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# Global Sailing Champion

## Antarctic Adventurer Relies on Yanmar



# Yanmar

on a Mission in PNG



The Yanmar powered Kwadima II ready for Mission work in PNG

The Papua New Guinea Bible Translation Association and the Summer Institute of Linguistics (SIL) are relying on Yanmar diesel power to help spread the gospel throughout two remote provinces in eastern PNG. The new Yanmar 6 cylinder 130mhp 6CHE3 diesel engine is fitted to a refurbished 12.5 metre vessel named 'Kwadima II' which has been given the task of ferrying mission workers, their families, and the gear to support them around the 160 inhabited islands in the region.

Coordinated by Wycliffe Bible Translators and funded by international donations, the Kwadima II boating project was carried out by Australian-based custom boat building specialist Opal Marine in Cairns. Owned by well respected traditional boat builder Rod Lacco, Opal Marine undertook the custom fit-out and Yanmar engine/transmission installation to prepare her for the riggers of working up to 200 miles offshore.

Of the 160 named islands in the province, eleven have long-term projects underway which can involve the study of up to 44 distinct local languages, deducing oral language to written word, teaching literacy, and publishing scriptures and other important materials in the local language. The linguists, who are lifelong volunteers supported by donations, commonly make several trips a year and often spend several weeks to months at their offshore locations.

Kwadima II will replace a smaller 27' wooden vessel which worked up to 200 days a year at sea. She will transport everything from food supplies and fuel, to tanks for rainwater, solar panels and construction materials for houses, offices, and classrooms. As the only SIL boat in the fleet, she will also take part in emergency evacuations plus search and rescue should the need arise. Kwadima II will also pick up and return school children at terms' end.

On top of this, the vessel will transport up to thirty bilingual native speakers at a time from their home islands, bringing them into the SIL regional training centre in Alotau, PNG, for linguistic workshops to support their own village Bible translation projects.

'Kwadima' means 'Morning Star' in Dobu- one of the province's languages with her captain and engineer both Dobu islanders.

The Yanmar 6CHE3 engine was matched to the YX30-2 2.96:1 Yanmar marine gears to provide a reliable and easily serviceable power combination for Kwadima II and her crew. The 38 foot boat weighs a total of 14 tonnes and is capable of carrying 3800 litres of fuel and 1100 litres of water.

Onboard accommodation caters up to 12 people with facilities including a fresh water shower, macerated toilet, icebox, two burner gas stove, sink, and a mast and boom for lifting up to 500kg of supplies on deck. A small jib staysail is also onboard for hand operated anchorage.

## "My Yanmar 6LY Series Engine Uses Bugger All Fuel"



When it comes to fuel economy, nothing on the market comes close to my Yanmar

Mick Cooke is a weather-hardened pro fisherman. He has been at sea most of his life, fishing in Bass Strait from more boats with different engines than he cares to remember.

With a life time of experience at sea behind him, Mick Cooke knows plenty about boats and the engines that he has come to depend upon for his livelihood and his life at sea. So when Mick says that his current engine is the best that he has ever used, by far, boaters should take careful notice.

"My Yanmar 6LY Series engine uses bugger all fuel," Mick Cooke said. "When it comes to fuel economy there is absolutely nothing on the market that even comes close."

Mick's current boat "Two Bays" is an alloy hull that was built by Alufarm Marine with the shaft drive 6LYA-STP fitted to the 5 tonne hull during construction. Launched in 2007, "Two Bays" already has 1000 engine hours logged with Mick clocking up seven hours a day while at sea.

The 10.5 meter boat gets up and planes easily with the 350mhp (261 kW) Yanmar achieving peak rpm of 3300 rpm for a top speed of 24 knots.

"Best fuel economy and best cruise speed is at 2500 rpm with the speed showing 17.4 knots."

"I've owned plenty of diesel engines from all sorts of manufacturers and they don't compare to the Yanmar. From the low operation noise, great performance and low weight, the Yanmar is an excellent engine whichever way I look at it."

"Steve Parsons from Power Equipment, the Australian company that sells them, has been great to deal with and the after sales follow up has been terrific."

"Since we have been running the Yanmar we have had no oil leaks and no warranty issues to worry about. The engine is serviced in line with the recommended intervals of 200 hours, keeping fresh oils and genuine filters up to the 6LYA-STP."

Operating principally as a Cray fisherman, Mick Cooke works the Cape Shank, Western Port and Port Phillip Heads area. During the off season for crays he turns to fishing for shark and snapper in Port Phillip Bay, the Rip and



# Cyclone

worries reduced with Ridwest shelter

Enterprising WA based engineering firm, Ridwest Engineering, has launched the first of their new Cyclone Shelters that feature MASE generators for stand alone electricity needs.

A Ridwest Cyclone Shelter is capable of withstanding Category 5 cyclones and can also be used as a refuge and emergency centre in other crisis situations. The shelter comprises Flying Object (FOB) resistant walls and roof which are both made of 13mm mild steel armour plating and can accommodate up to 35 people for 72 hours if necessary with rations including 'Dry Packs' and water allocation for each person.

The 12vKA MASE generator set onboard provides enough power for two reverse cycle air conditioners, lighting, emergency radios, and power points for the use of potential kitchen items including kettles and stereo systems. The MASE battery system is also fully rechargeable through solar panels when not being used for long periods.

The standout engineering feature of the shelter is the 'hold-down' design which uses 4 Manta Ray Earth Anchor systems per side – each capable of holding approximately 18 tonnes (depending on soil type).

Special safety features include an entry air-lock with sliding door, small armoured window with internally operated shutters to avoid sand blasting of outer window finish, emergency escape hatch located in roof with fold down ladder for easy access, along with annual checks and testing of hold down points carried out by Ridwest.

Other features include a 1000L fresh drinking water supply, kitchenette with basic tea and coffee making facilities, chemical toilet, large first aid kit, AM/Fm radio, internally operated ventilation points, UHF radio, emergency flashing light at entry door, strobe light on the roof for aerial locating during an emergency, solar panels

for charging genset batteries when not being used for long periods, ration packs for 35 people for 72 hours, operations manual, lifting eyes on all four corners for craning onto a truck, non-slip treadplate flooring inside and on the roof (which also has handrails), large double doors at rear for maintenance, insulated with polystyrene, and large storage areas under seating.

