

Power*news* MAGAZINE

A PUBLICATION OF POWER EQUIPMENT: AUSTRALIA, NEW ZEALAND & THE SOUTH PACIFIC

YANMAR POWERS SIX NEW ADDITIONS TO SYDNEY FERRIES' FLEET



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RE-POWERS HISTORY
INTO A NEW ERA**

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YANMAR

PROVEN MARINE TECHNOLOGY YANMAR COMMON RAIL SAILBOAT ENGINES

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Yanmar powers six new additions to Sydney Ferries' Fleet

Every year over 15 million customer journeys are made on Sydney Ferries' 32 passenger vessels across the city's iconic harbour and the Parramatta River. For commuters, travellers and tourists alike, reliability, punctuality and friendly service are vital.

Nearly a third of Sydney's ferries, including the six latest Emerald Class vessels, are now powered by Yanmar marine diesels supplied by Power Equipment. This puts Yanmar's clean, powerful and fuel-efficient engines at the heart of public transport for one of the world's most famous harbour cities.

Harbour City Ferries is a Transdev Australasia company, which has operated the Sydney Ferries franchise contract on behalf of Transport for NSW since 2012. The fleet and approximately 600 staff operate more than 170,000 scheduled services each year.

Historically, the Sydney ferries fleet has been powered by a diverse range of engines. Yanmar's involvement with the fleet started with the re-powering of four 35-metre SuperCat ferries with 6AY-WET engines (670kW, 911MHP) which began in April 2014 and concluded in mid-2016.

In 2014, Transport for NSW announced it would order six new ferries for use on Sydney Ferries'



Sydney Ferries dressed up for the 'Ferryathon' on Australia Day, 2018



Yanmar 6AYEM-GT engine



Fred Hollows and Victor Chang



May Gibbs and Bungaree



Pemulwuy



Catherine Hamlin



MASE Mariner 3400T



PSS Shaft Seal 4"

Middle Harbour services. These were to be the new 36-metre Emerald Class, based on a Transport for NSW design similar to the 25.4 metre First Fleet Class. The new vessels are designed to carry up to 400 people at speeds up to 26 knots.

Yanmar 749kW 20 litre 6AYEM-GT engines minimise fuel consumption and optimise performance with precise digitally-controlled fuel injection. These engines deliver exceptionally responsive performance and control because of their superior torque characteristics.

The build contract was ultimately awarded to Hobart-based INCAT Tasmania Pty Ltd and design house Revolution Design Pty Ltd.

‘The six ships – Catherine Hamlin, Fred Hollows, Victor Chang, Pemulwuy, Bungaree and May Gibbs – are all now in service. Fred Hollows was the first ferry to enter service in 2017.

Each vessel has two main engines – Yanmar’s latest design 20 litre 6AYEM-GT (rated at 749kW, 1018MHP at 2000rpm) featuring electronic common rail fuel injection. They drive through island-mounted Twin Disc MGX6599SC gearboxes, in company with MASE Mariner 3400T open frame marine generators. Both engines and gearboxes are controlled by Twin Disc EC300 electronic controls including a backup system.

The new Emerald Class ferries are fitted with advanced Packless Sealing System (PSS) shaft seals. The PSS is an effective mechanical face seal that compensates for the fore-and-aft movement of the shaft caused by the propeller’s thrust pushing on the engine mounts. This means the seal is less susceptible to interruption by water flow or silty water when compared with other sealing options.

Power Equipment NSW Marine Sales Manager Ian Mills says Power Equipment and Yanmar are excited to be able to supply marine power and associated technologies to the new Emerald Class ferries from INCAT.

“We are proud to be part of the iconic Sydney Ferries fleet history,” Ian says. “Sydney Ferries is one of the world’s most recognised and respected maritime public transport systems.

“Yanmar has its own distinguished history. Through more than 100 years of innovation it has focused on advancing marine diesel technology. Thanks to these efforts, Yanmar has built up a global reputation for efficient, durable engines and fast, reliable support in more than 130 countries.”

With the growing emphasis on eco operations and fuel efficiency, Emerald Class builder INCAT has built lightweight, fuel-efficient ships that can carry heavier loads at the lowest operational costs.

INCAT’s Hobart shipyard has more than 70,000 square metres of undercover production halls and two dry-dock areas capable of accommodating up to six vessels under construction. The Tasmanian company has developed a reputation for quality and excellence in production, supported by an experienced and dedicated workforce.

POWER PROFILE

Application:	Commercial - Passenger Ferry
Vessel Construction:	Aluminium
Vessel Name:	Catherin Hamlin Fred Hollows Victor Chang Pemulwuy Bungaree May Gibbs
Vessel Owner:	Transportation for New South Wales
Length (LWL/LOA):	36.5M
Weight:	110Tonnes
Engine Model:	Yanmar 6AYEM-GT
Engine Power Rating:	1018 mhp @ 2000 rpm
Drive Configuration:	Island Mount Gear Box / Shaft / Prop
Gear Ratio & Model:	2.45:1 Twin Disc MGX6599SC
Electronic Control Type:	Twin Disc EC300/Yanmar VC 10
Top Speed:	25 Knots
Propeller Size:	DIAM - 101.6 Length - 5911.5 Angle 5°
Technician Name:	Ian Mills / Noel Van Der Meulen
Sold by:	Power Equipment
New Installation	
Completed By:	New Build - INCAT, Tasmania
Generator:	MASE Mariner 3400T
Shaft Seal:	PSS Shaft Seal 4"

These engines deliver exceptionally responsive performance and control because of their superior torque characteristics.



JOHN DEERE

John Deere re-powers history into a new era

Who would ever connect a 400-year old Dutch ship that first brought Europeans to the Australian continent with an iconic American farming pioneer born 200 years later? The link is a pair of John Deere marine engines that are being used to power a replica of the important vessel.

THE DUYFKEN

Measuring 19.94 metres 'from stem to stern' and with a beam of 6.0m the Duyfken displaced about 100 tons when fully loaded and her three masts carried up to 31,000 square feet of sail. Duyfken was small but nimble and quick for the times. Her short but remarkable career ended in 1608 when she was judged irreparable at Ternate, North Maluku (now part of Indonesia).

The Duyfken replica was the first 'jacht' to sail from Indonesia to Australia in 350 years and more recently, to sail from Australia to the Netherlands in a recreation of a Dutch spice voyage expedition. In 2000 the Duyfken Expedition sponsored by Chevron Corporation brought the previously little known history truths to Australia and the world.



More than 400 years ago the small Dutch ship 'Duyfken', captained by Willem Janszoon, made a voyage beyond what was then the known world. The Duyfken was the first recorded European ship to reach and chart about 300km of the Australian coast on Cape York Peninsula.

With that visit, for the first time European geographers had identified all of the world's inhabited continents. It was also the first recorded instance when Aboriginal Australians came in contact with European explorers.

Some 393 years later, in 1999, a replica of the Duyfken was built in Western Australia,



Installing the John Deere 4045TFM50



John Deere 4045TFM50 engine

and recently it was re-powered with a John Deere marine diesel engine.

Built in 1595, the original Duyfken was a fast, lightly-armed ship that could carry small, valuable cargoes. As a 'jacht' or scout for the Dutch East India Company's 'Moluccan Fleet', Duyfken played a key role in breaking the trade dominance in the region held up to then by the Spanish and Portuguese.

Impetus to build a replica of Duyfken in the 1990s came through an enormous community effort led by Fremantle shipping figure, the late Michael Kailis. Historian Michael Young had gathered together a group of like-minded individuals, and under the leadership of Michael Kailis they created the charitable Duyfken 1606 Replica Foundation.

The Foundation constructed the ship at a cost of \$3.7 million. The Duyfken replica was built in WA to be as authentic as possible. It is built from European Oak sourced from Latvia, its sails are flax, and the rigging is hemp rope. It was also built for practicality, however, and it had twin diesels installed below decks.

