

W I D E R

Electrifying Yachting



W I D E R C A T 9 2 - S

TECHNICAL SPECIFICATION – S-STD MED

Mar 2025	S-STD Med	MDL	25/03/2025	LC/MDL/ML/RZ/MZ/MMA	MM
Revision	Description	Revised by	Date	Checked	Approved

PURPOSE OF THE SPECIFICATION

The intent of the present Technical Specification and attached General Arrangement Plan is to describe the technical details relative to the construction of the Wider Cat 92-S Standard Med.

GENERAL DESCRIPTION

The Catamaran shall be of displacement type of GRP (glass reinforced Plastic) construction for the hull and GRP and CRP (Carbon Reinforced Plastic) for the superstructure, powered by two shaft drives with fixed pitch propellers and fitted with the Wider Mild Hybrid System.

The Builder:	Wider srl
Exterior Designer:	Luca Dini Design & Architecture
Interior Designer:	Luca Dini Design & Architecture, Centro Stile Wider
Naval Architecture:	Wider Engineering Dept., MDS Engineering

ARRANGEMENT

The Catamaran shall have three decks, called and organized as follow

- Lower Deck
- Main Deck
- Upper Deck

The vessel's accommodation shall be as shown in the General Arrangements drawing and described as follow

Lower Deck:

Portside hull:

- 1 VIP Cabin with direct access to the side platform
- 1 VIP bathroom
- 2 Galley
- 1 Crew mess

Starboard hull:

- 1 VIP Cabin with direct access to the side platform
- 1 VIP bathroom
- 1 Guests cabin
- 1 Guests bathroom

Crew accommodation

- One crew / Captain cabin with two beds (Portside)
- One crew cabin with two beds (Starboard side)

Beach & Garage area

- Stern swimming platform
- Side swimming platforms all combinable in a huge beach club
- Garage for one Tender (5.05 m. Max) and one Jet Ski (Spark Trixx type)

Main Deck:

- Cockpit
- Main saloon
- Dining area
- Owner's Cabin
- Owner's Bathroom at starboard side
- Owner's Walk in closet
- Outside Owner's chilling/sitting area
- Forward terrace

Sundeck:

- Aft sitting area
- External Bar
- Sky lounge
- Wheelhouse
- Forward terrace

MAIN CHARACTERISTICS

Except for the main dimensions, and wherever specified, the dimensions and volumes in this article are preliminary and remain to be verified and/or corrected by the Builder.

Any machinery performance data reported in this article comes from the documentation provided by the manufacturers.

The speed and the displacement may vary depending on the layout and equipment modification selected by the Owner. The Builder shall inform the Owner of any differences, consequently to further Owner's request during the construction of the vessel.

Main dimensions

- LOA	28,04 m - (92' 0")
- LH	27,80 m - (91' 2")
- LWL at Full Load	25,49 m - (83' 8")
- BOA	11,98 m - (39' 4")
- Design Draft at Full Load	1,90 m - (6' 3")
- Gross Tonnage	242 GT
- Displacement full load	140 tons (309435 lb.)

Tanks capacity

- Fuel oil tanks	8.000 litres – 2.113 US gal
- Fresh water tanks	2.000 litres – 528 US gal
- Black water tank	1.000 litres – 264 US gal
- Grey water tank	2.000 litres – 528 US gal

Propulsion system and power supply system

- Propulsion	MAN V8 1300 (or equivalent) 956 kW
- Genset	Kohler (or equivalent) 45 kW
- Energy Storage System	NIDEC (or equivalent) LiFePo NET 360 kW/h

Speed

The following conditions at the trial displacement of 132 tons have been considered:

- Top speed 14.0 knots.
- Cruising speed of 12.0 knots;
- Ecological speed of 8.0 knots;
- Long Range speed of 6.0 knots;

Range

The estimated range of the Catamaran will be as follows:

- 600 nautical miles at 12.0 knots
- 1.000 nautical miles at 8 knots
- 1.700 nautical miles at 6 knots
- Zero Emission Mode (batteries only):
 - 15 hours – at anchor.

The range will be calculated depending on final and hotel load consumption around 25 kW.