CEO of Ridwest Engineering Pty Ltd, Josh Ridley, says the market for these shelters will be quite varied:

"As well as the obvious mining industry category, we think our Cyclone Shelters will be valuable for Defence Dept personnel, remote education and health facilities, drilling exploration teams and probably several others too. So we intend to build to special client specifications so all uses can be met, rather than just the 'standard model' and size", he commented.



A Yanmar powered MASE generator set was chosen to provide sustainable power for the Ridwest Cyclone shelter



The Ridwest shelter can accommodate up to 35 people

# Yanmar Powered

## Law Enforcement

Steber and Yanmar have combined forces to supply the Australian Customs Service (ACS) with four patrol boats to assist in the border protection of Northern Australia. The vast northern coastline demands reliability and rapid response times from both the Customs crew and the Steber vessels.

The Australian Customs Service boat of choice is the beamy Steber 40 which has an unrivalled reputation for rough water performance. This proven hull design also performs exceptionally well with the chosen Yanmar 6CX-GTYE twin engine combination which proudly boat the best fuel consumption figures in their class.

At wide open throttle the 400hp Yanmar engines power the 15 tonnes of Steber 40 easily to 27 knots, with a very economical cruise speed of 20 knots at 2400 rpm. At 10.5 knots the fuel burn is less than 9 litres per hour / engine which makes for a very flexible and economical border patrol vessel for the operators.

Matched with a Yanmar powered MASE IS 8 generator set, the twin diesel package combined with Steber's legendary engineering standards is sure to provide a long operating life characterised by low maintenance costs and Yanmar reliability. With a solid network of authorised Yanmar dealers throughout the remote areas where ACS operate their surveillance and intervention programs, the scheduled 500 hour engine services intervals will not present any problems.

According to Alan Steber, the Queensland boat building company has fitted plenty of Yanmar marine diesel engines for pleasure and commercial craft operators and he has not been disappointed yet.

Yanmar- Great for Steber and great for Australia's national security too.



Steber and Yanmar make a powerful boating combination



The Yanmar powered MASE IS 8 generator

# I Like Marine

## Diesel Engines In My Boats



A popular local character, Karl Krause received strong recommendations for Yanmar from his local fishing mates

Power Equipment's own Steve Parsons has recently teamed up with local Tasmanian Yanmar dealer, Glasgow Engineering, to oversee a repower installation of a new Yanmar diesel engine onboard the stainless steel cray boat 'Karmin'.

The new Yanmar 6HA2-HTE engine and MG5114 transmission gears were fitted to the 59 tonne part time scallop dredger and Cray boat to improve fuel consumption and reliability over the incumbent 250hp Gardner diesel.

According to owner Karl Krause, the new 350hp Yanmar diesel has returned an average fuel consumption figure of 15.9 litres per hour over a 4 day scallop dredging period. The Yanmar's fuel consumption is approximately 4 litres per hour better than the previous Gardner engine while delivering a significant rise in horsepower.



Karmin has all the modern conveniences for her 6 crew including a kitchen with a Miele oven and granite benchtops.



Yanmar 6HA2-HTE mechanical controlled engine

"I settled on the Yanmar 6HA2-HTE because it is a purpose built marine engine. I don't like truck motors converted and fitted to my boats. My preference is for a mechanical controlled engine and one with a high torque characteristic at low engine RPM's for when I am scalloping," said Karl.

# Marten 49 'Carrera'

## stars at Hamilton Island Race Week



Nothing could compliment the Marten 49 better than the magnificent location of Hamilton Island and the crisp clear waters of the Whitsundays.

After making her Trans Tasman cross, the Marten 49 'Carrera' became one of the star attractions at Hamilton Island Race Week. Blending her unmatched style with her dynamic performance, Carrera drew the attention of competitors on the water and magnetized a crowd of viewers at her berth - she was truly one of a kind. By combining the talents of designers Reichel/Pugh, SP Technologies design engineers and the experience of Marten Yachts, a yacht of outstanding pedigree has been created.

Having started the week with a crew who had never met, let alone sailed together and many who had never raced onboard a Marten, the Marten 49 went on to prove she was more than just a magnificent looking yacht. Winning two races and placing second overall in Premier

IRC, the combined crew of New Zealanders and Australians finished the regatta with smiles on their faces and new found friendships.

After the final race it was evident why this yacht is so popular. Ready for a well-earned change of pace, Carrera was transformed from her racing form into her cruising form, ready to explore The Great Barrier Reef.

The Marten 49 is built out of the latest advanced composite technology using pre-preg carbon. It features a lift keel for improved draft and performance when racing and reduced draft for accessibility to shallow ports and bays when cruising. An extensive list of available options provides each owner the ability to customise their Marten 49 towards their lifestyle. Striking the right balance between performance and comfort, the Marten 49 reflects the true definition of a cruiser / racer.

Featuring elegant lines, a luxuriously appointed interior and innovative engineering, it is no wonder why production of the Marten 49 is doing so well. With two currently under construction and a slot deposit from the Sydney International Boat Show, the Marten 49 has generated a momentum of interest and excitement.

It is no coincidence that Marten Yachts choses Yanmar as their preferred choice of marine diesel engine. The Marten 49 arrives complete with a 75hp Yanmar 4JH4-TCE diesel engine rigged to a SD50T Sail Drive leg, fitted with a 20 x 14 three-blade Gori folding propeller.

Designed and built with panache and precision, the Marten Yachts range, consisting of the Marten 49, Marten 67, Marten 72 and Marten 85, delivers unique yachts of distinction.

For further information [www.martenyachts.com](http://www.martenyachts.com)



The stunning Marten 49 showing her wares during the Hamilton Island Race Week

# Easy Solution

## for Difficult Pumping Problem

Pumps Australia were recently asked to design and manufacture a pump system for Rio Tinto to lift water over three mountain ranges in Africa, six km's in distance and 1500 metres in elevation. This was achieved with the use of three pump sets utilizing the Yanmar L70 electric start, close coupled through a gearbox to one of Pumps Australia's new super high head piston diaphragm pumps.