The Duyfken replica made several remarkable voyages before returning to Perth in 2012. As part of the Duyfken Experience, the ship is based on the Swan River and offers passengers the experience of a 'tall-ship' on trips down the river to Fremantle and back.

Late in 2017 a storm pounded the moored Duyfken with 45 knot winds and 1.5 metre waves for 12 hours. Flooding ruined the starboard engine but a simple engine replacement was not feasible because the engines had to be paired to ensure balanced power to the two propellers.

Experts from Power Equipment dealer Stem 2 Stern Marine Service and Power Equipment's WA team determined that two John Deere PowerTech™ 4045T FM50 (105bhp, 78kW) marine diesels offered the

most suitable features to match Duyfken's twin props. Matching engine and propeller characteristics optimises propulsion, fuel efficiency and seaworthiness.

Stem 2 Stern installed the new John Deere diesels, which required some tricky internal lifting to remove the old engines and drop in the replacements. This was done with 5 mm clearance between the main mast and the fuel tanks.

Duyfken crew members have commented on the ship's smooth operation and lack of vibration since the installation of the John Deere 4045Ts.

Power Equipment, its specialist WA team and John Deere are proud to be playing a key role in keeping the Duyfken story sailing into history.

The whole re-powering project was completed within three weeks. It cost about \$140,000 which was crowd funded by more than 300 donations from across Australia and the Netherlands. This confirmed the widespread community support for the Duyfken replica which the not-for-profit foundation holds on trust for the community.

POWER PROFILE

Application:	Sailing Ship
Vessel Construction:	Wooden
Vessel Name:	Duyfken
Vessel Owner:	Duyfken 1606
Length (LWL/LOA):	21.93M
Weight:	110 Tonnes
Engine Model:	2 x John Deere 4045TFM50
Engine Power Rating:	M1 - 105BHP @ 2300RPM
Drive Configuration:	Propeller & Shaft
Gear Ratio & Model:	4.48:1 / Technodrive TM200
Electronic Control Type:	Morse KE4
Top Speed:	n/a
Propeller Size:	Feathering
Technician Name:	Nick Marsden
Sold by:	Stem 2 Stern & PE - WA
Repower Installation Completed By:	Stem 2 Stern Marine Services



Quiet, compact Yanmar engines give Peerless compressor an edge



Yanmar LN Series compact diesel engines are meeting the need for small lightweight and quiet diesel engines for use in air compressors in the mining and mobile service vehicle industry.

This is confirmed by Peerless Products who has been using Yanmar's L48N, L70N and L100N engines for its air-cooled diesel compressors for 12 months.

Peerless Products is one of market leaders in the production of air compressors, air tools and drilling machines. The company has the largest range of air compressors in the Australian market today and can design and build compressors to meet any requirement.

Peerless Products National Sales and Marketing manager Troy Jamieson says customers were unhappy with the diesel engines and compressors they previously used because of the high noise levels they created.

There was a demand for smaller, quieter diesel engines and compressors to suit the needs of the service sector with mobile mechanic's vehicles, which have limited space.

"Noise and weight are the common complaints that you get in the market, and Yanmar offers a significant drop in noise," Troy says.

The compact size and light weight of the Yanmar

LN diesel engines are a major reason Peerless Products switched engine brands for use within its air compressors.

"When it comes to diesel engines, Yanmar is one of the smallest engines on the market. It has less weight than other brands, and the noise reduction compared to other brands is significant."

Peerless Products' customers also wanted a more fuel-efficient engine and are more than pleased with the Yanmar LN units, which offer significant fuel savings.

"One of our big OEMs switched from petrol to diesel because they worked out in three-to-five years they would save just under a quarter of a million dollars, thanks to fuel savings and lower long-term costs. The smaller diameter of the engines also means they are better for smaller builds."

Peerless works closely with Power Equipment, which supplies the top-of-the-range Yanmar LN series exclusively within the Australian market.

The LN series of engines are designed with Yanmar's proprietary direct injection technology, which maximises combustion efficiency and offers a powerful but environmentally friendly engine. They are designed to supply power to a wide variety of machines, including pumps, power generation, construction and agriculture. The engines



The Yanmar LN Series powered Peerless P17 Compressors

are simple to install and fit in small spaces without sacrificing power and performance.

The L48N, L70N and L100N engines are all four-stroke, vertical cylinder, air-cooled diesel engines, weighing just 27kg, 36kg and 48.5kg, respectively, with the recoil start. They have a respective fuel oil tank capacity of 2.4L, 3.3L and 5.4L.

Lightweight alloys are used for the main engine parts, while Yanmar's miniaturised fuel injection system is very efficient and cuts fuel consumption.

Precision balancing delivers superior vibration and noise reduction, which means more operator comfort, while starting is easy with the standard recoil starter.

Throughout Australia, Yanmar engines are recognised for their simplicity, especially in the mining industry. There is also a good range of parts available through Power Equipment."

Troy says Power Equipment not only supplies the Yanmar engines, it is proactive in supporting Peerless Product's product development.

Power Equipment Power Products Area Manager Steve Harvey has been working with the Peerless team in the development of the P17

compressor using Yanmar LN engines, which are now in production and on the market.

Troy says Peerless Products receives excellent support from Power Equipment, which assists the company in its research and development work.

"Power Equipment helps us with our special builds with exhaust changeovers and modifications to the unit. Steve Harvey has been right on the ball and offers a very high level of service.

"That is what we need in the OEM market. If something happens we need it fixed straight away.

"We work quite extensively in the service

industry and the mining sector, and it is a vital part of our service that we ensure a smooth transition to the end user."

Troy sees significant growth opportunities for Yanmar within Australia's diesel engine sector.

"As time progresses, hopefully smaller engines will become more economical. We expect to see more demand in the farming sector for smaller engines as farmers get the diesel rebate through the government.

"Yanmar builds diesel engines that give long-term financial and environmental benefits, rather than a short-term gain. They offer a sustainable future within the diesel engine market."

"When it comes to diesel engines, Yanmar is one of the smallest engines on the market"

*Troy Jamieson,
National Sales and Marketing Manager,
Peerless Products*

Quality and support meet 7-star expectations



The twin Yanmar 6HYM-WET in the engine room



MASE Mariner 1600



PSS Shaft Seal 2.5"



Stylish and functional helm station



Inside the Steber 52



In a big, competitive world and the even more rarified world of 7 Star resorts, superior levels of quality, reliability and service are expected. It is, therefore, notable that the latest boat from Taree-based Steber International is headed to the unique Fregate Island private resort, part of the Seychelles in the Western Indian Ocean.

It becomes the fourth Steber boat servicing Fregate Island, its predecessors still performing faultlessly up to 22 years after delivery. The last delivery from Taree was a Steber 38 powered by twin Yanmar 6LY3s two years ago; it logs up to 1600 hours per year.

Earlier boats were powered by other engines but the client's shift to Yanmar engines was in pursuit of better service and product support, Alan Steber explained.

The specially optioned Steber 52 is powered by twin 700MHP Yanmar 6HYM-WET S-rated diesels, also driving MASE Mariner 1600 gensets. While primarily tasked with ferrying up to 33 guests and luggage the 55km between Fregate (named for its ubiquitous Fregate birds) and the Seychelles main island of Mahe at up to 30 knots, the versatile Steber 52 will also serve as a dive platform, pleasure cruiser, game fishing and supply boat as needed.

Given its operation in some serious marine waters,

the fibreglass hull boat's highly evolved keeled hull and structural qualities, combined with the 13.7 litre Yanmar's reliability and performance characteristics, are up to the challenge. The order from Fregate Island was won largely on Steber's reputation for quality hull design and construction which delivers good handling characteristics, seaworthiness, stability and a "soft dry ride", Alan Steber explained.

