



TECHNICAL SPECIFICATIONS Y9



| BOW SPRIT EXTENSION<br>LWL<br>BEAM | 30.00 m<br>26.04 m<br>6.80 m    | Michael Schmidt Yachtbau GmbH                   |
|------------------------------------|---------------------------------|---|
|                                    |                                 | NAVAL ARCHITECT Tripp Design Naval Architecture |
| DRAFT                              |                                 |   |
| FIXED KEEL                         | 4.7 m                           | INTERIOR DESIGN / STYLING                       |
| TELESCOPIC KEEL (optional)         | 3.20 m - 4.80 m                 | Norm Architects                                 |
| FIXED KEEL (shallow draft)         | 4.1m                            |   |
| DISPLACEMENT (light ship)          | approx. 55 t                    |   |
|                                    |                                 | STRUCTURAL ENGINEERING                          |
| BALLAST (fixed)                    | approx.18.92 t                  | AMS   |
| DALLACT (talana ania)              | bulb 16.00 t                    |   |
| BALLAST (telescopic)               | approx. 19.18 t<br>bulb 15.00 t |   |
| BALLAST (fixed, shallow draft)     | approx. 19.92 t                 |   |
| briezro (nixed, shahow draft)      | bulb 17.40 t                    |   |
|                                    | 5415 17.10 (                    |   |
| PROPULSION                         | 2x VOLVO D3-170 engines         |   |
|                                    |                                 |   |
|                                    |                                 |   |
| HOTEL BATTERIES                    | 24 V DC, 1,400Ah                |   |
| FUEL TANK                          | approx. 3,000 l                 | CLASSIFICATION                                  |
| FRESHWATER TANK                    | approx. 2,000 l                 | CLASSIFICATION                                  |
| GREYWATER TANK                     | approx. 250 l                   | Hull construction certificate by                |
| BLACKWATER TANK                    | approx. 250 l                   | RINA. See flag state requirements               |
| DEMORTALIER TAINE                  | app.on. 2001                    | See may state requirements                      |

27.40 m

YARD



LOA



## 0000 GENERAL

The purpose of the Specification is to define the characteristics of the Yacht in its entirety. The preliminary General Arrangement drawings must be analyzed in conjunction with the Specification to have a complete overview of the Yacht. YYachts undertakes to ensure that the Yacht is built in accordance with the Specification.

The weight of the Yacht fitted with all the equipment listed in the specifications is intended to be the Light Ship Weight without e.g. fuel, fresh water, grey / black water, sails, provisions, passengers and crew. The Displacement is subject to change and will increase by the installation on board of additional equipment, options requested by the client and listed as optional equipment or additional components ordered by the Buyer and not included in the Specification. The weight can increase by the installation of additional options, equipment, different General Arrangement plan, Classification or Flag Administration Compliance requirements and choice of keel options.

Materials and equipment described in the Specification may change in accordance with Classification Society or Flag State requirements. YYachts reserves the right to substitute equipment described in the Specification with equipment having equal characteristics.

# 0001 FLAG STATE REQUIREMENTS

The Buyer has to inform MSY about the flag under which the Yacht shall be registered and for which purpose. The cost for the Certificate will be calculated and will be written in the contract, changes will add costs and weight of the Yacht. The service for registration, certificates and surveys are not included.

#### 0002 OWNER'S SUPPLIED ITEMS

The equipment and material listed as Owner's Supply Items shall be obtained by the Owner and shall be approved by MSY and if agreed being installed by the MSY with all necessary foundations, connections, and related equipment. Only those items specifically listed will be supplied by the Owner. MSY will be responsible for the safe keeping, in an area accessible to the Owner, of all Owner's Supply items sent to MSY.

# 0003 SPARE PARTS

Spare parts for major items of equipment, as listed below will be quoted separately by MSY:

- Engine (major spare parts kit)
- Generator
- Refrigeration





- Water maker
- Hydraulic Spares Kit
- Spare Filters (one replacement set)
- Spare belts (one set of each type)
- Spare light bulbs (two of each type)

The appropriate storage of these spare parts is MSY's responsibility.

# 0004 MANUALS AND DOCUMENTS

A handbook for the Yacht will be provided by MSY. Manuals for use and maintenance for all the major equipment installed on the Yacht shall be provided.