The units were designed and manufactured to be compact and portable incorporating long range fuel tanks, with all necessary safety shut down equipment. The flow achieved at the altitude of 1500 metres was 72,000 litres per day or 72 cubic metres per day.

The frames were hot dipped galvanized with easy central lifting points and clear access maintenance points from all directions. The pumping project was so successful 10 more units are in the pipeline to be built.





"Our charter work is mainly corporate, weddings or special celebrations so each time we take a group on board the event is very important and special to them. Clearly the experience on board Xponential has to be exceptional from the time the guests step aboard until such time as we come back to the dock."

"My previous boat was a conventional vee bottom cruiser, powered by a pair of European diesel engines that consumed 45 litres per engine per hour while cruising at 15 knots. By comparison to my new Yanmar engines which consume half that amount of fuel, the old diesels were noisy and very smoky on start up."

After operating my Yanmar engines for some time, now I know that some of the issues with diesels don't have to be tolerated like they used to. I am very impressed with the Yanmars."

Based on the Derwent River at Hobart, Tim Hull offers a fully optioned charter service that incorporates full catering on-board and a charter experience that can take in the sights of Hobart and the magnificent and extensive surrounding waterways.

Most charters average about half a day in duration, so guests are on board and under power for a significant period of the time.

"When I decided to go for the Scimitar catamaran I invested a lot of time in selecting the right vessel and fortunately the Scimitar came with Yanmar JH series engines which produced 125mhp each.

They came fitted with ZF transmissions and big 18½" pitch 4 blade props."

"What appealed to me was that the Yanmar engines were marine engines, specifically built for the marine application and environment. I had previously used truck engines converted for marine use and I wanted something better."

"The Scimitar was delivered from Queensland to Hobart by delivery skipper, Peter Cook from Australian Domestic Boat Deliveries and myself as crew. The new engines provided 15 knot performance average on the trip; fuel consumption was 12.5 litres per engine per hour."

With the engines now fully run in and an extra ½" cupping added to the pitch of the props, our cruising speed has increased to 17 knots with the tachos showing 3300 rpm and still getting 12.5 litres per engine per hour.

"The boat and engines seem to be happiest at 3300 rpm. The Yanmar's are quiet, the hull is stable and 17 knots gets you to most places on the Derwent at a good pace."

"Sometimes you forget that the combined 250mhp of Yanmar power is lifting over 10 tonnes of boat up and running. Those engines do a fabulous job and in the two years that I have been running Xponential the Yanmar engines have been very reliable and dependable with the good service support from Eastern Shore Marine."

Like many who earn their living from working on the water, Tim Hull has zero tolerance for on-board malfunctions. As a Hobart based charter boat operator, Tim Hull's operation has to perform perfectly on cue, every time the mooring lines are slipped.

Yanmar's reputation for building 'bullet proof' marine diesel engines was the key factor behind a pair of JH Series Yanmar engines being fitted to Xponential, a Scimitar 1010 cat.

"Xponential is an executive charter boat that is licensed to carry 12 passengers," Tim Hull explained.



Xponential makes a versatile event venue as she cruises the Derwent River in Hobart

As a thoroughbred fishing boat the Yanmar powered Steber 28 is about as good as they get. The Steber 28 Commercial/Utility/Recreation features a full lock up cabin while the aft cockpit is absolutely vast.

When Ken and Jill Harrison went in search of boat that they could use to fish on Melbourne's Port Phillip Bay, they shied away from the more conventional designs and instead opted for a practical and highly usable vessel.

"We went right away from the floating palaces," said Jill Harrison. "After looking around the market we settled on the Steber 28 for its security and durability."

"As a boat that we can stay on board overnight and fish Port Phillip Bay, the Steber 28 is perfect."

Given a broad selection of power options for their new boat, Ken and Jill Harrison opted for a Yanmar marine diesel at the suggestion of the boat builder, Alan Steber.

"We selected the Yanmar 6LPA-STP and have been entirely delighted with the performance," said Ken Harrison.

"The Yanmar has been absolutely faultless. It is quiet, smoke free starts instantly and just hums along with little or no vibration. All those things that you read in the ads about the Yanmar engines are absolutely true."

The Yanmar 6LP-STP is a shaft drive model that features a 6 cylinder in-line block that displaces 4.163 litres. The engine is a 24 valve engine and tips the scales at just 408 kgs. Power output is 315 mhp at 3800 rpm.

Fuel consumption on Seamphony has been accurately monitored with the Harrisons logging 16 litres per hour over a 64 hour period of general boating.

Built to survey by Steber International and fitted with full live on-board amenities such as shower, head, galley and bedroom, the Steber 28 is rigged to the same standard as a full on commercial vessel. The engine room has been rigged professionally and is exceptionally neat. While shore power can be plugged in, there is also a Xantrex inverter on board.



Jill and Ken Harrison make a formidable fishing team



## Little Persuasion

### For Yanmar Diesel



When fishing writer and industry character Scott Amon set out on a mission to find the boat of his dreams, he didn't expect that his intense research mission would take him from his incumbent outboard powered centre console runabout to a new inboard diesel-powered hardtop. But take a closer look at Scott's new Yanmar powered Persuader 2200 Offshore, and its easy to see why this offshore fishing boat hit the mark.

The classic design of Persuader 2200 Offshore

with enclosed wheelhouse and uncluttered cockpit scored big points with Scott and his family. Built by industry stalwarts Steber and Sons, the 6.95m fibreglass hull offers smooth rough water performance, full v-berth accommodation and enough fishing space out the back for a full-on bluewater tussle.

However, the performance of the 125hp Yanmar 4JH3-DTE turbo diesel was the real surprise packet for Scott.

"Having never owned an in-board powered boat, I did a fair amount of homework on reliability, economy, and maintenance requirements of the 125hp turbocharged Yanmar diesel engine and associated gearbox and shaft drive components," said Scott.

"The consensus from both commercial and recreational in-board gurus left no question that the Yanmar power plant was an exceptional engine."

"The Yanmar has performed faultlessly and uses less fuel than my older, economical longboat hull and 70hp 2-stroke outboard. I did five fishing

trips for 46 litres of fuel and with fuel prices sky rocketing, I'm glad I'm not running an outboard, or worse, twin outboards."