Their reputation has been forged over nearly 70 years. The firm was started by Alan's father after WW2 with clinker-built wooden boats before becoming pioneers in the new era of fibreglass construction in 1961. The business outgrew Sydney's Middle Harbour and moved north to Taree in 1974 – central for deliveries to the key market for big trailer boats to 20ft. In the mid-1970s small runabouts were phased out and the first large boat built, a 32 footer. The move into the construction of larger vessels, Surveyed for commercial fishing, charter, police boats, marine rescue, also large recreational vessels, proved to be a wise decision. Boats can now be built up to 65ft in length.

Similarly, Yanmar's reliability and reputation for customer and product support were big factors in the engine selection for the Steber 52. Power Equipment has also received an order for engines in the forthcoming first Steber 60.



“Steber International’s working relationship with Power Equipment and Yanmar over the years has been above average - extremely good”

Alan Steber, Steber International

The Yanmar 6HYM’s excellent torque rise characteristics in both high speed and high load ranges deliver big, stable power over a wide range of operational conditions and tasks. Empty or fully loaded, that contributes to higher passenger comfort levels and better control for the skipper.

Big valves improve airflow through the engine, while a compact twin turbocharger minimises turbo lag. An all-new high efficiency intercooler, all-new fuel injectors and optimised combustion chambers deliver lower emissions, improved fuel economy and improved power output.

The engines are also designed for easier routine inspection and maintenance which minimises downtime and contributes to a safe, seaworthy boat ready for operation when tasked.

In both the new Steber 52 and forthcoming Steber 60 Yanmar engines are complemented by MASE Mariner gensets. These will power the boats’ vital 240 volt AC auxiliary systems – lighting circuits, the gyroscopic stabiliser, air-conditioning systems, refrigeration systems and galley cooking. Like Steber build quality and Yanmar reliability, MASE generators are also known for quietness, reliability, perfor-

mance, flexibility of installation and ease of service. They are also part of the Yanmar service support network here and in the Seychelles – a big positive for Fregate Island.

The Yanmar engines specified in these Steber boats are also equipped with a high capacity front PTO. These can, in future, be used to drive winches and other mechanical auxiliaries if and when required.

Power Equipment’s demonstrated ongoing customer support for leading boat builders like Steber International continues a proud record established over decades.

“Steber International’s working relationship with Power Equipment and Yanmar over the years has been above average – extremely good,” Alan Steber commented.

Steber vessels have been exported to various countries including Japan, the United Arab Emirates, Qatar, Papua New Guinea, Fiji, Malaysia and New Zealand. In the ‘custom fit commercial’ category they are arguably at the top of the pack.

“And we’re in fibreglass which has enormous advantages over aluminium including noise levels, ride comfort and insulation,” according to Alan Steber. “Those insulation properties

are an extra advantage in the Seychelles and the Gulf countries close to the Equator,” he added.

“We are experts at what we do” said Alan, “We have the infrastructure and expertise to go to the next level and look forward, if there’s new technology there, to be part of it, to continue for the next 70 years.”

POWER PROFILE	
Application:	Pleasure Craft
Vessel Construction:	Aluminium
Vessel Name:	Steber 52
Vessel Owner:	Fregate Island
Length (LWL/LOA):	16.65M
Weight:	26 Tonnes
Engine Model:	Yanmar 6HYM-WET
Engine Power Rating:	700MHP @ 2200RPM
Drive Configuration:	Gearbox
Gear Ratio & Model:	2.04:1 Twin Disc MGX506SA
Electronic Control Type:	Twin Disc EC300 Quickshift
Top Speed:	29.5Knots @ 2243
Propeller Size:	29.5” x 38.5 5B
Technician Name:	Ian Mills
Sold by:	Power Equipment
New Installation	
Completed By:	Steber International
Generator:	MASE Mariner 1600
Shaft Seal:	PSS Shaft Seal 2.5”

NEW Gori Propellers

lift CATAMARAN'S PERFORMANCE



The Leopard 44, Catamaran

New Gori three-blade single pitch propellers retrofitted to its saildrive engines have given a 44ft Queensland catamaran more manoeuvrability, responsiveness and stopping power.



Brisbane-based Chris Petersen was using his Leopard Sail catamaran to make short-stay trips around southeast Queensland and wanted to extend his trips to medium-length coastal cruising. To do so, he decided to upgrade his propellers to get better low-speed responsiveness and stopping power at anchorages and marinas.

After consulting with the Power Equipment team, Chris opted to install the new three-blade single pitch propellers from Gori on his Leopard. The single pitch (SP) version of the Gori three-blade propeller is simple to install and offers sailors fail-safe motoring.

Chris says the new propeller offers excellent low engine rpm operation and stopping power that exceeds his original propellers by 50 percent. The new Gori design also offers the lowest drag of all sailboat propellers in its class, so the refit has not compromised his sailing performance.

Based on the standard three-blade

propeller that Danish company Gori introduced in 1994, the new SP propeller has no overdrive, so it is simple to operate.

Its 360 degree blade inversion design offers identical pitch in forward and reverse. The propeller does not auto-rotate when folded and, therefore, does not require a shaft brake.

Paired with the 13-tonne Leopard's 39hp Yanmar 3JH5/SD60 saildrive engine, the new propellers give a maximum speed of nearly 10 knots and a comfortable cruise speed of 7.5-8 knots at an economical 2100 rpm.

Chris says the new propellers create noticeably lower vibration levels across all speed ranges, a feature that other boat owners with the new propeller have noted.

Power Equipment says European and South African boat yards are already offering the new Gori three-blade SP propeller in new builds, and if Chris' experience is anything to go by, it will be popular for refits and new-builds in Australia.

The new SP propeller is currently available for saildrive engines only in a left-hand rotation in 15 to 20-inch diameters.

Next year, Gori plans to launch a shaft propeller range in the same design in 22-26 inch sizes for applications of 10hp to 300hp. These propellers will include a right hand rotation variant.

"The investment in a pair of quality propellers has been worthwhile."

*Chris Petersen,
Owner of Leopard 44 Catamaran*

MORETON BAY TEST PROVES GORI DESIGN A WINNER



Chris Petersen at the helm of the Leopard 44

It is relatively easy to sail Chris Petersen's Leopard 44 catamaran single-handed in open water, thanks to its foot-operated switches for the main electric winches, and sails that can be easily sail trimmed within arm's reach.

Chris says adding the new Gori propellers to his yacht has made sailing even more enjoyable.

"The investment in a pair of quality propellers has been well worthwhile. The added confidence I now have means I can use the boat in more weather conditions than I ever expected," he says.

Chris took a team of Power Equipment representatives for a day sail out of Raby Bay recently.

The trip inadvertently turned out to be a good test for the boat's new propellers. A very fresh westerly punched straight into the Leopard on the return leg back to Cleveland, and Chris elected to take a straight-line return under motor.

Moreton Bay had a persistent 25-32 knot wind and unpleasant 1.2m-1.5m sea on short intervals. It looked like it might be a chore under motor, but the 39hp Yanmar 3JH5 engines produced an economical 2100 RPM and the vessel held a constant 5.5 knots, even in the worst of the wind and chop.

The Power Equipment team says it is proud of the positive feedback it has received from Chris. It shows the value of their advice and the care they put into the installation and after-sales support.

Power Equipment organised delivery and installation of the new Gori three-blade SP propellers through their Cleveland-based dealer Moore Marine. It also provided instruction and testing after the propellers were installed.

Python ready to pounce on mining gear

Australian Pump Industries (Aussie Pumps) has expanded its range of Yanmar-powered hydro blasters for the mining industry.



Yanmar 3TNV88 diesel engine



Hamis Lorenz, Aussie Pumps Operations Manager

The Aussie Mine Spec Extreme series of heavy-duty hydro blasters now includes the 4,300 psi Python with a huge 31 litres/minute flow that delivers real cleaning muscle.