User manuals and warranty certificates shall be provided for all the third parties equipment, supplied by the equipment suppliers. In particular, specifications will be provided for fuses, filters and other accessories which frequently need replacement.





# 0100 COMPOSITE

# 0110 HULL, DECK AND MAIN STRUCTURES

### 0111 HULL

The hull will be laminate in a female mold to achieve the shape defined by the naval architect and reduce at minimum the fairing and the related additional weight.

To achieve a maximum strength / light-weight-ratio, the hull is constructed in a sandwich-construction with CORECELL™ M-foam. Carbon fibre will be entirely used. Fibres will be used to optimize the performance of the lamination as necessary. The fibres will be impregnated with a high-performance epoxy laminating system and post-cured at low (80-85°C) temperature to exploit to the maximum the fibre properties. The foam in hull sandwich structure will have the best shear and impact strength characteristics.

### 0112 BULKHEADS AND INTERNAL STRUCTURES

All bulkheads and internal structures are made in carbon / epoxy / sandwich, vacuum consolidated. For more strength and better load distribution there are additional carbon fibre reinforcements around doors, cut outs and cable penetrations. Watertight bulkheads will be fitted in the Sail Locker and Lazarette. "Crash box" in the lower bow section for additional safety.

#### 0113 DECK

The Deck is made in a sandwich-construction with CORECELL™ M-foam. The deck lamination will be produced on a female mold suitable for vacuum consolidation and post curing of the epoxy resin system that is adopted. Carbon fibers uni-directional and woven will be intensively used to get the best structural performances. Deep set foundations and reinforcement for all deck equipment (tracks, hatches, winches, pedestals, cleats, blocks, etc.) will be of high-density foam inserts or single skin zones with additional local structure.

## 0114 CHAIN PLATES

Shrouds on V1 / D1 carbon chainplates with stainless-steel bushings structurally integrated into the hull laminate for maximum bonding and excellent load distribution.

#### 0115 BOW SPRIT

Integrated carbon bow sprit, fixed, with stainless-steel anchor roller and fixing point for the code 0 or gennaker, well separated from the forestay.





# 0120 COMPARTMENTS

### 0121 BOW COMPARTMENT

Custom flush deck hatch. Anchor chain storage. Solid laminated anchor windlass foundation. Watertight bulkhead. "Crash box" in the lower bow section for additional safety.

#### 0122 SAIL LOCKER

Flush carbon deck hatch, stainless-steel ladder for easy access. Floorboards, LED overhead light, electric bilge pump and a 230V socket. Topsides are coated in grey.

A sail storage will be located on the deck.

## 0123 LAZARETTE

Large powered custom hatch incl. 2 carbon inspection hatches in aft deck. The hatch opening is approx. 4.3 m by 1.95 m. The carbon bathing platform is integrated in the stern while the transom stays fully closed, even with bathing platform lowered. This significantly increases the boat's safety and keeps the lazarette dry. The transom swimming platform opens actuated. There are steps from deck level to swimming platform.

## 0124 ENGINE ROOM

The engine compartment for engine and generator is positioned under the salon floor. Special attention was paid for optimum thermal and sound insulation. To achieve extra strength and rigidity, the engine tray is fully laminated to the hull. An automatic fire extinguishing system is installed in the engine compartment. The engine compartment is painted grey for practical and maintenance reasons. All components are concentrated in the compartment, access to the engine room from the salon and a door below the companion way.





# 0200 INTERIOR

# 0210 FURNITURE

The standard wood is light brushed oak. All joinery is built from extra lightweight panels. All surfaces are either painted or covered with veneer. The ceilings are built of plywood panels covered with fabrics or painted.

The standard floor is natural oak. The floor support grid consists of sound isolated material (plywood / rubber / cork) which is attached to the structure by laminate and / or epoxy glued.

Salon upholstery according to Y Yachts standard. Mattresses on all beds are high quality "Tempur / Visco" type. All interior accessories (fabric, lamps, taps, switches, tables, handrails...) according to Y Yachts standard.

Floor plates are made of a sandwich construction. In view of maintenance, the floor plates have to be easily removable, and they will be mounted on antivibration insulating material.