"I quickly fell in love with the drone of the Yanmar diesel. The engine box was well soundproofed and, while noise levels were lower than I expected, that metallic whine of a turbo diesel winding up was heart-warming."



Yanmar 4JH3-DTE turbo diesel engine

# Global Sailing Champion

## & Antarctic Adventurer Relies on Yanmar



Tony Mowbray is a highly sought after corporate speaker

Sailing world record holder and Antarctic adventurer, Tony Mowbray, relies on a Yanmar diesel engine as he visits some of the most remote and rugged sailing locations in the world.

Widely regarded as one of the world's best sailors, Tony runs "Team Mowbray Expeditions" taking ordinary people sailing to incredibly remote and extraordinary destinations. Currently he offers adventure sailing trips exploring locations such as the Antarctic Peninsula, Cape Horn and the Chilean Fjords in the southernmost region of South America.

The list of Tony Mowbray's achievements in life to date is nothing short of impressive. Not only did Tony and his crew onboard "Solo Globe Challenger" survive the perilous and fatal 1998 Sydney to Hobart race, in 2000/01 he became just the 6th Australian to sail solo, non-stop and unassisted around the world in record time spending 181 days continuously at sea on his own.

He is also a highly sought after corporate speaker speaking regularly throughout Australia, USA and the UK.

His journey with a Yanmar began in July 2005 at an Adelaide auction following the purchase of a 60 ft Schooner which had been repossessed by

Westpac. Although structurally sound, the yacht needed a serious refurbishment which Tony had hoped to undertake after sailing her home to Lake Macquarie, 2 hrs drive north of Sydney.

"The original engine didn't even make it out of Adelaide Harbour before it died," said Tony.

"I sought advice from a local and respected marine diesel engine specialist on the Adelaide Waterfront, Mr Paul Webb of Webb Marine Services, who also is an authorized Yanmar dealer. I had not owned a Yanmar powered boat before but I know plenty of people who do and they all speak ever so highly of the brand. It was an easy decision for me to select Yanmar for my re-power."

Tony also sought advice from Yanmar's Marine Sales Engineer Steve Parsons who discussed at length the engineering advantages of running a Yanmar engine and transmission throughout Tony's intended adventurous and remote destination trips.

"From the outset, quality, reliability and durability were absolutely paramount for me," said Tony.

"Most salespeople will talk to you about price but I was more interested in listening to Steve Parsons explain to me the benefits of operating a Yanmar diesel in some of the most remote places on the planet. Between Steve and Paul, I got the best advice and engine package available."

"From the point where the fuel leaves the fuel tank, to where the power leaves the tip of the propeller blades, it is all brand new. Paul Webb is the very best in his field and did a superb job on the re-power."

Once the new Yanmar was installed Tony got the boat back to his home base and he and a team of willing workers set about a complete refurbishment to prepare the 1981 UK-built yacht for her next stage of her life. After 12 months and \$300,000, the aptly named "Commitment" was ready to host up to 6 guests (expeditioners) plus Tony and a crew in style and comfort as they tour the likes of Cape Horn, The Antarctic Peninsula, The Glaciers and Fjords of Tierra del Fuego, the snow and ice capped Andes mountain range and Patagonia

including Argentina and Chile.

"Commitment is now based in Chile, South America and she spends 5 months of the year giving people the trip of a lifetime and after dinner conversation for years to come" said Tony.

"In the 1998 Sydney to Hobart for 15 hours I thought that I had found out how I was going to die. That experience really reinforced that fact that we are not here forever. As the yacht's name suggests, I'm big on commitment and want to share life changing experiences with other people."

Tony has already clocked up 1,000 hours on his 125hp 4JH3-DTE Yanmar engine and not once has it let him down. The economical intercooled turbo diesel engine delivers an outstanding 2,200 mile range from Commitment's 1,200 litre fuel tank that also supplies a diesel Genset and diesel cabin heater.

"On some occasions we have the engine running 24 hours a day," said Tony.

"During one of our recent 22 day expeditions through the Chilean Fjords and Glaciers we ran the motor every day. We would start it up at 7am and shut it down at 7pm and it never missed a beat."

"Performance is brilliant, with my Yanmar capable of pushing my 32 tonne yacht to 9.5knots in smooth water. She averages about 3.5 litres per hour and will happily sit on 2100rpm doing approximately 6.5 knots. She ticks over like a Swiss clock, sounds beautiful and hardly uses any oil."

Team Mowbray Expeditions is offering 8 different trips from 8 to 23 days from November 07 to March 08 this Southern Hemisphere summer. "Commitment" takes a maximum of 6 expeditioners and 2 crew accommodated in 5 double cabins with 3 toilets and 2 showers. Age, gender and previous sailing experience are not important according to Tony. Participation is the key to an enjoyable experience. The common denominator is people who are outgoing, have an adventurous personality and are seeking different and fulfilling experiences in life.

# Velella Cruises

## Across the Top of Australia



The Yanmar 1GM10C engine neatly installed in Velella

One of Yanmar's pocket rocket saildrive engines, the 1GM10C, has clocked up some of the most incredibly scenic yachting hours onboard the cruising sloop 'Velella' as she embarked on a voyage from Perth, up around the coast of northern Australia and down to Cairns.

The cruising voyage was the brain child of Shaun Sims who, with the help of first mate Robin Clark, embarked on a 6 month yacht restoration project to refurbish the 26 foot Swarbrick designed cruising sloop in preparation for their trip of a lifetime.

After the hull was stripped bare, re-epoxied and refurbished inside, Shaun Sims looked to Graham Dearle at Yanmar for advice on installing a new 1GM10C Saildrive into the new vessel. The compact profile of the single cylinder 9.9hp diesel was a perfect match for the precious amount of onboard space allocated to an engine installation which was fed by a 100 litre stainless steel fuel tank.

In hindsight, Shaun's decision to purchase the Yanmar proved the right one with the compact diesel clocking up over 600 hours of trouble free yachting over the 12 month journey. The itinerary placed Velella and her crew amid some of the most remote, rugged and pristine coastal environments Australia has to offer that tested both man and machine to the limit.