Extreme blasters deliver high flow at high pressure, a combination that ensures mining plant and equipment caked in mud can be cleaned faster.

The heart of the new machine is a 'Big Bertie' RAS triplex piston pump. The pump's power comes from a reliable, Yanmar 3TNV88 20kW diesel engine with integrated control panel.

The compact, water-cooled Yanmar delivers cleaner power thanks to its high-tech flow mixing and injector nozzle design. The engine is governed to a maximum speed of 2400 rpm for long life.

Python blasters also have a Power Equipment manual engine protection kit. This includes tachometer, hour meter, battery

monitor, and low oil pressure protection. With a 50-litre stainless steel fuel tank, the Yanmar 3TNV88 can run for 10 hours.

Aussie Pumps Operations Manager Hamish Lorenz says shifting dried mud from a crawler dozer or dump truck is a big job.

"You can't fix it until you clean it. That is where machines with great pressure and flow really deliver. Extreme blasters can handle the rigours of mine life and run all day, every day in the busiest of wash bays," Hamish says.

The Python Extreme is mounted on a hot dip galvanised steel frame with a skid base. A weather-proof cover protects the engine and pump without inhibiting air flow around the radiator.

Yanmar and Aussie Pumps a powerful combination

Australian Pump Industries (Aussie Pumps) has used Yanmar diesel engines in its extensive range of high-performance pumps and cleaning equipment for many years.

The volume of equipment Aussie Pumps manufactures has increased to the point where it buys full container loads of Yanmar engines.

"We match Yanmar diesels to all our self-priming pumps, from firefighting units to big 6-inch gushers," says Aussie Pumps Chief Engineer John Hales.

The pumps are carefully tested and matched to the right engine so that anyone using an Aussie Pump machine gets the ideal combination of efficiency, fuel economy and performance for a wide range of applications.

The Aussie Fire Chief is one of the popular pumps that Australian Pump equips with a Yanmar engine. This lightweight portable fire pump is used by government departments, firefighting authorities and farmers, not just in Australia, but all over the world.

Yanmar engines are also supplied for Aussie Pumps' big pressure cleaners.

John says Aussie Pumps gets terrific support from Yanmar's Australian distributor Power Equipment. A big plus is that spare parts for Yanmar engines are readily available throughout Australia and in Aussie Pumps' export markets.



John Hales signs the latest Yanmar container order while John Mason, Power Equipment Area Manager, looks on

Aussie Pumps exports to such distant lands as Kazakhstan, Mauritania and Kenya, as well as Europe and North America and closer to home in Papua New Guinea, the Solomon Islands and other South Pacific nations.

"We go to great lengths to provide the world's best self-priming centrifugal pumps," John says. "It makes sense to power them with top quality engines and leave copy engines to the amateurs."



Tim Andrew and his Arrow Machine



The Arrow Machine powered by Yanmar TNV Series



Setting the boundaries - day in, day out

It is said that we all need boundaries to keep us safe, and every day Australian-made Arrow kerbing machines are at work putting in place uniform and consistent physical boundaries that do just that.

Underpinning the performance of these Arrow machines is the reliable power of Yanmar diesel engines.

Arrow Machinery is Australia's only specialist manufacturer of concrete kerbing machines. The business was established 30 years ago, and it stands tall in this field worldwide, exporting to about 60 countries.

The key to Arrow's success is that it designs and builds kerbing machines that meet its customers' specific needs. Rather than adapt a single machine to different jobs, it offers a range of six models that are designed to deal with various scenarios – landscaping, garden edging, roads, footpaths or car parks.

Arrow Machinery managing director Tim Andrews says his company's focus is on building kerbing machines that are efficient and reduce labour costs.

The company offers a choice of extrusion type and slip form machines. Extrusion machines use a ramming mechanism to compact a dry mix to both form the kerb and propel the machine forward. Slip form machines use a wet mix and vibration technology. Slip form kerbing units deliver faster construction times and can reduce operation crews from five to three people.



Yanmar 3TNV70 diesel engines

Components in Arrow's machines – hydraulics, vibrators, controls, undercarriages and switch-gear – are made to internationally recognised US military standard (MilSpec). This makes it easy for Arrow customers around the world to source spare parts and service their machines.

Based on this successful customer-focused manufacturing and service philosophy, Arrow Machinery has specified Yanmar engines for more than 20 years.

"We have used Yanmar engines exclusively in our diesel-powered kerbers for more than 15 years," Tim Andrews says. "They have proved to be highly reliable with no warranty issues."

A prime example is the latest new concept Arrow 350 mini Slipform Kerber. The Arrow 350 is a compact and economical machine that provides better control, better concrete

feed and better design than earlier models. It is powered by the three-cylinder Yanmar 3TNV70 diesel engine rated 20.8hp @ 3600 rpm.

The TNV Series is Yanmar's premium range of water-cooled industrial diesel engines. TNV engines are clean, quiet and fuel-efficient. They are extremely durable thanks to their superior block design and finer engineering tolerance.

Tim Andrews says Yanmar engines are very well supported in Australia and worldwide which fits with his company's policy of prioritising customer support wherever its machines are sold.

"Yanmar engines have no cooling issues, which is a big benefit to our kerbing machines. Also, all key service points are easily accessible on one side. This suits our design configurations and makes servicing easier for our customers," he says.

"We have worked with Power Equipment's Yanmar Sales Manager John Mason for many years. We highly value his advice when it comes to matching power to specific machines. John has helped us deliver the kerbing solutions our customers need."



MV Nancy Wake is a refined *but* POWERFUL *Lady*



Steve Cordingley poses at bow



Plenty of seating positions to cater for all passengers



Ray Harris with the Yanmar 6AY-WGT



The MV Nancy Wake is destined for a life of hard work as a commercial ferry and tour boat based in Sydney, but given her lineage she will be able to handle the demands she will face with style.

The Sealink Travel Group commissioned the 29-metre Nancy Wake from Brisbane boat builders Aluminium Marine. She is a 65-tonne Reefmaster catamaran designed to carry 270 passengers, and she has the power to do this thanks to two 911hp Yanmar 6AY-WGT marine engines supplied by Power Equipment.

Sealink runs a fleet of 75 vessels and has a staff of 1,200 around Australia. Its operations include the iconic Captain Cook Cruises on Sydney Harbour.

The MV Nancy Wake is a versatile vessel that is destined for service on Sealink's new Manly-Barangaroo ferry service and Sydney's whale watching tours.

Aluminium Marine owner Steve Cordingley says the Nancy Wake will deliver a top speed of 24 knots, and she can consistently operate at 20-24 knots for long periods due to the design of the boat and the engineering behind the Yanmar engines.

The Nancy Wake's two Yanmar 6AY-WGT mechanically-governed engines are paired with Yanmar YXH240 heavy duty vertical offset

transmissions. They turn 90 millimetre shafts and 38 inch diameter five-bladed propellers recessed in a tunnel arrangement under each hull.

Steve says he prefers Yanmar engines for the commercial boats his company builds.

"Other engine options are nowhere near as good as the Yanmar. Yanmar provides dedicated marine engines that are purpose-built for the application. You can repair them in the vessel if needed and the fuel consumption is unbeatable," he says.

The Yanmar's six-in-line design provides easy access for marine engineers and maintenance teams.

Even in the tight confines of a catamaran hull, the Yanmar design allows in-situ access for just about any repair and scheduled oil and filter changes or standard running maintenance intervals, which are at an extended period of 500 hours.

Fuel consumption is also outstanding. Yanmar Marine's figures for the six-cylinder, 20-litre 6AY-WGT are an impressive 125 litres/hr (208 g/kwh) at 1800rpm.