#### 0220 CABINS

The Cabins are described for the standard layout. Optional layouts will reflect the general outfit described in this chapter.

#### 0221 OWNER'S CABIN

Owner's cabin features a queen size double island bed and full height hanging wardrobe, drawers and lockers, 230 V AC sockets + USB charging sockets, indirect lighting, direct lighting, reading lights and night courtesy lights. En-suite bathroom is at the forward end of the cabin with PLANUS KONOS electrical toilet, separate shower stall, mirror, washbasin mounted on satin white CORIAN countertop.

# 0222 OWNER'S LOUNGE / OFFICE

The owner's lounge / office has a desk with chair, a comfortable sofa and bookshelves, 230 V AC sockets + USB charging sockets, indirect lighting, direct lighting, reading lights and night courtesy lights. Possibility to have an open space towards the salon.

# 0223 FWD GUEST CABIN

Guest cabin on PS features twin beds with hanging wardrobe, drawers and lockers incl. 230 V AC sockets + USB charging sockets, indirect lighting, direct lighting, reading lights and night courtesy lights. En-suite bathroom towards the aft of the cabin with PLANUS NEW ARCTIC electrical toilet, separate shower stall, mirror, washbasin mounted on satin white CORIAN or equivalent countertop.





### 0224 AFT GUEST CABIN

Guest cabin on PS aft features a double bed with hanging wardrobe, drawers and lockers incl. 230 V AC sockets + USB charging sockets, indirect lighting, direct lighting, reading lights and night courtesy lights. En-suite bathroom is at the forward end of the cabin with electrical toilet, separate shower, mirror, washbasin mounted on satin white CORIAN countertop.

### 0225 SALON

Salon features a minimalistic open space arrangement yet with emphasis on different working areas. Straight lounge sofa on the PS with coffee table. Dining table incl. 3 x upholstered chairs and large linear dining bench on STB. Lots of storage space under the sofa and dining bench. 230 V AC sockets, indirect lighting, direct lighting, reading lights and night courtesy lights.

#### 0226 GALLEY

Galley is located on STB aft. PAPERSTONE countertop in dark grey with integrated single sink, faucet and niche with gimballed MIELE induction hub and MIELE combi oven. MIELE cooker hood above induction hub. Stainless-steel refrigerator with 2 drawers (1 drawers' fridge + 2 drawers deep freeze). Lockers, drawers, waste bin are provided. Indirect lighting, direct lighting and night courtesy light, 230 V AC sockets. Perforated plates for galley drawers with positionable poles in a pre-defined grid to organize galley storage (5 pcs). Possibility of open space towards the salon.

# 0227 NAVIGATION

Chart table is located in the Crew quarter. Chart table offers a working area with instruments and gauges, ergonomically positioned instruments and gauges and space for documents. Chart table chair as per mood board. Red and white reading light, direct lighting and night courtesy light, 2 x 230 V AC sockets, 2x USB sockets.

## 0228 CREW QUARTERS

Located separately on PS and STB aft and features STB 2 singe bunks, on PS a double berth, lockers and drawers, en-suite bathroom with sink, mirror, electric toilet and one commonly shared shower. Indirect lighting, direct lighting, reading lights and courtesy light and 230 V AC sockets. Comfortable breakfast/dining bar, access through a dedicated companionway from the cockpit and through the galley.





# 0300 SYSTEMS

# 0310 AIR CONDITIONING

One central chiller unit with 62,000 BTU and three fan coil units – two in Salon and one in the Owner's Cabin.

#### 0311 BLACK WATER

One black water holding tank with an approx. capacity of 250 I will be installed. To discharge the holding tank at the shore station a connection on top of the tank will be provided.5x electric PLANUS toilet 24 V DC flushed with fresh water. Discharge possible via own sea cock or deck suction line.

#### 0312 PROPULSION

2 x Volvo D3 170 (125 kW) engines. The engines have a 12V DC / 100A alternator to charge its starter batteries. The engines have an additional 24 V DC / 150 A alternator each to charge the service batteries. Transmission via shaft to a 4-blade folding propeller.

Electric twin-lever engine controls for throttle and gear, engine panels, all installed at STB steering console. The twin engine combination allows easy docking without stern thruster and offers a safe redundant system.

