shaft seals and ancillary equipment. Local Hobart based Yanmar Sales and Service Dealer Spectrum Engineering joined the Power Equipment staff manning the display to assist the many festival visitors with their product queries. We were also fortunate to have Mr. Ryuhei Satake from Yanmar Singapore in attendance again this year to hear and share the experiences of

the Yanmar owners at this important event on our boat show calendar.

With so many Yanmar customers attending with their wooden vessels, there were stories aplenty of the voyage from the mainland, across Bass Strait to eventually sail up the Derwent and into Constitution Dock. Under testing weather conditions that forced a number of large boats including the tall ships HMB Endeavor and the James Craig to turn around and head back to their respective ports, the determination and seamanship of our Yanmar customers was truly impressive. We are pleased to summarise a very small selection of the Yanmar powered boats on display.



L to R: Luke Foster, Callum Fagg Spectrum Engineering, Steve Parsons, Allan Foster Michael Blair.

Wayne Parr – Moonraker

Wayne and his wife Melinda deserve the award for most courageous, most determined and most amazing voyage. The couple left Sorrento aboard their restored 1954 gaff rigged sloop powered by a Yanmar 2GM20. At just 7.6 m (24.9') loa, this boat was a mere speck on the hostile expanses of Bass Strait.

Travelling in convey, Moonraker had a good first day under sail. However the following nine days the wind blew without abating. The Yanmar was used to make the remainder of the voyage, operating at wide open throttle, 3500 rpm, for all nine days hopping from anchorage to anchorage across Bass Strait.

As an indication of the seas, even at wide open throttle Moonraker at times was travelling at negative 1 knot. Clearly Wayne and Melinda made the journey safely, thanks to their Yanmar 2GM 20 and to the other boats in the convey providing support.

"It was because of my absolute faith in the Yanmar 2GM20 that we pressed on," Wayne said.



Tim Phillips – Storm Bay

Tim Phillips of the Wooden Boat Shop is a perennial supporter of the Australian Wooden Boat Festival. Once again he sailed the 54' Huon pine planked Tasmanian built fishing boat back to her port in Hobart. Storm Bay which was originally built in 1925 by the legendary shipwright Percy Coverdale has been completely restored by Tim Phillips and is a favorite amongst Hobart aficionados.

Storm Bay has an 110mhp Yanmar 4JH4-HTE in the engine room. The Wooden Boat Shop is a long standing Yanmar Dealer and is responsible for the sales and servicing of many Yanmar's in their home waters of Sorrento – Mornington Peninsula Victoria.



Chris Sinn – Jane

"Jane" is a 14.3 m timber masterpiece from the Wooden Boat Shop built for Chris Sinn. Throughout the 2 year build process, Chris Sinn was a hands-on owner undertaking and assisting in the construction process. The interior was custom designed by Chris' son, an award winning architect. The run down to Hobart was Chris' first big trip and he took his time, completing the voyage in 3 weeks. The 110mhp Yanmar 4JH4-HTE used just 4.5 litres per hour travelling at 7 knots at 2200 rpm.





Ross Wilson – Aranui

Aranui was recently built and launched by Mark Abbott and his team at Corsair Boats, Rosebud Victoria. Aranui's owner Ross Wilson stocked the boat for the journey south, kicked the Yanmar 6CX-530CR into life and set out on his first sea voyage aboard Aranui. This is a magnificent vessel in every respect and she performed faultlessly on the trip south. Ross intends to cruise some of the famous cruising waters in Tasmania with his wife before heading back to his home port of Sydney.



Peter McKeand – Menindee

Built in 2014 by Corsair Boats, Menindee. It is modeled on the traditional Maine lobster boat and is powered by the latest generation Yanmar 8LV-370A. The traditional hull design is complimented by ample use of highly varnished mahogany and red cedar timber.



Rodney Clark – Rachel Christine

This 2002 built 15m professional fishing boat is regarded as the last Huon pine built commercial fishing boat to be built in Tasmania. Power is in the form of a 278mhp Yanmar 6HA-HTE3 with a Yanmar powered MASE I.S.7 generator set also on board. Owner Rodney Clark heads to sea alone laying his cray pots, generally staying at sea for two weeks or more at a time.

Rodney proudly welcomed the public aboard the Rachel Christine, providing people with an on-board perspective of a working cray boat. With over 17,000 engine hours of trouble free operation and not an oil leak to be seen in the engine room I think we can safely say Rodney is a happy Yanmar owner. Rachel Christine's excellent overall condition & presentation is an absolute credit to Rodney.



Danny Fox – William Norling

"An oldie is a goodie" according to Danny Fox. The William Norling was built in 1965 but was re-powered with a 278mhp Yanmar 6HA2-HTE in 2009. Since then Danny Fox has logged up 10,000 hours of cray fishing. Rather than go to sea during the Australian Wooden Boat Festival, Danny stayed in port at Hobart and welcomed the public aboard his 18 m all timber vessel. Commenting on the Yanmar re-power, Danny says that the 20% fuel savings paid for the new engine in 5 years with the added bonus of no oil leaks, something that could not be said about the GM 6/71 that the Yanmar replaced!



Jonathon Long - Mary Mine

This is a very tidy converted fishing boat, powered by a 125mhp Yanmar 4JH3-DTE. The boat was originally built as a commercial fishing boat in 1956 and is 9.8 m loa. Based in Queenscliff, Victoria it is estimated that as a fishing boat, Mary Mine travelled through the treacherous Port Phillip Heads 11,000 times.



Nick Williams – Efficient

This is another fine vessel to come from the Wooden Boat Shop. Powered by a Yanmar 6CX-530CR, Efficient was launched in 2011 and looks just as good today as she did at her launching. Recently the 13.4 m hull was completely repainted and now sports a painted hull and cabin with the previous varnished timber work still prevalent inside the cabin. Due to business commitments Nick left his departure from Sorrento later than originally planned and together with his crew of 2 friends travelled non-stop to Hobart in 24 hours to ensure that Efficient was part of the 2015 festival.



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only the No.1* will do...**

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for *Reliability,*
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and *Endurance***



*ADEDA/PowerStats Market Data: Australian Loose Diesel Engines 1-125kWm 1/7/13 to 30/6/14

For more information, contact
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