Velella had all before her as she first sailed north out from Exmouth in the Indian Ocean then up and along the coast to Broome in the Timor Sea. She then pushed further north past Darwin in the Arafura Sea then down around the Gulf of Carpentaria, before pitching up around Cape York and into the Coral Sea for the last run into Cairns.

Onboard existence was made more than bearable for the crew with Shaun and Robin spending countless preparation hours making sure Velella had many of the comforts of home. A pressurised hot water shower and an electric toilet with holding tank were vital inclusions plus the 90 litre Isotherm Marine fridge and 2 burner stove made galley duties far more refined.

All the rigging, ground tackle and electrics were installed new so to avoid any terminal failures. Highlights for Velella were the freshwater waterfalls at Crocodile Creek in the Kimberley region of WA and soaking up the clear waters of Boulder Reef in the Great Barrier Reef Marine Park in far north Queensland.



Velella anchored on Boulder Reef in North Queensland

The compact little Yanmar 1GM10C clocked up over 600 hours in Velella, as she sailed north from Perth and up over the top of Australia and down to Cairns.



On board Team Mowbray Expeditions, guests are encouraged to become a part of the team.

# ▼ Australia's First

## Yanmar 6Y Engine Backed Up

Following much international fanfare surrounding the launch of the new Yanmar 6Y series of engines, Adelaide boat builder Jim Theodore was the first to order and install a Yanmar 6BY... and then following sea trials immediately ordered a second.

Based on the same common rail diesel engine fitted to select BMW models, the Yanmar 6Y engines have quickly won acclaim throughout Australia as more and more are now being fitted into the engine bay of Aussie built boats.

The Theodore Coastal 720 is a relatively new boat, a rig that caught the eye of the AMIF Boat of the Year judges who bestowed 'runner up' on this boat in two categories. And just as the AMIF judges were impressed with the boat, Jim Theodore was impressed with his Yanmar 6BY that he installed.

"The Yanmar impressed me with its light weight and frugal fuel consumption," Jim Theodore said.

"We had previously been installing a variety of makes of diesel sterndrives and the Yanmar 6BY came in at 200 kgs lighter than the most common diesel sterndrive that we had been installing."

The light weight not only translates to a superior power to weight ratio for enhanced on-water performance, but the benefit can also be measured in the towing weight of this trailerable rig.

When a kerbside package gets towards the top end of a legal towing weight, a saving of 200kgs can often make the difference between legal and illegal.

"After we installed and ran the first of the Yanmar 6BY engines to the Theodore 720, we decided to order and install a second, we were so impressed. Both installations have featured a MerCruiser Bravo III duo prop drive."

The Yanmar 6BY dry weight with the Bravo 3x drive is 408 kgs; without the stern drive it weighs in at 310 kgs and develops 260 mhp at 4,000 rpm.

On the water the Yanmar punches the big 2 tonne 7.2 metre hull onto the plane quickly. Equally rapid is the acceleration as the turbo kicks in and a light turbo whistle can be heard as the power builds.

At full throttle the Coastal 720 is good for an even 40 knots running 28" pitch props. An ideal cruise speed is achieved at 3000 rpm where the GPS shows a speed of 25.5 knots with fuel consumption of 22.9 litres per hour.

The owner of the first Theodore Coastal 720 powered by the Yanmar 6BY reports that over the first 100 hours of general boating, fuel consumption worked out at less than 8 litres per hour. That's pretty economical boating.

"The Yanmar 6BY has plenty going for it," said Jim Theodore. "The fuel saving is just unbelievable. The Yanmar uses only about 1/3 of the fuel consumed by a big 4 stroke outboard when the fuel flow is compared at for both engines at say 22 knots."

Other attributes of the Yanmar as identified by Jim Theodore include an easy installation, true drive by wire throttle control, great instrumentation, low noise and no diesel odour or smoke from the exhaust.

"But overall on-water performance is what will win customers over. This diesel engine delivers petrol like nimble performance with diesel torque and economy. And even down low it is impressive trolling at 4.3 knots with the engine ticking over at 600 rpm.

The Yanmar 6BY is an ideal match to the big Theodore 720 Coastal. Five years in development and now two years in full production, the Coastal 720 is a high quality - low volume fibreglass boat.

As a genuine blue water fishing machine, the Coastal 720 targets fishing devotees, with some spill over interest received from divers. The cockpit is huge. Moreover, the rig is trailerable being one of the largest boats about that can be legally towed.



According to Jim Theodore, the owner of his first Yanmar 6BY powered Theodore Coastal 720 reported an average of 8 litres of fuel per hour over the first 100 hours of boating.



# ▼ Seasoned Boater

## Repowers With Yanmar



Greg Hawtin enjoys enormous fuel savings with his new Yanmar

Cairns boater Greg Hawtin is the kind of bloke who almost has salt water running through his veins. Growing up in far North Queensland when it was genuinely a remote part of Australia, Greg spent his youth fishing, hunting and exploring.

Things around Cairns have certainly changed since those days, but Greg's passion for the water, fishing and boating remain as strong as ever. So much in fact, that when the original diesel engine in Greg's 23 year old Cairns Custom Craft 7.0m plate alloy hull died, he decided that a repower, rather than a new boat, was the best option.

"The original 220hp 6 cylinder diesel engine in 'G Force' did a pretty good job but was slightly underpowered," Greg said. "Towards the end it was pretty unreliable which is something that you don't want when you go miles and miles offshore to fish the outer reef up here. And after 1000 engine hours it just died."



Yanmar 6LPA-DT marine diesel engine

After checking around the traps, talking to mates and visiting the boat shows, Greg settled on a 260mhp Yanmar 6LPA-DT marine diesel engine package complete with the factory approved and warranted Mecruiser Bravo Two-X sterndrive assembly.

"I could have purchased a V8 petrol sterndrive or lesser name diesels for less, but I was won over by the well proven performance and the incredible fuel economy that the Yanmar brand is renowned for up here in North Queensland."

"When I was doing my research a rep from another diesel engine company bagged the Yanmar 6LP Series for being a derivative of a Toyota Landcruiser diesel engine. That was not a smart move because I knew what the full story was plus I've had a fantastic run with my various Toyota 4WD Landcruisers for over 20 years and figured that if I did as well with my new Yanmar in my boat then I would be just as happy."