CLASSIFICATION AND CERTIFICATION

The yacht, including its machinery, equipment and outfitting, will be constructed in accordance with the Directive 2013/53/UE related to pleasure craft and jet ski, and in compliance with RINA ⚙ HULL • MACH.

The vessel shall meet all relevant statutory and classification requirements for a yacht of this type.

CONSTRUCTION MATERIALS

Hull

The hull form shall be of bilge round type with a skeg having adequate strength.

The hull shall be built in sea water resistant GRP material with Vinylester resins and internal reinforcements in laminated polyurethane core.

Superstructure

The superstructure above the main deck, external and internal deck casings and decks included, shall be built in sea water resistant GRP material with Vinylester resins and internal reinforcements in laminated polyurethane core include external and internal deck casings and decks. The Carbon Fibre will be used in order to reduce the weight of the ship.

General Painting

All preparation of the surfaces and application of coating material shall be made in accordance with product manufacturer's recommendation instructions.

The hull top side and superstructure shall be in GELCOAT white as per standard supply.

Teak Deck

Decks will be covered with eco-teak planks of 8mm finished thickness, which may be entirely built off the boat with full depth caulking seams and will be laid on the faired FRP deck using a flexible adhesive (Sika or equivalent).

Caulking will be black or grey colour and the installation of the caulking and the decks will adhere carefully to the caulking and adhesive manufacturer instructions. The planks will be 50mm wide with 5mm wide seams.

It will be straight grained for the length of each plank. Plank length will be at least 3 meters and short or narrow planks will be avoided.

Covering board will butt against the bulwark inner face without a water way and will be sealed to this with a wide and slightly angled caulked seam.

PROPULSION SYSTEM AND POWER SUPPLY

Main Engines

Two propulsion motors diesel driven MAN V8 1300 with max power of 956 kW connected to a traditional shaft line shall be supplied and fitted (or equivalent).

Both the components are coupled with a reduction gearbox made by ZF model 550-1 V with a reduction ratio of 2,96:1.

Auxiliary engines

N°2 variable speed diesel generators 230V made by Kohler 45EFOZCJ with a max power of 45 kW each will be supplied (or equivalent).

Each generator will be set up for remote as well as local management and control: selection will be done manually for each group and will be duly signalled by the ship automation system. The two machines will be supplied with an insulated sound box.

Batteries

N°30 batteries made by NIDEC model EK with a chemistry LiFePO4 that include a high control system for the monitoring of the thermal runaway phenomena will be installed of board for a total NET capacity of 360 kW/h.

The batteries will be liquid cooled with an Aerosol firefighting system directly integrated into each module, installed in a fire protected local with an Aerosol firefighting system.

Solar Panels Roof

The Catamaran could be equipped with approx. 80 sqm of Solar Panels placed on the roof top and made by SOLBIAN or equivalent with high efficiency SUNPOWER solar cells for a peak power production of approximately 14 kW_{pp}/h, depending from sun exposure.

The extra solar energy production not instantly used will be automatically stored into the batteries in order to be used when necessary.

MAIN MACHINERY AND DECK EQUIPMENT

Steering Gear

The steering will be preferably electric with independent drives and no tie bar and as per rules. The unit should be dual powered 230VAC and 24VDC.

Electric actuators made by XENTA will be connected from firm foundations to the tiller arms of the rudders these latter fitted by means of keyways to AISI 316L stocks.

The rudders will be fabricated from stainless steel or equivalent with a shape and profile according to the Naval Architecture design. The rudders will be fitted slightly offset so propellers and shafts can be withdrawn without dismantling the rudders. The rudder stocks will be housed in a heavy walled housing connected to the hull structure and fitted with self-lubricating bearings and collars, a drip less seal system will be fitted, probably a triple 'O' ring type but to be studied with the manufacturer.

Emergency steering will be manual (depending from the type of the powering), hydraulically actuated and arranged as close as convenient to the steering system aft, there will be a rudder angle indicator.

Bow Thruster

A bow thruster unit shall be installed in a 300 mm in diameter transverse tunnel in a suitable location in the stern forefoot on each hull. The unit shall be manufactured by made by QUICK MARINE, model BTAC 300kgf, and shall be driven by an electric motor of 22.0 kW approx., turning a fixed pitch screw counter-rotating propellers.