This means that the transfer voyage from Brisbane

Power Equipment managers applaud the Nancy Wake

When Brisbane-based Aluminium Marine took its latest Reefmaster catamaran ferry, the MV Nancy Wake, out for a trial on Moreton Bay prior to delivery it was an impressive display.

Two Power Equipment managers – Queensland Branch Manager Michael Blair and Queensland Sales Engineer Marine Ray Harris – were on board for the outing.

Michael and Ray were both more than pleased with the performance of the Nancy Wake's twin 670kW Yanmar 6AY-WGT marine engines that Power Equipment supplied.

The 65 tonne Nancy Wake cruised at an average speed of 20 knots while maintaining an engine speed of just 1600 RPM and creating very low vibration levels.

Michael even had a temperature gun which he focused on critical parts of the 6AY engine, transmission and engine space. He was

delighted with the numbers it showed and says good ventilation is absolutely critical for efficient operation and long working life of the engine.

"Aluminium Marine has once again delivered on a very well ventilated engine space," he says.

Ray is the long standing account manager for Aluminium Marine and he too was proud to see it produce another world class ferry with a Yanmar diesel propulsion system.

"Each of those engines was burning less than 90 litres of fuel per hour at those revs," Ray says. "That is pretty impressive considering we were running at 20 knots."



Power Equipment Managers:
Left: Ray Harris (Queensland Sales Engineer)
Right: Michael Blair (Queensland Branch Manager)

"Yanmar provides dedicated marine engines that are purpose-built for the application."

Steve Cordingley, Aluminium Marine Owner

to Sydney only required one stop to replenish the 4000-litre fuel tank with plenty of safety margin.

In October, Power Equipment Queensland Branch Manager Michael Blair and Sales Engineer Ray Harris were onboard the MV Nancy Wake for its launch and test cruise.

They say Aluminium Marine's design gives the engines good ventilation, which is absolutely critical for their efficient operation and long working life.

Michael says the Nancy Wake has nice output in every way for a vessel of her size.

"She has very low vibration levels and there is no noticeable diesel exhaust at idle or cruising, even with the throttle up to running speed."

ALUMINIUM MARINE

Aluminium Marine has built a solid reputation in commercial boat building circles in Australia, New Zealand and beyond. Recently it sent two 30m vessels, also powered by Yanmar

engines, to the British Virgin Islands.

Steve Cordingley takes a hands-on approach in managing the business, which has gone from strength to strength since it began in 1986.

Today, Aluminium Marine operates out of a five-hectare waterfront facility and production halls at Thornlands, Brisbane.

Steve employs 30 staff at the business, and he says he is not particularly keen on building large, luxurious recreational vessels (which he calls 'white boats').

"Our expertise is really in durable commercial vessels," Steve says. "I like doing these projects because we can build good primary designs and hulls and customise them for different commercial clients to suit their application."

Aluminium Marine's most recent projects have been vessels in the 20-30 metre range built without existing orders. They have all been sold to keen Australian or international commercial operators before their completion.

In the case of the Nancy Wake, Steve and his

crew have designed and built a high quality, practical boat that has a clean, simple layout.

The needs of skipper or crew do not feel like an afterthought whether on the bridge, moving around the hospitality zone or working in the engine rooms, around the fuel tanks or in the stern hulls.

The lack of vibration and obtrusive noise is proof of good engineering and the impressive purpose-built marine diesels do their job the way Yanmar engines are designed to do.

To sum up – thanks to Yanmar and Aluminium Marine, the Nancy Wake is one lady under power.

POWER PROFILE

Application:	Commercial - Passenger Ferry
Vessel Construction:	Aluminium
Vessel Name:	Nancy Wake
Vessel Owner:	Sea Link Sydney
Length (LWL/LOA):	29.2 M
Weight:	95.2 Tonnes
Engine Model:	Yanmar 6AYM-WGT
Engine Power Rating:	670 kW (911mhp) @ 1938 rpm
Drive Configuration:	Direct coupled gear with twin fixed propellers x 2
Gear Ratio & Model:	2.27:1 - Yanmar YXH 240
Electronic Control Type:	ZF Micro Command - 3 stations
Top Speed:	20.4knots @ 1600rpm / 24knots @ 1800rpm
Propeller Size:	38 x 43 3/4 x 5 Blade
Technician Name:	Brad Williams
Sold by:	Power Equipment QLD
New Installation Completed By:	Aluminium Marine Pty Ltd



Marine journalists and the Power Equipment team at the water demonstration, VIC



Shooting Dtorque on the water

Impressive *new* diesel outboards make their debut

On June 26th marine and industrial engine distributor Power Equipment hosted a media day at its head office in Melbourne, inviting journalists from leading marine and defence industry publications from Australia and New Zealand.

The event unveiled a new generation of high-performance diesel outboard engines that will shake up the marine industry. Featured at the event were:

- The 50hp Dtorque from Neander Motors in Germany.
- The 150hp and 200hp OXE Diesel from Swedish company Cimco Marine.
- The 300hp Cox CXO300 from the UK's Cox Powertrain

The journalists who attended the media day toured the Power Equipment facilities in Lynbrook, Victoria, had a detailed briefing about the new engines and took part in water demonstrations of the Dtorque and OXE Diesel engines.

Power Equipment partnered with leading commercial aluminium boat builder Yamba Welding & Engineering who have been building quality aluminium vessels for over 40 years, to conduct the water demonstration of the OXE diesel outboard. The engine was paired with a 6.7-metre Naiad rigid inflatable boat (RIB). The Yamba Naiad is known as the 4WD of the Sea. Naiad RIBs are made of aluminium plate and have air- or foam-filled buoyancy tubes with heavy duty polyurethane covers that are 10 times as strong as hypalon.

Their soft ride and predictable handling

make Naiads easy to drive in rough conditions. This makes them the ideal match for the latest high-technology diesel outboards that Power Equipment is introducing to the Australian market.

Feedback from the media event has been very positive. Australian Defence Magazine Deputy Editor Nigel Pittaway says the diesel outboards were very quiet and economical.

"The Dtorque was surprisingly quiet and it accelerates quickly for general purpose use. At 11.9 litres per hour at maximum speed, it is very economical. I was pleasantly surprised," Nigel Pittaway says.

"The boat was very manoeuvrable and it held its speed in the turns. It was very smooth throughout the turns and again I was impressed."

Michael Yeo represented Navy Outlook magazine at the event. He too noted the Dtorque's low noise and vibration levels and says the engines will be of real interest to the military.

"These engines have potential in the government and military side of things. These days the trend is toward multi-mission vessels and a lot of ships carry small RIBs."

"Having a diesel engine like this reduces the fire risk compared to petrol engines and it reduces the different types of fuel

the ship has to carry. I think navies will be very interested in something like this," Michael Yeo says.

The journalists also highlighted the quietness of the OXE Diesel outboard. Gary Fooks, who represented Australian Boating magazine, says it was very quiet even at full revs.

"During the demonstration two of us in the back seat were having a conversation at library speaking levels. I was stunned. This is an interesting engine"

Chris Beattie of Club Marine magazine was impressed with the OXE Diesel's mid-range power.

"It is very smooth and its mid-range power is a good example of where diesel technology is today compared to 20 years ago," Chris says.

"Its applications are overwhelmingly commercial. All that mid-range power is what is needed in commercial boats."

Power Equipment General Manager Luke Foster says the three new diesel outboards offer significant advantages over other engines on the market.

"Diesel engines are more economical to run and safer than petrol engines. These engines are the outcome of years of research and development," Luke Foster says.



OXE Diesel was paired with 6.7-metre Naiad RIB

Dtorque (50HP)



The Dtorque 50hp is the first turbo diesel outboard with dual crankshafts.

This configuration gives exceptionally smooth and vibration-free performance. The remarkable torque output (which peaks at 111Nm at 2500rpm) is greater than the best performing 70hp four-stroke petrol outboard on the market today.