So the old diesel engine and leg were removed and a sparkling new Yanmar 6LPA / Bravo Two-X package installed. Compared to the old diesel engine, the Yanmar was fractionally longer and taller, requiring a small amount of modifications to the engine hatch only.

"And that was about the only downside to the whole project. The new Yanmar has added a whole new dimension to the enjoyment of my boating and fishing trips. I'm totally confident in the engine and love the greatly reduced amount of fuel that I now use."

Compared to the old diesel engine, the Yanmar 6LPA-DT delivers about 30 more hp at the prop, but the new engine is only notionally heavier. The real benefit, apart from the reliability and reduced engine noise, is the increased torque, faster top end speed and enormous fuel savings. It is widely regarded that nothing delivers mid range torque better than sheer engine displacement, and at 4.2 litres the Yanmar 6LPA has capacity to spare compared to many of its competitors.

"My old Cairns Custom Craft now has a top end speed of 34 knots at wide open throttle

which is at 3200 rpm. More importantly though, I can cruise at 3200 rpm with 22 knots on the GPS display all day long."

The fuel tank onboard 'G-Force' has a 600 litre capacity even though Greg has never used a full tank since the repower. Through rigorous monitoring of fuel usage and distances travelled, Greg Hawtin says that at cruise speed his fuel usage is less than 1 litre per nautical mile travelled. That is cheap boating in anyone's language.

"My favourite trip is to head out and do an overnight fishing trip on the reef with 2 or 3 mates fishing for Red Emperor in 80 meters of water. We leave mid afternoon and return mid morning after being at sea for approximately 20 hours. The trip is 90 NM return and the fuel usage is 80 litres," Greg said. "The old engine on the same trip used 150 litres and took longer!"

As a senior technician with Telstra working in some of the most remote parts in Australia, and having previously worked in electronics in the RAAF, Greg Hawtin is passionate about new technologies and reliable equipment.

"My game is technology and the quality engineering that is built into the Japanese engineered Yanmar's make them stand out from the rest."

"I know that there are other marine diesel brands on the market, but to my way of thinking Yanmar holds a distinct edge with quality Japanese engineering, high resale value, reliability and a back up parts and support service that is simply the very best you could hope for."

"When you are 40 nm offshore with a bunch of mates, an ice box full of fish and it's time to come home, the very last thing you need to be

Less than 1 litre per Nautical Mile is very economical boating



# ▼ Hooked on

## New Yanmar 6BY Series Diesel Power



John Margetts

Usually with this model boat customers have opted for an outboard in the 250 hp category or even dual 150 hp outboards.

The Yanmar 6BY installation performed by Hooker Boats was the first 6BY sterndrive engine to be fitted in North Queensland. Yanmar have sold many of the well proven 4LHA and 6LPA mechanically controlled packages in North Queensland but this was the first installation of the new electronic controlled 6BY Series.

"I opted for a Yanmar diesel sterndrive for my demo boat due to the reliability factor and exceptional fuel economy. I also felt that with customers experiencing the benefits of Yanmar power during the pre purchase process, customers would actually convince themselves of the benefits of Yanmar."

There are a lot of older and experienced boaties in the big trailerable boat market who subscribe to the old fashioned view of a diesel – heavy, slow revving and smelly. The world has certainly changed with advanced diesel technology encompassed in the Yanmar 6BY – drive by wire control, electronic engine management, low emissions and light weight.

As an offshore fishing machine, the Yanmar powered Hooker 8m WRC rig is an impressive beast. The 260 mhp (191kW) punched out by the 6 cylinder 6BY-260Z delivers a rapid 35 knots at 4100 rpm swinging a 21" pitch prop on the MerCruiser Bravo 2X leg. In a fully loaded state, cruise speed is achieved at a leisurely 3300 rpm and 26 knots, a fine effort for a boat that tips the scales at a dry weight of 2 tonnes.

With the 600 litre fuel tank fully loaded, the Yanmar powered Hooker package has a very impressive range of 1200 nautical miles. It is easy to sometimes overlook that this boat is legally trailerable, not a large sea going cruiser

with massive fuel tanks on board.

For John Margetts a typical fishing day out from his home city of Cairns involves a run out to the reef, some 25 to 30nm offshore. A serious session of trolling ensues and then at days end it's a comfortable run back home again.

"I do this trip on less than 80 litres of fuel – it has to be one of the most economical days reef fishing that anyone could ask for."

And on the big days it is a run of 120 nm offshore to the outer reef where the big fish live right on the edge of the drop off. Following a day long session of chasing these fish, it's then time to head back home with another 120 nm run.

Compared to a 4-stroke petrol outboard on the same hull, the diesel torque is simply awesome and guarantees the Yanmar powered package is first back to the ramp, and last at the fuel bowser every time.

"I am totally won over by Yanmar's reputation for quality and their after market support. The Yanmar 6BY-260Z just hums along under the engine hatch but you can really feel the power surge when you lean on the throttle and hear the turbo whistle come on."

"This Yanmar engine is so under stressed, I reckon that it will last forever", concluded John.

The new generation BY Series which include dual overhead camshaft, 4 valves per cylinder and common rail fuel technology are available in both a 4 cylinder 2 litre variant (150mhp and 180mhp) and the 6 cylinder 3 litre (220mhp and 260mhp) model. With a dry engine weight of only 250kgs for the 4 cylinder model and 310kg for the 6 cylinders, they are already gaining an excellent reputation from owners and boat builders alike for performance, low fuel usage and low noise.

John Margetts' Yanmar 6BY diesel gives his new Hooker 8M Series WRC boat a cruising range of 1200 nautical miles



# ▼ Scimitar Customer

## Demands Big Yanmar 6BY Series Power



Bryan Bradford

A general rule of thumb in the boat building business is that manufactures determine the optimum power for a boat, and then prefer to build to this standard factory specification. However, every now and then a customer will have specific requirements for different engine performance soon after.

This Scimitar 1010 catamaran, which is the second Scimitar built for the same owner, is such an example.