Anchor Windlasses

One electrically driven vertical anchor windlasses made by QUICK MARINE model DK6 4000 AC, 4 kW of power approx., complete with galvanised steel chain lifter and polished stainless steel chain stoppers/devil claws for a 16 mm studless chain shall be provided.

N°2 galvanized anchors model SHHP SUPERHAWK of 105 kg will be provided.

Warping Capstans

Four electrically driven capstans made by QUICK MARINE or equivalent, under deck motors and gear case and with a polished stainless steel warping head shall be fitted in the aft and fore main deck, two on each side, on properly re-enforced mooring area.

N°8 bollards (n°4 on the bow and n°4 on the aft) in total will be supplied.

N°2 retractable bollards on the side aft platforms should be supplied (available only for tender and toys).

Stern Gangway

One hydraulic stern gangway made by BESENZONI or equivalent mod. SP 607 with 7 steps + 1 shall be provided of suitable length. The ladder shall be of aluminium construction with teak treads, lighting and grating, portable stanchions and rails.

Beach Club and Garage

The Catamaran will be equipped with a huge beach club where take place two electro-hydraulically actuated foldable balconies and a garage.

The two VIP's cabins have direct access to the side balconies through a watertight door.

The two balconies shall be built in mixed carbon fibre (in order to reduce the total weight) and equipped with teak covering, portable stainless-steel stanchions and rope-rails.

Two structural pockets into the hull, placed behind the side balconies and accessible only when those are opened, will be positioned in order to store some kind of toys as Seabob, SUP, etc. The aft part of the cross-deck of the yacht will be equipped with a huge garage where it's possible to store the tender and other components.

The hauling and recovery is achievable, when the shell door is open and properly dog clutched, by the presence of an electro-hydraulic tender lift system made by Besenzoni (or equivalent) with a lifting load of approx. 1.250 kg.

In case of malfunctioning of the opening system, the garage is achievable also by a secondary access located below the main deck aft cockpit sofa under a seat.

MAIN SYSTEM AND EQUIPMENT

Fuel Oil System

The yacht will have one (1) fuel filling station and shall be suitable for gravity filling.

Each fuel tank shall be equipped with an electronic level sensor. Sensors shall be settable output type to permit high level and low-level alarm signalling. The sensors shall be interfaced with the ship monitoring system, so levels/volumes will be displayed in a dedicated page.

Filtration for generators shall be through a Racor 900 MA fuel filters/water separators with alarm. Special by-passes with ball valves will be installed for the Racor filters in order to clean them without stopping the engines.

One (1) fuel purifier made by AXI International model Smart FPS MX-F (or equivalent) will be supplied, installed and connected to a daily fuel tank of 1.000 litres of capacity in order to have always clean diesel for the generators.

One (1) fuel transfer pump 400V made by Gianneschi (or equivalent) will be supplied.

The aft garage will be equipped with a hose for tender fuelling.

Fresh Water System

The Catamaran will be equipped with two fresh water tanks (one each hull) for a total capacity of approx. 2.000 litres.

The fresh water system can be filled through the shore water connection near the transom. There will be a pressure reducer, with double gauges and a freshwater filter in the shore line.

The fresh water supply system shall include one (1) fresh water pressure pumps Gianneschi ECOINOX 2CE 2x230V AC 50 Hz (or equivalent). The system's pressure shall be provided by pressure system (one pump with the second pump on standby).

Freshwater pumps shall be located on a suitable foundation.

Fresh water tanks shall be fitted with remote level gauges connected to the ship monitoring system. Each tank shall also be fitted with sounding pipes and high and low level alarms.

The system shall include:

- ❖ UV sterilizer SELMAR Selpur UV B/Plus
- ❖ Active Carbon filter SELMAR Acqua Dream

The hot water supply system shall include two (2) 230/400V AC 50 Hz, 80 litres made by QUICK (or equivalent) water boiler with pressure relief valves installed with necessary suitable material pipe and fittings, valves and insulation. The system shall include one (1) Gianneschi Z25 or equivalent 230/400 VAC 50 Hz circulating pumps. Hot water system plumbing shall be of suitable material and hot water lines shall be properly insulated.

