Wallypower

Main picture: *The Wallypower, with her unique stealth-like looks, has an incredible cruising speed of 45 knots.*
Above right: *The unique glass and carbon deckhouse.*
Right: *One of the two small piloting consoles.*
Below: *A protected guest cockpit has been placed forward of the deckhouse.*

Italian industrialist Luca Bassani, founder and chairman of Wally, stands at one of the two navigation consoles, piloting the first Wallypower with great dexterity as he starts up the three propulsion water jets. Ten seconds later, the 95 tonne boat gently lifts off the water and skims over the surface, although just moments before she had been travelling at only nine knots under her two small 276kW Cummins diesel engines. She reaches 35 knots with no vibration whatsoever, and then accelerates smoothly up to 45 knots. It is only when one glances at the GPS that one realises that the yacht is already at her 45 knot cruising speed.

With the earthly backdrop of Portofino slipping away in the distance, the whistling of the gas turbines and the fine plumes of spray rising up from her wake, one has the feeling of being involved in some kind of futuristic adventure film. But in reality, one is aboard an extraordinary yacht, designed to break through the 60-knot barrier. Nestled beneath the striking prism-shaped glass and carbon deckhouse that covers the 12m-long, loft-style interior with its panoramic views, those on board get their first taste of the phenomenal acceleration of this high-speed demon.

The deep-V hull with its knife-edged bow makes short work of the first waves whipped up by a fresh southwesterly. Bassani expresses his satisfaction when the hull, designed to pierce the waves, effectively absorbs any pitching and achieves a 50% reduction in vertical acceleration.

At 50 knots, the boat starts to react forcefully to the succession of 1.5m-high waves, and guests on board had to hold on tightly after the side hull steps that assist in roll stability come in contact with the water surface. Bassani is reassuring, announcing that this movement will be distinctly lessened when the angle of incidence of the steps is corrected and the flexible elements designed by the Wally research department are added.

With the swell three-quarters on the stern, the 118 Wallypower is on an ideal trajectory for reaching 60 knots. However, with the sea temperature at around 31°C and the air temperature at 33°C, the three gas turbines do not yield their full power of 12,527kW as they would if the sea temperature were a cooler 15°C. Bassani explains that the pitch of the propellers in the KaMeWa water jets is too fine – they will have to be adjusted for the boat to be in its optimum configuration for achieving 60 knots. Hence on this occasion it does not manage to exceed 54.8 knots.

Admittedly, this is far from the 65 knots claimed by Wally, but the yacht's very balanced handling at over 50 knots should eventually allow her to reach this speed quite comfortably with a good safety margin. As Bassani adds: 'The real challenge is to be fast in all sea conditions. Most of today's fast boats are obliged to slow to below 20 knots for 60% to 70% of the time. So we have gone for this deep-V hull form with no flaps, a deadrise of 22° in the stern, and a very fine bow for cutting through the waves. The tank tests carried out by SSPA in Sweden demonstrated the efficiency of such a hull – it does not bounce.'

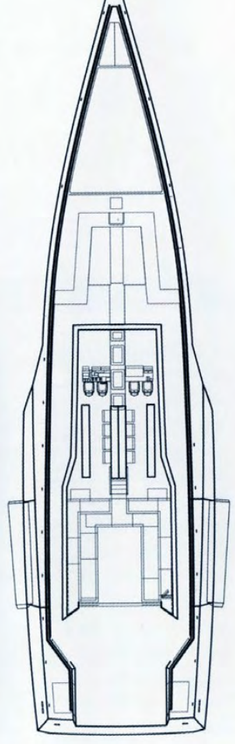
The yacht's aerodynamic and very futuristic stealth-boat lines were designed in-house by the architects at Wally, in collaboration with the Intermarine engineering department, while the interior and styling came with the help of Italian studio Lazzarini & Pickering Architects. Absolutely no

Right: *All the interior spaces are very light and open.*
Far right: *In line with the styling of the rest of the yacht, the long, narrow dining table is manufactured from carbon.*
Far right bottom: *The main saloon opens out onto the aft deck like a sun terrace.*
Below: *The Wallypower has been designed to break through the 60-knot barrier.*

equipment is on view, not even the essential deck fittings. Everything is hidden away in the bulwarks and coamings or below decks. Even the radar, GPS, radio transmission and satellite antennae are concealed beneath the forward part of the coachroof, so nothing on the deck of this monster of technology gives away her amazing power. In keeping with the yacht's style, the navigation station is rather unusual, featuring two small piloting consoles just forward of the long, narrow carbon dining table.