#### 0313 FRESH WATER

Water capacity approx. 2,000 l polyethylene, filler on deck. Dual pressure water pump. Semi-rigid pipes with swaged terminals. 2 x Water heater with 75 l capacity each, heated by engine and / or 230 V AC immersion heater. Faucets hot / cold in galley and each head / shower. 1x hot / cold shower on bathing platform. Deck wash system incl. spray hose using freshwater, located in anchor locker.

### 0314 FUEL

Fuel tanks with a total capacity of approx. 3,000 l, filler on deck. Tank made in high grade marine polyethylene. Day tank with 150 l, 2 x Fuel filters with water separator. Independent fuel supply lines for each engine and generator.

## 0315 HYDRAULICS

The forward hydraulic power pack with 2 x 24 V DC / 13.5 kW motor is installed in the sail locker powering:

- 1 Bow thruster
- 1 Jib furler
- 1 Anchor windlass





The aft hydraulic power pack with 1 x 24 V DV / 1.5 kW motor is installed in the Lazarette powering:

- 2 Lazarette hatch cylinders
- 2 Bathing platform cylinders

A manual hydraulic panel is mounted next to the steering position to operate:

- Vang
- Outhaul
- Backstay
- Jib halyard tensioner

#### 0316 GENERATOR

Fischer Panda 15000i PMS 15 kVA 50 Hz mount in a special sound shielding box on soft mounts to minimize the noise transmission.

### 0317 GREY WATER

Centralized 250 I greywater tank. One pump 18 I/min. or equivalent will be installed to discharge the grey water tank.

#### 0318 BILGE

Bilge drainage is to be by means of one self-priming pump. Switches for the automatic start of the pump will be provided. The electric bilge pump can be used as back-up for the fire-fighting system and vice versa, in case is requested by the Certification.

A manual bilge pump will be provided.

Bilge pump equipment detail:

- 1 self-priming centrifugal pump
- 1 manual pump

## 0319 DECK DRAIN

There will be scuppers installed at PS and at STB, in suitable position with drain overboard.

# 0320 ENGINE ROOM VENTILATION

The air-intake and discharge will flow through suitable grills, traps to prevent occasional water leaks and water-tight for adverse conditions.

All air piping to and from the engine room must be provided with quick fastener for fire prevention.



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This Standard Specification is subject to change without prior notice and non-contractual. 1-September 2021



Engine room ventilation is arranged as follows.

Intake: through grid/water trap on coaming PS with fan

Extraction: through grid/water trap on coaming STB with fan

### 0323 ANCHOR

LOFRANS SX4 hydraulic windlass installed in Anchor Locker, controlled by a remote control on foredeck and cockpit. LEWMAR 63kg Delta Anchor galvanized, incl. 80m 13mm galvanized chain

#### 0324 SEAWATER

Two sea chests, one PS and one STB, to supply sea water to all engines and systems. Each sea chest will be suitably sized to provide the maximum demand of all the users. The two sea chests are to be connected to the main sea water manifold by positive close valves and filters to insure perfect water decantation. Another sea chest will be used for the outlet. CuNiFe piping and bronze valve will be used.

### 0326 EXHAUST

The exhaust gas has cooling water injected after the engine exhaust manifold. Wetted gas runs to aqualift GRP muffler. A gas/water separator is to be fitted.

A goose neck loop is fitted between the muffler and the outlet fitting on hull. The gas will run to the outlet in flexible heat resistant pipes.

Cooling water will discharge separately by an exhaust manifold under water line. This system has to be considered separately for each engine including the diesel engine of the generator.

### 0327 THRUSTER

A retractable hydraulic bowthruster with 25kW power is installed. The bowthruster is powered by the forward hydraulic power pack.

# 0328 HORN

Electric foghorn at 1st spreader. Operation button on STB steering position.





## 0400 DECK FIT

# 0410 DECK HARDWARE

4 x electrical HARKEN B990.3ST winches. For safety reason the mainsheet fixing point is as far as possible separated from the guests. A single point mainsheet positioned on aft deck close to steering consoles. Mainsheet is operated by the winches forward of the steering positions.

HARKEN custom self-tacking system to make single hand tacking easy. Custom track for self-tacking jib. Mini-maxi hi-load car with stand-up block and stoppers. Sheet for self-tacking jib, 2:1 purchase via sheave at mast and halvard block.