The hot water plumbing will be laid out as a ring line with a circulation pump, providing near instant hot water at each tap. To preclude any bacterial growth there shall be no dead ends in the plumbing system and branch lines shall be kept as short as possible.

The Catamaran shall be equipped with one (1) SELMAR Pacific 150/CS 400V reverse osmosis fresh water maker and treatment system of approximately 4.000 litres per day.

For deck wash, the Catamaran will get fresh water directly from the fresh water tank or from the shore connection with sufficient connections to reach all decks, garage, engine room and beach club with a 20m hose.

For deck wash 2×20 meters 3/4" garden hose will be supplied with Gardena quick coupling and two (2) Gardena water guns. All freshwater connections to be foreseen of Gardena quick couplings, also globe valves with drain to be installed.

Black and Grey Water System

The black and grey water system of the Catamaran will be equipped with four tanks for the storage of the waisted water, divided as below:

- One (1) Black water tank of 500 l each hull for a total capacity of 1.000 l;
- One (1) Grey water tank of 1.000 l each hull for a total capacity of 2.000 l.

The Catamaran shall be equipped with a sewage water treatment made by SELMAR mod. BLUE SEA 2500 and in fully compliance with IMO Res. MEPC 227(64) that give the possibility to treat 2.500 l/day of black/grey water.

The black/grey water system will be completed with a PLANUS system for toilets and grey water collect.

Air Conditioning

A VECO (or equivalent) air conditioning system shall be realized with centralized units, suitable to provide the best efficiency for a vessel of this type.

In general, all living quarters and interior spaces shall be provided with fan-coil units that receive their fresh air through fresh air units. All sanitary spaces and technical spaces containing components with high electrical load shall be provided with forced exhaust ventilation.

The air conditioning system shall be designed and installed with the purpose of providing the maximum comfort of the guests and crew through the control of:

- Temperature;
- Humidity (in summer);
- Air purity;
- Velocity.

The plant shall be designed to meet the following ambient conditions:

<i>Summer</i>	<i>Outside</i>	<i>Inside</i>
Temperature dry bulb	37°C max	22° ± 1°C
Relative humidity	75% ± 5% max	55% ± 5%
Sea water temperature	32°C max	

<i>Winter</i>	<i>Outside</i>	<i>Inside</i>
Temperature dry bulb	0°C min	21° ± 1°C
Relative humidity	75% ± 5% max	
Sea water temperature	10°C min	

Compressed air system

A compressed air system, rubber mounted, shall be supplied and fitted in machinery space. This system shall be fitted with essential fittings, water traps, air filter and controls.

Pressure-reduction shall be fitted to assure adequate capacity to navigation air horn, general users and quick connections located in the engine room (1 each ER), aft garage (1), aft cockpit main deck (1). Steel pressure tank shall be integrated with the air compressors.

Principal characteristics:

Pressure	8 Bar
Compressor	200 l/min approx.
Tank	50 l

Fire Fighting System

The engine rooms will be protected by an aerosol system with a dedicated control unit, installed on the main deck, for which only manual activation will be provided.

One (1) electric pump made by Gianneschi (or equivalent), identical and hydraulically interchangeable with the one dedicated to the bilge system, is foreseen for the main firefighting system/chain washing service. The complete catamaran will be equipped with fire detection system, by Autronica, with different types of sensors, able to control the boat.

Bilge System

One (1) electric pump made by Gianneschi (or equivalent), identical and hydraulically interchangeable with the one dedicated to the firefighting system, is foreseen for the main bilge service. The pumps, with a power of 1.1 kW each, will be powered at 230Vac.

A completion of the bilge system, the catamaran will also be provided of eight (8) automatic submersible bilge pumps, made by Rule or equivalent, each powered at 24Vdc.

Engine Room Ventilation

The engine room will be equipped with two (2) axial reversible fans made by Gianneschi (or equivalent), dedicated to the ventilation of the local completed with an extraction system carried out by two (2) centrifugal extractors made by Gianneschi (or equivalent), non-reversible. The air inlet will be equipped with separators. All inlets/outlets will be protected by electro/automatic fire dumpers.