Commencing three years ago, the aim of this project was to combine the comfort of a superyacht with the high performance of a coastguard vessel, while adopting the pure approach that characterises the 'Wally way of thinking'. No one has ever dared to take such a concept so far before. The association between Wally and the highly experienced composite specialists, Intermarine-Rodriquez in La Spezia led to the successful launch of this 36m vessel – the product of a great passion for rationality and innovation.

The Wallypower is not a prototype, but rather a very carefully designed motor yacht that makes use of proven technology, such as the combination of gas turbines and water jet propulsion – the latter not being prone to the cavitation and vibration of conventional propellers at high speed.



Above: *Two similarly styled double guest cabins are placed just aft of the master.*

The engine system was designed and installed by Detroit Diesel, the same American engine manufacturer that also developed the software required to co-ordinate the operation of the three turbines with the three Maag Gear gearboxes and the three KaMeWa water jets – two directional and one a fixed central booster. These Detroit Diesel turbines (DDC TF50), already tried and tested on numerous military and merchant vessels, are much lighter and less bulky than diesel engines and also require a lower level of maintenance. Of course, certain adjustments had to be made for their use in the close confines of a yacht. The titanium exhaust cooling-chambers, in particular, called for special consideration because of their exit temperature of nearly 70°C – and obviously one has to be out in open water, a good distance from other traffic, before they can be started up. Also, while they are extremely versatile and responsive to the three control levers, the driver has to be very mindful of safety and courtesy.

Wally envisages that some prospective owners might prefer a tamer version of the Wallypower. It therefore proposes to offer a version with two 2,982kW MTU engines, giving a maximum speed of 45 knots.

The engine room, nicknamed 'the bank' by Bassani on account of the financial investment it represents, occupies nearly one third of the yacht's length and a total area of around 70m². Even so, it is a tight fit for the line-up of two diesel engines and three gas turbines, each measuring over 6m in length when coupled to their Maag Gear gearboxes, with the water jets sited behind. Installed around this very complex engine system, which needs constant monitoring, are two 33kW Kohler generators, compressors for the Frigomar air-conditioning, a desalinator and the hydraulic power pack.

Once the access hatch opening from the galley is closed, one can appreciate the excellence of the sound insulation. Studies into this and the yacht's vibration were carried out by Technav. Certainly the remarkable quietness of the Wallypower is one of its major selling points. Even at full throttle, one can comfortably hold a conversation or listen to music in the saloon if the sliding door onto the aft deck is shut.

Contrary to expectations, the rigidity of the yacht's composite hull does not make it uncomfortable – quite the reverse, as carbon is not used for the underwater running surfaces. The yacht's bottom is a classic construction of 30mm GRP laminate, hull skins are GRP/carbon sandwich with a balsawood core and the deck is carbon/Nomex, a very sound hybrid structure that does not transmit shockwaves.

The deck plan is innovative, particularly as it was decided not to build up the stern deck, which opens onto the sea like a sun terrace extending beyond the saloon. The outside seating area, on the other hand, is situated in a cockpit sunk into the deck forward of the deckhouse. Here, up to 20 people can sit around two folding tables separated by a central gangway, the floor of which is translucent so as to let light into the owner's cabin below. Forward of the table, a hatch in the deck opens upwards to reveal the long garage which accommodates a 5.5m semi-rigid tender. Once the tender has been launched by means of its custom black davit, this large space with its varnished teak floor can be used as a gymnasium.