“With their advanced engineering they can deliver both the performance and the comfort that commercial operators and military vessels require.

“We are very pleased to have secured the distribution rights for these innovative outboards in Australia and New Zealand. We are the only distributor in the world to have distribution agreements with all of these brands.”

Diesel outboards are reliable and deliver superior torque and lower fuel consumption than comparable petrol-powered outboards.

The Dtorque 50hp and OXE Diesel 150hp and 200hp are now available for order in Australia and New Zealand, and the 300hp Cox will be available for orders from mid-2019 for the Australian market.



Three outboards on display at the Media Day, Power Equipment Head Office



The Cox CXO300 display model at the Media Day, Power Equipment Head Office

OXE DIESEL (150HP / 200HP)



The OXE 200hp diesel is the world's first diesel outboard engine in the high horsepower segment. It has a unique belt driven propulsion system coupled to a full hydraulic multi-plate clutch transmission.

This means the engine can be mounted horizontally, so it does away with vertical shafts and bevelled gears, and allows for the full torque of the diesel to be transferred to the propeller shaft. It also provides crash stop capability, smooth gear engagement and low speed control.

COX (300HP)



The CXO300 is the highest power density diesel outboard engine ever developed and brings game changing potential for commercial and military applications.

The technology is based on a four-stroke, V8 architecture and the engine has a power-to-weight ratio that is comparable with high performing petrol engines, but at the same time delivers fuel consumption cost benefits that are around half that of a state-of-the-art petrol engine.

The well-known adage that ‘Nothing Runs Like A Deere™’ is being validated every day by a Northern Victorian irrigation company that, simply, won’t use anything else.

John Deere reliability key to Campaspe Irrigation success



JOHN DEERE



The John Deere 6068T provides all the Campaspe Irrigations need

Rochester-based Campaspe Irrigation is an agent for Zimmatic by Lindsay centre pivot and linear move irrigation systems, as well as manufacturing its own transportable high capacity pumping stations built into 20ft shipping containers.

As Campaspe Irrigation’s Project Manager Wayne Conway explained, “Our transportable pumping stations, capable of moving up to 18 megalitres a day, are based on an idea by Geoff Mustey. A John Deere engine goes into the box, coupled to a centrifugal pump, filters, and with all the electrical gear. They’re self-contained – and people run generators off them or a large alternator off the side of the John Deere to provide 240 volt power or 415 volt 3 phase power on-site.”

“They’re popular in low lying, flood-prone areas, such as Kerang and Lake Boga, to mitigate floods or excess runoff, and at other times to shift large volumes of water between channels or dams.”

“Just half a dozen bolts and you can pick it up and move it away before the flood comes or to where it is needed.

“We’ve done these for the past four years; there are dozens out there, and John Deere is always the only engine we use. We expect continued growth through 2018,” Wayne added.

“Plus we bring in lateral irrigators from the US and we put a John Deere on them. We’d have probably a dozen of them out and about over the last four years. We’re currently building three of these with turbocharged 6.8 litre John Deere 6068T F150 (114kW continuous) and 6068T F250 (124kW continuous) on them.

“We only use John Deere engines. If someone comes in here wanting a diesel-driven pump with high output – it’s always a John Deere engine.

“Why? I believe it’s their reliability. They’re specced very well and they’ll just sit there day after day running. We rarely have an issue with them. And farmers are familiar with them and know their qualities.

“And we’ve had a good experience with the John Deere engine distributor Power Equipment – very good. We had tight deadlines on the three lateral irrigators currently being completed and it simply all happened. Tight deadlines. All good. They made it happen. And it was right in the transition period as distribution changed from John Deere Australia to Power Equipment too. We were a little worried but ‘no’ – the engines were here on the due date.”

And Power Equipment meets our particular requirements, Wayne said.



The Campaspe Transportable Pumping Stations

“If someone comes in here wanting a diesel-driven pump with high output - it’s always a John Deere engine.”

*Wayne Conway,
Project Manager,
Campaspe Irrigation*

“About 70% of the engines we purchase would be ordered as a ‘Spec. B’ engine; we like to do our own cooling on them with our own heat exchangers where necessary.

“The drip irrigation installations run heat exchanger units – it’s preferred where the engines run for extended periods of time – they prefer to run a heat exchanger than a radiator. However, on all the lateral irrigators, if they’re out in the open and not in a pump shed they’re radiator-equipped, but if they’re in a pump shed and driving drip irrigation we always supply them with a heat exchanger unit and we build all that gear here ourselves.”

Campaspe Irrigation is part of the Darling Irrigation group that operates over three states. Darling Irrigation is itself associated with the AGnVET network with a history of agricultural service to Eastern Australia extending back over more than 100 years.

Over nearly 30 years, Power Equipment has achieved an excellent reputation as a high quality supplier of industrial and marine engines and associated products. It has a very mature state-of-the-art infrastructure which has been created by continuous reinvestment. Power Equipment attributes

much of its success to offering quality products and backing this up with a total commitment to customer satisfaction.

Power Equipment, now Australian distributor of John Deere Power System’s range of industrial and marine engines, points out that the familiar and popular power plants deliver performance and uptime reliability with customer and product support to keep businesses growing.



Inside the ‘heart of the unit’ where the JD6068T diesel engine is located



POWER YOU CAN WORK WITH

Commercial fishing is always challenging, whether on the water dealing with the elements to find and land a catch, or onshore dealing with the business of staying afloat.

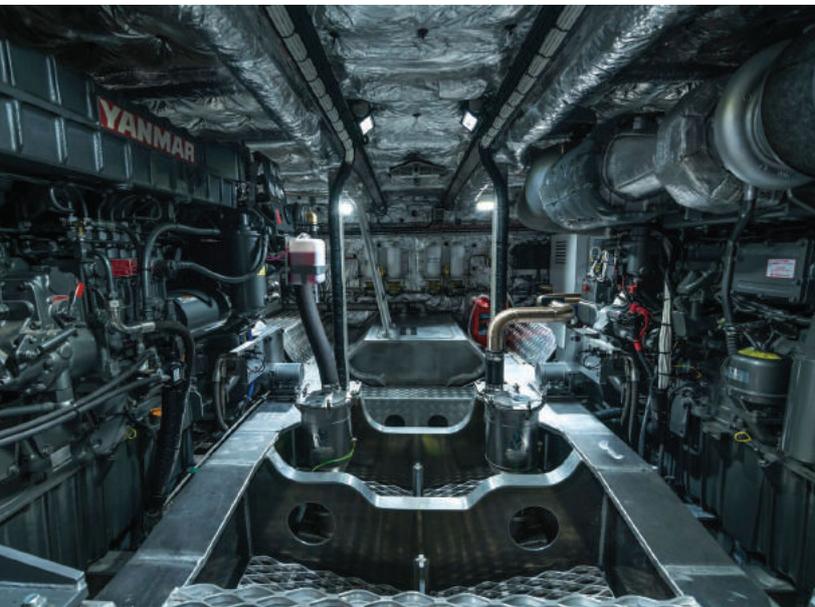
As experienced operators like Western Australia's Tebco Fisheries can attest, there is no 'roadside service' when you are 200 km from the nearest port.

Recently, Tebco commissioned its biggest boat, the 'Holdfast'. At launch, Holdfast claimed the title of Australia's biggest high speed cray boat. When designing the Holdfast, the focus was to build a boat that could land high quality catches at times when demand and prices are high. This can mean working at times and in places where fishing is harder than it otherwise might be.

*Yanmar powers
Australia's biggest
cray boat*



Shooting 'Holdfast' on the water



2 x Yanmar 6AYM-WGT in the engine room



MASE2510T on 'Holdfast'

“Tebco likes the simplicity of Yanmar’s mechanical control system.”