ELECTRICAL AND ELECTRONICS SYSTEMS

Shore Power

Shore power will be rated up to 125A and will come aboard through a cable and close to where it enters the vessel there will be a connection box with a set of principal breakers. There will then be a shore power isolation transformer and after that the main supply cables will go to the main switch board.

The shore power will be fitted with a polarity indicator and reversal switch so phases can be properly aligned to those on board.

A highly flexible shore power cable rated at 125A and of 30 meters length will be provided with a service plug, there will be a screw cap cover on the inlet.

In the starboard side aft of the Catamaran will be a pocket which that will contain the shore power connection, this will be a highly flexible cable of a type suitable to carry the maximum shore power load of the vessel.

A pipe and suitable international coupling for attaching a waste water pump out will be located in the engine room or in a dedicated pocket into the hull.

Underwater Lights

Six (6) each hull QUICK or equivalent RGB+W underwater light will be provided and controlled by the monitoring system.

Machinery Controls Alarms and Instruments

A ship Alarm and Monitoring system shall be installed, consisting of:

- One main station on the bridge;

The alarm system shall have its own network that shall be separate from the computer network.

Communication and Monitoring System

The organic integration of the system that form the means of interface and control between the Guests and Crew represent the most important design principle of Entertainment, Communication, Security and Navigation system.

This unified approach requires that the architecture of the main electronic system be based on network framework and cabling which are, as far as possible, shared. Integration is intended as:

- Effort to unify user interfaces;
- TCP/IP units;
- Use of modular elements that can be assembled and connected in different ways to customize the systems tailoring it to Owner's needs.

The fields to which this philosophy is applied are:

- Digital entertainment with standard level displays, amplifiers and speakers;
- Full internet connectivity;
- Local coverage for telephony and fax with high speed 4G standard;

The following represent the general design rules applied for the selection of the main devices:

- Use of last-generation devices to have the most current model at time of delivery;
- Use of worldwide distributed well-known brands in the selection of devices in order to guarantee worldwide assistance.

Navigation System (GARMIN or equivalent):

- Radar 12kW;
- Wind Station;
- GPS;
- VHF;
- AIS;
- Autopilot;
- Echosounder and Log;
- n°4 GPSMAP 8416 monitors (including Plotter);
- n°1 GPSMAP 923 in the Crew Mess;
- n°8 Cameras (n°2 in ER and n°6 Externals);

Entertainment

Lower Deck

VIP/GUEST CABINS:

- N°3 TV LED 43" 4K;

CREW MESS:

- TV LED 32" FULL HD;

CAPTAIN CABIN:

- TV LED 24" HD;

Main Deck

OWNER CABIN:

- N°1 TV LED 55" 8K + TV-Lift integrated into the ceiling;
- B&O Core Multiroom (with B&O App for smartphone or tablet);
- N°1 Sinto-Amplifier (shared with the other areas);
- N°2 Speakers;
- N°1 Sub-Woofer 500W

MAIN DECK LOUNGE:

- N°1 TV LED 55" 8K;
- B&O Core Multiroom (with B&O App for smartphone or tablet);
- N°1 Sinto-Amplifier (shared with the other areas);
- N°1 B&O Remote Controller
- N°2 Speakers;
- N°1 Sub-Woofer 500W

EXTERNAL ZONE MAIN AFTDECK:

- N°2 Marine Speakers 130 W;
- B&O Core Multiroom (with B&O App for smartphone or tablet);

EXTERNAL ZONE MAIN FOREDECK:

- N°2 Marine Speakers;
- B&O Core Multiroom (with B&O App for smartphone or tablet);

Upper Deck

SKY LOUNGE

- N°1 TV LED 65" 8K;
- B&O Core Multiroom (with B&O App for smartphone or tablet);
- N°1 Sinto-Amplifier (shared with the other areas);
- N°1 B&O Remote Controller
- N°2 Speakers;
- N°1 Sub-Woofer 500W

EXTERNAL ZONE UPPER AFT DECK:

- N°2 Marine Speakers 130 W;
- N°1 Sub-Woofer 250W;
- B&O Core Multiroom (with B&O App for smartphone or tablet);

EXTERNAL ZONE UPPER FORE DECK:

- N°2 Marine Speakers;
- B&O Core Multiroom (with B&O App for smartphone or tablet);

INTERIOR

The interior of the yacht shall be built of the Builder's highest quality for this type and size of yacht and in accordance with Luca Dini design (Luxury Areas) and with the Centro Stile WIDER design (Crew Areas) and shall be based on the premise that the design shall be of a common and uniform style in detail and construction throughout all areas.