Not only did the customer want the latest version of his dream boat, but he demanded the latest in engine technology provided by the Yanmar BY series engines. While the new Yanmar 4BY engines are proposed as a standard to this model, they were not released in Australia at the time the required to meet the building program. Rather than opt for an alternative brand, the customer, specifically wanting the Yanmar BY Series, specified the larger and more powerful Yanmar 6BY engines which were immediately available.

The owner's previous Scimitar was fitted with smaller engines and both the owner and the team at Scimitar were very keen to see the expanded performance with the larger horsepower Yanmars.

The Scimitar 1010 is a high performance ocean going cruiser that features a beamy easy living, spacious design. This boat is an outstanding success as a coastal cruiser, family entertainer or a luxury charter boat.

While there is a reasonable power difference between the 4BY (150 – 180 mhp) and the 6BY (220 mhp) and the installation envelope is also larger, the same attributes that have already

made the Yanmar BY series so popular in the Australian market since its release this year, apply to both models.

"The Yanmar engines are ideally suited to the Scimitar 1010," said Bryan Bradford, Director of Scimitar Marine. "While the Yanmar BY engines are certainly similar in weight and power to competitive diesel engines, we have found that the new BY series engines are exceptionally easy to own and operate with their fully integrated electronic throttle controls."

"The BY series of Yanmar engines are fully electronic managed models. This is true drive by wire. Moreover the engines can be electronically synchronised making the job at the helm even easier again."

With there being a surge in popularity in this style of boat amongst cruising boaters, it is understandable that discerning buyers are demanding the latest in high technology, fuel efficient marine diesel engines.

At wide open throttle the Yanmar 6BY powered Scimitar 1010 has a top speed of 26.5 knots at 4050 rpm. Throttling back to a comfortable cruise speed of 18 knots has the tachos sitting on 2900 rpm and the fuel flow a modest 16 litres per engine per hour. This data is achieved with a pair of 19" x 21" counter rotating 4 blade props.

"The new technology currently available from Yanmar is very impressive," Bryan Bradford said.

"We have been fitting Yanmar engines for more than 8 years now and the performance data in terms of fuel consumption is remarkable. Where

for many years we installed the 125hp Yanmar 4JH model, we used to see 12.5 litres of fuel consumed per engine per hour at 17 knots. With larger and more powerful 6BY engines on board, the fuel consumption is not that much more plus much higher cruising and top speeds are available to run ahead of heavy weather or venture quickly offshore for a day fishing trip. Throttle back and the same long range cruising economy is still achievable."

Scimitar Marine is a strong advocate of the Yanmar brand. "The engines are a great match to our hulls and we love dealing with the Power Equipment people – they are always available and supportive for both us and our customers."

Director of Scimitar Marine, Bryan Bradford, believes the New Yanmar BY Series engines are ideally suited to the Scimitar 1010



## Powers Carrot Colossus



L-R: Mike Edwards, Yanmar (National Power Sales and Marketing Manager), John Lamattina, Stephen York, and David Trebilcock, Yanmar.

By any yardstick, Rocky Lamattina & Sons is an impressive carrot producing organisation. The family company grows carrots at three separate locations and supplies up to 500 tonnes of carrots to customers 52 weeks of the year.

The carrot farming process is spread over three properties, Wemen in north western Victoria, Kaniva in western Victoria and South Australia. With the nerve centre of the business headquartered at Wemen, Lamattina's not only have a 2430 Ha property, but one of the most technically advanced carrot processing plants imaginable.

Of course the carrot growing process begins out in the fields and at Wemen alone the operation has 37 centre pivot irrigators in place. While a series of electric pumps deliver water to these huge water systems, Yanmar 4TNE diesel engines are located on site at each pump, driving the hydraulic system that turns the irrigator wheels.

According to John Lamattina, the Yanmar 4TNE engines have been the dependable backbone

of the highly automated irrigating system.

"We have stuck with the Yanmar 4TNE engines as they never give us any trouble," John Lamattina said. "We use Yanmar diesel engines right across all of the properties where we have a total of 62 Yanmar powered irrigators in operation."

The Yanmar diesel engine with the most number of hours up is situated at Wemen. This engine has 15,000 hours logged in 5 years of operation... and it is still as reliable as ever and still going as strong as the day it was installed.

"This is testimony not only to the Yanmar engine itself, but also to the benefit of regular service and careful attention. We purposefully run quality machinery such as Yanmar and in looking after our equipment we are well rewarded with long, dependable operation."

"With our Yanmar 4TNE engines it is simply a matter of ensuring that the oil and filters are kept up to the engines at regular intervals. It's that simple."

Aiding the efficient process of installing and servicing the T-L centre pivot irrigators is Stephen York of Water Dynamics Yarrawonga, a supplier that has a long established and a strong association with Yanmar diesel engines. Every irrigator is fully automated with UHF switch gear operated from a central location.

The Lamattina operation is year round. At Wemen each T-L centre pivot irrigator covers an area of between 70 and 80 acres. Typically a field of this size will produce 3250 tonnes of carrots.

Carrots are harvested at all three Lamattina properties by mechanical harvesters which dump freshly harvested carrots into portable

bins, with each tri-axle bin carrying 13 tonnes of carrots. All processing is undertaken at the Wemen site where a modern highly mechanised washing and packing plant.

Raw carrots from the field enter the plant at one end and then emerge at the other end washed and packed in plastic bags ready for the supermarket shelf. In between there is virtually no human intervention in the plant, which has a heavy emphasis on water recycling.

Such is the fierce independence of the Lamattina operation, that the vast majority of the equipment on site from the harvester to the processing plant has been designed and engineered by the Lamattina family themselves. The company runs its own fleet of 13 Kenworth prime movers and B Double trailers ensuring that 17 shipments are loaded and delivered from the plant every week.

The company that Rocky Lamattina founded in Gippsland 35 years ago has grown to be one of Australia's greatest rural success stories. Today Rocky, together with his sons Angelo, Phil and John, supply Coles with 300 tonnes of carrots every week of the year.



Yanmar's 4TNE going strong after 15,000 hours

The Lamattina carrot production encompasses 2430 Ha with 62 Yanmar powered irrigators on site to help produce up to 500 tonnes of carrots per week for customers across Australia



# White-Wash with Yanmar



Ron Conde loves his new Fairway 36 with Yanmar power

Ron Conde has been playing around with boats virtually all of his life. The passion started out with a yacht and then quite a few more followed.