Rohan Warr, Dongara Marine

When choosing engines for the fleet, performance and reliability are paramount, and serviceability is also a priority. Holdfast’s power comes from two Yanmar 911mhp 6AYM diesel engines. She uses that power to bring more than 200 baskets – up to 6.2 metric tonnes – of live crayfish to port.

Port Denison-based Southerly Designs designed the Holdfast, and Dongara Marine built her. Dongara Marine is known for its resin-infused composite wheelhouses, which weigh less than glass or aluminium wheelhouses. They are also easier to maintain and better at suppressing noise.

Tebco Fisheries owners are brothers Bruce and Jeff Cockman. They say working with Dongara Marine and its subcontractors was a smooth process. “We worked really well with the guys at both Southerly and Dongara Marine. They were extremely responsive to our input and everyone just got on with doing the right thing.”

Dongara Marine’s Rohan Warr says his company has a long relationship with Tebco Fisheries but Holdfast was the first new boat it built for them.

“They specified the Yanmar diesels for Holdfast. Tebco likes the simplicity of Yanmar’s mechanical control system. It is easier to service when you are miles offshore,” Rohan says.

Yanmar’s 6AYM diesel engines deliver exceptional fuel economy and lower emissions. New fuel injectors, combustion chamber and pistons contribute to low fuel consumption. Tebco Fisheries expects to save up to 15,000 litres of fuel a year with these engines in the Holdfast.

The 20-litre engines deliver high levels of power over a wide operating range, especially under load. A turbocharger minimises turbo lag and a new intercooler contributes to the 6AYM’s performance. Strong torque rise of more than 20 percent supports stable cruising speeds with minimal speed reduction during sudden load changes.

The 6AYM has low lubricating oil consumption (LOC) and long service and overhaul intervals. It can be matched with a range of propellers. Inspection and maintenance is straight forward. It is easy to replace the cartridge-type oil filters, and inspection windows on the side of the engine block allow on-site piston replacement if necessary.

Full mechanical engine management eliminates the risks posed by fragile electronic systems in difficult conditions and hot engine rooms.

On Holdfast, two MASE2510T gensets are coupled to the Yanmar engines. These power the radar and navigation systems plus other vital services such

as lighting, the galley, CCTV monitoring and sonar systems.

“Holdfast has been very good,” Rohan Warr says. “Tebco Fisheries is very happy with the new boat and its build quality. If anything the performance has been much better than expected.

“Shortly after launch, some highly unusual operational conditions caused a small episode. It was unrelated to the integrity of the boat or the engines. Power Equipment’s WA service team and Senior Service Engineer Jim Kibblewhite quickly remedied it,” Rohan says.

“Their prompt and professional support was hugely appreciated. It complemented the overall collaborative effort that resulted in the ultimate success of the Holdfast.”

POWER PROFILE

Application:	Commercial Cray Fishing
Vessel Construction:	Aluminium
Vessel Name:	Holdfast
Vessel Owner:	Cockman Family, WA
Length (LWL/LOA):	25.95M / 85ft
Weight:	68 Tonnes
Engine Model:	2 x Yanmar 6AYM-WGT
Engine Power Rating:	670Kw (911mhp) @ 1938 rpm
Drive Configuration:	Shaft Drive x 2 with Fixed Pitch Propeller
Gear Ratio & Model:	ZF2000A 2.029:1 close coupled
Electronic Control Type:	ZF Clear Command
Top Speed:	23.5 knots
Propeller Size:	5 Blade Weighbridge D38 x P35 x 5B
Technician Name:	Nick Marsden
Sold by:	Power Equipment WA
New Installation	
Completed By:	Brand Mechanical
Generator:	2 x MASE2510T



POWER PROFILE

Application:	Power Catamaran
Vessel Construction:	Fibre glass
Vessel Name:	Barcoo Drift
Vessel Owner:	-
Length (LWL/LOA):	14.1M
Weight:	14 Tonnes
Engine Model:	Yanmar 6LY3-ETP
Engine Power Rating:	353kW (480mhp) @ 3300rpm
Drive Configuration:	Twin Shafts with fixed pitch propellers
Gear Ratio & Model:	2.432:1 - Yanmar KMH61v-2
Electronic Control Type:	Yanmar Electronic - Single Station
Top Speed:	30Knots @ 3300 rpm
Propeller Size:	n/a
Technician Name:	Mackay Marine Services
Sold by:	Power Equipment - QLD
New Repower Installation Completed By:	Noosa Marine - Noosaville



The Barcoo Drift was built at Noosa Marine



Julian Griffiths and his Yanmar 6LY3- ETP



Yanmar 6LY3-ETP



Barcoo Drift ready for a sea trial



Barcoo Drift on the water

Yanmar engine a “dream fit” for new 14m Roger Hill catamaran

Boutique Sunshine Coast boat builder Noosa Marine recently finished fitting a pair of 480hp Yanmar 6LY3-ETP engines to a new Roger Hill ‘planing power’ catamaran it built at its Noosaville facility.

Installing the Yanmar engines culminated a 13-month build, and Noosa Marine founder Julian Griffiths says the fitout went “like a dream”.

The Noosa Marine team is very proud of the attention to detail it gives to the boats it builds. They have used the Yanmar 6LY3-ETP in a number of previous new builds.

“The cat has performed exceptionally well with those engines,” Julian says. “After an initial water test, the small propeller was re-pitched and it is getting out of the hole very, very well.”

Few composite boat builders in Australia take as much pride in hull finish as Julian’s crew at Noosa Marine, but it is the propulsion from quality Yanmar marine diesel engines that turns that craftsmanship into excitement.

The direct injection, turbocharged, six-in-line cylinder 6LY3 is a recent addition to Yanmar’s line-up of clean, quiet, powerful and fuel-efficient marine engines. It’s a popular choice among Australian boat builders and refitters in both the recreational and commercial sectors. The Central Queensland-based owners of the new cat ordered it specifically.

On its delivery run to Mackay the new catamaran (named Barcoo Drift in a tribute to the owner’s home district) used good weather and the 5.8-litre Yanmars to notable effect. It had an average running speed of 21 knots at 80 litres per hour, numbers that the new owners are very pleased with.

While Power Equipment had not completed final sea test statistics on the new engines at the time of this story, Julian had seen impressive numbers from the bridge on initial water testing at the engine’s full 3300 RPM.

“It was getting in excess of 31 knots at wide-open-throttle from what we saw in early runs,” he says.

That is an exciting performance for 14 metres of luxury catamaran, no doubt helped by well-balanced engine positioning and the low dry weight of the Yanmar 6LY3s, which come in at just 640 kg each.

With a displacement around the 13 tonne mark, twin-480hp engines are the recommended power choice for this Roger Hill design.



The helm of the Barcoo Drift

With Yanmar 6LY3 engines, these cats deliver excellent cruising speeds in the 20-25 knot range, according to the boat’s designer. This shows the value of good design and a waterline hull length just under 13m.

Yanmar’s 24-valve 6LY3-ETP engines will no doubt continue to impress in this latest Roger Hill design build for many years to come. Its new owners intend to enjoy her performance (and fishing) in the Whitsundays, one of their favourite boating areas.

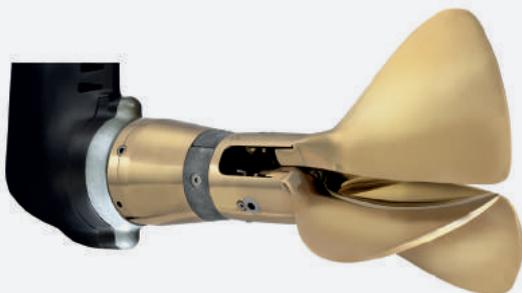
GORI PROPELLER

experience the difference

GORI PROPELLER

FULL SPEED AHEAD

under new owners



Gori Propeller has a lively new look and a new product that will please yacht manufacturers.

Last year, the high-performance marine rigging manufacturer BSI A/S bought Gori Propeller, a move that brings two complementary technologies under the one umbrella.