Everything in the yacht is in keeping with the style of the overall décor, which flows inside and out. Bassani calls the

interior scheme, 'a New York loft on the sea' and it possesses an air of great simplicity. The two architects Claudio Lazzarini and Carl Pickering adopted the minimalist style inspired by Le Corbusier and already applied with great effect to the supersloop *Wally B*. The atmosphere is that of an ultra-modern superyacht in which functionality is everything, and where all the top-of-the-range equipment is hidden from view.

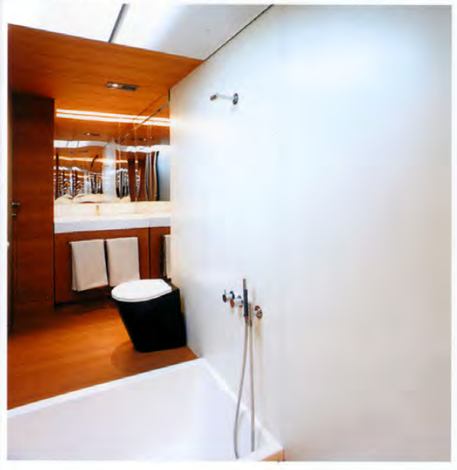
On deck, this means that one can move about very easily on the wide side decks protected by high bulwarks, feeling perfectly secure without being particularly conscious of the fact that the yacht is built for performance. Inside, nothing is sacrificed to speed – all the living spaces are very bright and open. The massive saloon area, with its long banquette seats set into recesses and randomly scattered with big linen-covered cushions, is refreshing in its simplicity. There is a clear view out to sea, particularly to the sides, where the bulwarks can be hinged outwards to give unrestricted views.

The long central passageway beneath the dining area and bridge is bathed in natural light that filters in through the row of translucent panels overhead. This passageway gives access to the three cabins for six crew members to port, a very functional galley with crew mess to starboard, and the three double guest cabins, including the owner's, forward.

As the yacht has no portholes, traditional prisms are set into the deck to let light into the interior. The result is quite impressive, especially in the two similarly styled guest cabins. Like the owner's they are fitted out in a chic, minimalist style in which the vertical teak panelling contrasts with the white deckheads and other panels covered in linen or metallic laminate. Each has a wide enclosed shower room off the corridor. The owner's cabin is again minimalist in design but it is also spacious, extending across the full beam of the yacht, with its centrally positioned oversized double bed flanked by settees. The bathroom, just forward, has two heads and washbasins separated by a shared shower and bath.

This incredibly innovative approach to motor yachting has certainly created a stir. One thing is certain, however, the owner of this vessel will have something that is totally unique.

Above: *The full-beam master cabin has an oversized bed centrally placed.*
Below left: *The master bathroom features two heads and washbasins with a shower and bath in between.*
Below far left: *A semi-rigid tender is stowed in a garage in the bow of the yacht.*
Left: *A guest shower room.*



SPECIFICATIONS

LOA	36.00m (118ft 1in)
LWL	30.40m (99ft 9in)
Beam	8m (26ft 3in)
Draught	1.25m (4ft 1in)
Displacement (half load)	95 tonnes
Propulsion system	3 x 4,175kW (5,600hp) DDC TF 50 gas turbines; 2 x Cummins 276kW (370hp) diesels
Water jets	2 x KaMeWa type 63 1 x KaMeWa type 52
Range at 60 knots	380nm
Range at 45 knots	800nm
Range at 9 knots (under auxiliary power)	2,000nm
Fuel capacity	22,000 litres
Water capacity	1,200 litres
Gearboxes	3 x Maag Gear
Bowthruster	Max Power, 45 OR
Generators	2 x 33kW Kohler
Air-conditioning	Frigomar
Navigation electronics	Furuno GP80 GPS, 2 x Raymarine Pathfinder Radome 48 radars, Sailor Inmarsat C
Autopilot & gyrocompass	C. Plath
Fitting out	Worldwide Woodcraft, Fano, Italy
Construction	Advanced composite using GRP, carbon, balsa & Nomex sandwich
Interior design	Wally and Lazzarini & Pickering
Exterior styling	Wally and Lazzarini & Pickering
Building yard	Intermarine-Rodriquez
Naval architecture	Wally-Intermarine
Classification	RINA & Det Norske Veritas
Builder/Year	Wally/2003