But these days as Ron has slowed down and his family have grown up he has channelled his boating passion towards a new Fairway 36, a comfortable live aboard cruiser. This is the boat that Ron Conde and his wife Robin can take on extended cruises way up the coast of Queensland.

Based on his previous boating experiences, Ron was adamant that a Yanmar engine had to be fitted to his new boat.

"I have experienced a range of other brands of diesel boat engines in the past and I have also had Yanmar engines on board my own boats," Ron said. "When it came time to selecting the engine for my Fairway, the decision was easy. It had to be Yanmar."

"Then when I checked the Yanmar range against the other brands out there I found that the Yanmar 6LPA-STP was an ideal match to the Fairway 36. The Yanmar was lighter than other brands and it had the added benefit of not revving too hard. The power to weight was very impressive."

With 100 hours up on his new pride and joy called White-Wash, Ron is delighted with his Yanmar choice. The boat weighs in at 7 tonnes on the water and is a classic semi-displacement hull.

At wide open throttle, the tachometer shows 3900 rpm with the GPS reading 19 knots. Throttling back to a comfortable cruise speed of 15 knots, the Yanmar 6LPA-STP has the low fuel consumption rate of 19 litres per hour. With the 800 litre tank on board, White Wash has a range of about 500 nautical miles with safety, or enough fuel to comfortably run from Brisbane to Gladstone.

Yanmar's sophisticated 6LP-STP is a true 'go-fast' power package with a direct injected, turbocharged and intercooled straight 6 cylinder engine pumping out 315mhp at 3800 rpm. The 4 valve per cylinder engine boasts a big 4.2 litre displacement for sustained torque through the mid rev range while still offering an impressive power to weight advantage coming in with a dry weight of 452 kgs with a gearbox fitted.

Matching the Yanmar engine on board is a Mase IS 3.5 generator set. Mase gen sets are widely accepted as being amongst the best engineered in the world, with the Italian made generator being linked to a Japanese Yanmar diesel engine.

The Mase gen set on board White-Wash is used to keep the main batteries charged, run the hot water system and a heater for winter boating.

"I could not be happier with my Fairway and the Yanmar marine diesel engine that drives her," said Ron Conde.

"We are very much looking forward to heading up the coast to Yeppoon and Mackay, and with the Yanmar doing all the work, we feel very confident and comfortable about being away for up to 8 months at a time."



Yanmar 6LPA-STP engine



Mase IS 3.5 generator set



# Yanmar Power

## For Oceanic Offshore's New Multi-Cat



Commercial diving company Oceanic Offshore has looked to Power Equipment for their main propulsion and onboard generating power for their recently commissioned specialist offshore diving vessel 'Mary V'.

The job waiting for the new engines was always going to be demanding, as the vessel was designed to carry heavy equipment and operate throughout some of the most remote waters in Australia. So the Oceanic Offshore team settled on two Yanmar 6CX-GTYE series engines for their power to weight performance, refined technology, simple mechanical controls and impressive fuel economy results.

Taking over 18 months of planning and construction, the new 19.5 metre aluminium catamaran is now fully equipped as a live aboard diving base station for long term commercial diving projects.

Oceanic Offshore began in 1997 with commercial diving industry stalwart and present CEO Kevin Nuttall who was looking to establish Australia's most diversified air diving company. Based out of Burrup on the Dampier Peninsula in northern WA, the company has grown rapidly with Kevin's two sons now onboard to help manage the growing demand for air diving services throughout the oil and

gas exploration industries.

Witnessing an increase in industry demand and no longer satisfied with trying to hire appropriate dive vessels at short notice, Kevin Nuttall approached well respected naval architect Jim Wilshire from AllSeas to help design a fully integrated diving support platform. Jim worked closely with Graham Dearle, Power Equipment's Fremantle based Marine Sales Manager, during both the design and construction process which was undertaken by Rod Wellington and Ocean Pearl Boat Builders in Broome.

The vessel needed specialised equipment including an onboard decompression chamber, dive air compressor, 240V gen set, sea crane and desalination plant plus deliver economical cruising for long range capabilities. Yanmar marine diesels were selected.

"It was a personal choice to install Yanmar diesel engines on Mary V," explained Oceanic Offshore's Operations Manager, Troy Nuttall.

"I've had experience with large Yanmar engines in rig tenders prior, and enjoyed their simplicity with regards to maintenance and repairs. We have also used Yanmar in other instances such as small engines supporting water pumps etc and found them reliable."

Based on the 'Multi-Cat' hull design more commonly associated with dredging, 'Mary V' is powered by twin Yanmar 6CXM-GTYE intercooled turbo diesel engines pumping out 360 mhp (265kW) @ 2600 rpm. The 7.4 litre straight 6 cylinder diesels are matched to Twin Disc MG5075A marine gears for dependable performance and long term durability.

The extensive list of onboard electrical equipment requires a stable source of 240V electricity. To supply 'Mary V' with enough power for the air conditioning, dive air

compressors, de-salination plant, freshwater pumps lighting, computer and galley equipment, Troy also sourced a Yanmar powered MASE IS 16 generator set to handle the 240V power load. Renowned for their low noise and low vibration levels, the Yanmar powered gen set was installed with a full canopy to deliver a noise level of only 50 dBA at 7 metres- a feature much appreciated by the 'Mary V' crew.

"The vessel has just finished a diving support program for Woodside Energy at Scott's Reef spending approximately 4 weeks on location," said Troy Nuttall.

"While Mary V came in heavier than we first expected, with a deadweight of 37 tonnes, her overall performance is 12-14 knots at cruise or 17 knots at top speed."

Oceanic Offshore undertakes a wide range of commercial diving services from hull and propeller cleaning for shipping companies, drilling and underwater welding to complete dive services for mining exploration companies and underwater salvage. Testament to the stability of Mary V, the onboard Dragger 78" Twin Lock recompression/decompression chamber is equipped with a NATO flange and capable of accommodating up to 2 divers.



Oceanic Offshore's purpose-built commercial diving vessel features an onboard decompression chamber



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