The exception being the crew area, which shall be somewhat simpler, none the less, no lowering standards of construction, plumbing, lighting or finish shall be accepted.

Any items necessary for the proper furnishing, outfitting and equipping of all spaces shall be selected in a manner to be suitable for the intended use.

In the layout of the spaces and the various services, every possible advantage shall be taken of the available space and the various fittings are disposed and fitted in the most efficient manner.

Fittings and items of equipment, which require ready access for operation or maintenance, shall be placed in positions so that access is secured without undue disturbance of other fittings in the immediate vicinity.

Where it is necessary for maintenance of plant and concealed systems, secret detachable panels shall be installed.

Household appliances**Lower Deck***Galley*

- N°1 Fridge
- N°1 Freezer
- N°1 Freezer undertop
- N°1 Dishwasher
- N°1 Oven 90 cm
- N°1 Microwave
- N°1 Induction Hob 6 zone
- N°1 Hood

Main Deck*Bar*

- N°1 Undercounter fridge
- N°1 Ice Maker
- N°1 Wine cellar

Laundry

- N°1 Washing machine
- N°1 Dryer machine

Upper Deck*Aft External*

- N°1 Undercounter Fridge
- N°1 Ice Maker
- N°1 Grill

Loose Furniture

Lower Deck

VIP Cabins

- N.2 Pouf

Guest Cabin

- N.1 Pouf

Main Deck

Owner Cabin

- N.1 Arm Chair

Main Saloon

- N.1 Round table
- N.8 Chairs
- N.1 Coffee table
- N.1 Fabrics Sofa 3 Seats
- N.1 Fabrics Sofa 2 Seats

Aft Cockpit

- N.4 Chairs
- N.2 Sun Beds

Upper Deck

Saloon

- N.2 Fabrics Sofa 2 Seats
- N.1 Coffee table

Aft Cockpit

- N.2 L-Shape Sofa
- N.2 Coffee table

OWNER'S SUPPLIES LIST:

The following materials is excluded from scope of supply of this technical spec and will be supplied directly by the Owner:

- Owner's Interior / Exterior decorator and designer fees if any
- Decorative Artworks and paintings
- Wall and floor lamps and any decorative lamp
- Loose carpet and rugs
- Bed linens, blankets and pillows, decorative pillows
- Towel and robes
- Special pictures and knick-knacks
- Stationary
- Guest booklets
- Guest clothing
- Table linens
- Bone china crockery Cutlery and serving pieces
- Pots and pans, tableware, silverware, glassware and cooking utensils, bar-ware
- Table accessories
- Sundries (lamps, ashtrays, vases, etc.)
- Nautical publication
- Special gold fittings
- Consumable stores at delivery of the yacht
- Uniforms
- Special Decoration
- Gym and Fitness equipment
- Interior loose furniture other than the ones specified in the GA
- Exterior loose furniture other than the ones specified in the GA
- Exterior loose and fix furniture covers
- Wave runners, Jet- Ski and water sports equipment, water toys, swimming equipment their storage systems and their chocks and lashing points
- Diving equipment, diving bottles with Scuba accessories
- Tools and spares, other than the ones required by the Rules

- Fuel oil, except quantity used for trials
- Oil pollution cleanup kit
- Charts, pilots, almanacs, chart table equipment etc.
- Log books, Manuals Safe Manning Documents other than the ones required by the Rules.
- Medical stores, nautical books and publications other than the ones required by the Rules.
- Consumable stores at delivery of the yacht
- Fuel oil and lube oil, except quantity used for trials before delivery
- Whatsoever not mentioned in this specification.