The new alignment coincides with the release of Gori's latest innovative product, a three-blade single pitch propeller that will ultimately be available for 10hp-300hp engines.

The BSI Group is one of the world's leading manufacturers of rigging and hatches for all types of yachts.

Now that Gori Propeller is a fully-owned subsidiary of BSI, it has taken on the BSI look with a red and blue logo that lines up with the other brands in the Group.

Gori Propeller will incorporate the new colours and logo on its brochures and revamped website. The new website will contain more information than its current one, including illustrated instructions that can be downloaded.

The website will carry images of spare parts with order numbers as well as a

distributor link to download photos and advertising material.

NEW GORI THREE-BLADE SINGLE PITCH (SP) PROPELLER

Gori's new three-blade single pitch (SP) propeller is based on the standard three blade propeller introduced in 1994. The new Gori SP propeller has all the same features that made the original version the most efficient sailboat propeller under power and sail, but it does not have overdrive.

This is because some yacht owners do not know how to operate the standard propeller.

Like the original version, the new SP three-blade Gori propellers pivots 360 degrees when switching between forward and reverse. And it operates at the same pitch in forward and in reverse, so it has superior stopping power.

One of the big attractions of the Gori three-blade propeller is that it has the lowest drag of all sailboat propellers (1.4 Newton at 6 knots). It does not



auto rotate when folded so there is no need for a shaft brake.

At present, the new SP propeller is available for sail-drive engines only, and for all left-hand propellers (LH), from 15" through 20".

Later this year, shaft propellers from 22" through 26" will be ready as will right-hand (RH) propellers, which feature on the

majority of marine engines in the pleasure boat market. If the demand arises, Gori will develop larger LH versions also.

Because the new three-blade Gori single pitch (SP) propeller is fully equivalent to the overdrive version, the existing calculation program on www.gori-propeller.com can be used for both versions.

Gori Propeller has started to deliver the new single pitch propeller. Since it is aimed at the OEM market, some yards in Europe and South Africa specify it as standard or offer it as an option.

One of the big attractions of the Gori three-blade propeller is that it has the lowest drag of all sailboat propellers.



5 BEST IN CLASS
x



Clean



Interconnective



Quiet



Powerful



Fuel Efficient



COMMON RAIL MARINE ENGINES

clean, quiet

AND **POWERFUL**



YANMAR 3JH40-CR

JH COMMON RAIL SERIES
Shaft/Sail Drive
40-110 mhp



YANMAR 4LV-CR

4LV COMMON RAIL SERIES
Shaft Drive
150-250 mhp



YANMAR 6LY-CR

LY COMMON RAIL SERIES
Shaft Drive
400-440 mhp



World-first Torqeedo training course held in Melbourne

Power Equipment recently hosted the first dealer training course Torqeedo has ever held outside Germany on its electric propulsion outboard motors.

Torqeedo products are distributed in Australia and New Zealand by Power Equipment, which hosted the event at its head office in Melbourne March 19-21.

The training courses Power Equipment holds on its many brands of engines are a great way for dealers and technicians to learn the technical details about new products and how to correctly service them.

Power Equipment Torqeedo product manager Jason Hodder says he was delighted to host the first training course Torqeedo has presented outside of Germany.

The course included training in a real workshop environment and instructors travelled from Germany to run it. They provided theoretical and practical training on the company's range of electric propulsion engines.

Jason says the course was a huge success for the dealers and technicians from both Australia and New Zealand who attended.

"Torqeedo is a world leader in electric propulsion technology. Because their engines are electric, rather than diesel,

they are a lot more intricate and fine to work on. You are dealing with batteries, and the course focused specifically on the electrics themselves."

Electric motors from Torqeedo offer many benefits to both users and the environment. They deliver clean energy, and are extremely quiet and lightweight. They are also safe, because they contain no explosive or flammable liquids, and they are easy to store.

"The product is growing and the technology is the way of the future," Jason says.

"I couldn't be happier with the way the training course went. It is a huge benefit for us to support this local market and show people that we are not only committed to selling the product, but also supporting it."

Western Australian commercial boat operator Gerd Heinen operates Eco BBQ Boats in Mandurah. Eco BBQ Boats is a boat hire business that provides self-drive circular boats designed as waterborne barbecues for up to 10 people.

Gerd is an electronics engineer and he has been using Torqeedo electric outboard

motors since his business was formed in early 2016.

He attended the training course in Melbourne, and says it was very useful.

"The course dealt with a lot of issues we come across," Gerd says. "We learned how to maintain the engines properly and deal with repairs. For our business, it was very beneficial for us to attend."

Torqeedo electric outboard motors are ideal for Gerd's eco-boating business and the harsh conditions in Australia.

"We needed a stronger, more reliable motor; that is why our engines come from Torqeedo. They are very reliable and we have had no major fault and no major repairs on them so far."

2018 TRADE SHOWS

SEPTEMBER

The Land Forces,
Adelaide Convention Centre, SA
4-6 September 2018

AFAC, Perth Convention
and Exhibition Centre, WA
5-8 September 2018

Perth International Boat Show,
Perth Convention and
Exhibition Centre, WA
21-24 September 2018

OCTOBER

All Energy,
Melbourne Convention
and Exhibition Centre, VIC
3-4 October 2018

POWER EQUIPMENT & SOCIAL MEDIA

Power Equipment is excited to announce that it has established new social media accounts on Facebook, Instagram and LinkedIn.

We will use our social media presence to bring you the latest news and information about the group of world-renowned brands of industrial and marine diesel engines that we exclusively distribute throughout Australia, New Zealand, PNG and the South Pacific.

With the use of social media, we are hoping that we will develop cutting edge communication with our dealers, end users and enthusiasts of these brands and products.



Connect with us on Facebook
Power Equipment Pty Ltd



Follow us on Instagram
powerequipment



Our LinkedIn page is located at:
**Power Equipment Pty Ltd
(Australia)**

You can also connect to our social media through links that can be found on the Power Equipment Australia website.

We're looking forward to sharing even more information about the products we are passionate about.



Power Equipment offers dealers marketing tools and ideas

Joy Wotherspoon joined Power Equipment as Marketing Specialist in May 2017. She has brought with her 20 years of experience as a marketing professional to offer her marketing service to both the Power Equipment marine and industrial sales teams, as well as their dealerships across the region.

These services include managing and developing press releases, print advertising, media plans, marketing collateral, digital and social media as well as trade shows and field days.

"I was excited to join Power Equipment because it represents major global brands such as Yanmar and John Deere. There is a great opportunity to grow these industries and to work closely with our manufacturers for this region," Joy says.

Strategic marketing is the key to Joy's results, and has driven her into exploring new approaches and unravelling customer insight, pinpointing the right communication tools that ensure her team and dealerships will succeed in the long term.

"Salespeople have a lot of local knowledge. They know their customers and which Power Equipment products can meet their customer's needs. I can give them marketing tools which they can use to reach out to their customers most effectively," Joy says.

Joy earned her MBA in Marketing from Swinburne University of Technology, Melbourne and has worked in marketing roles for major international companies in both the consumer goods and engineering sectors, including Unilever,



Joy Wotherspoon, Marketing Specialist

BP Australia, Twinings Tea, pharmaceutical manufacturer Catalent and precision engineers Renold.

"I am here to provide support to our fantastic salespeople in dealerships all across Australia and this region.

"It is important that all our dealers use the latest marketing materials as well as current branding and logos, and are up to date with marketing activities. This can give them an advantage over their competitors."

"We understand that all our dealers are independent, so we can develop joint press releases and print advertisements that can help them stay ahead in their local areas," Joy says.

Call Joy on **03 9709 8527** or email her on **joy.wotherspoon@powerequipment.com.au** to discuss marketing resources and ideas to help you connect with your customers.

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