2 x 3 aluminium halyard blocks at mast foot. 6 x padeyes on bulwark for halyards. 2 x 3 jammers (main Halyard, 2 reef lines, jib sheet, gennaker halyard, topping lift).

There are 6 mooring cleats: 2 at the bow section, 2 midships and 2 aft, 2 stainless-steel fairleads in the aft section.

Padeye for gennaker on bowsprit

# 0411 WINDOWS & HATCHES

The fixed flat windows in the deckhouse are made of tempered security glass, safely attached and sealed off to the deck. All hatches are flush mounted in several positions on deck and coachroof. Large custom carbon flush hatch on aft deck for dinghy storage with 2 inspection hatches.

### 0412 DECKING

All walking areas including the cockpit are covered with synthetic teak material and black caulking. Complete decking is vacuum glued. A 35 mm high toe rail is mounted along the entire outer side of the deck.

### 0413 COMPANION WAY

Manually operating custom acrylic sliding hatch for main companionway with lock and washboard. Aft companion way with hinged hatch.

### 0416 RAILING

Pulpits PS and STB are made of stainless-steel with LED navigation lights. Stainless-steel push pit with LED stern light and bracket for stainless-steel flagpole. 2 x 10 stanchions and 2 x rail gates.





# 0417 TRANSOM DOOR

The transom swimming platform opens hydraulically and offers a space of approx. 1.8 m x 3 m above the water. There are steps from deck level to swimming platform. A bathing ladder with four steps is stored at the stern bulkhead and can be mounted at the swimming platform.

# 0421 BOW SPRIT

Integrated carbon bow sprit, fixed, with stainless-steel anchor roller and fixing point for the code 0 or gennaker, well separated from the forestay.

### 0423 CONSOLES

2 x steering pedestals PS and STB with instrument consoles incl. magnetic compass, 2 x white painted composite steering wheels, special cross spoke design, diameter 1,200 mm, RAL 9010 painted.

### 0424 LAZARETTE HATCH

Large custom hatch incl. two carbon inspection hatches in aft deck for dinghy storage. The hatch opens hydraulically.

# 0425 COCKPIT TABLE

4 x GRP tables with wooden plate are installed in the cockpit.





## 0500 ELECTRIC

# 0510 CHARGER & INVERTER

VICTRON ENERGY Inverter / Charger 24 / 8000 / 200A.

Shore power supply from 90 V - 265 V AC and from 50 Hz - 60 Hz VICTRON ENERGY DC/DC-converter 25 A 24 V - 12 V DC for navigation electronics.

Water heater, 230 V AC outlets throughout the yacht, power supply via inverter, automatic switch-over from generator / shore power

### 0511 DC SYSTEM

24 V DC System managed and controlled by C-ZONE. Two distribution zones forward and aft with control units and manual override functions.

DC consumers: LED navigation lights, LED anchor light, LED deck light, bilge pumps, water pressure pumps, air vents, toilets, refrigerator, interior lighting, direct and indirect plus reading lights, various USB 3.2 A / 5 V charging point at chart table and all cabins.

## 0516 BATTERIES

24 V DC Service battery bank AGM 14 x 12 V / 200 Ah for 1,400 Ah at 24 V. Individual starter battery for engine,  $2 \times 12 \text{ V} / 120 \text{ Ah}$ . Individual starter battery for generator  $1 \times 12 \text{ V} / 120 \text{ Ah}$ . Separate battery charger for starter batteries.





# **0600 ELECTRONICS**

# 0612 YON WATCH

The yacht is equipped with a telematic monitoring system allowing the use of the Y ON WATCH application.





# 0700 PAINT

# 0710 HULL COATING

The hull is painted in white uni-colour.

# 0711 DECK COATING

The deck is painted in white uni-colour.





# 0800 RIGG

# 0810 MAST

Carbon mast, AXXON high modulus prepreg, autoclave cured. Spreaders swept back. Modern fractional rig, tapered top, spray painted black. 1.2 m crane for fathead main sail. Standing rigging rod. Track to hold jib halyard. Mast jack with hydraulic hand pump and wedges. Hydraulic jib furler. Main halyard 2:1, jib halyard 1:1, boom topping lift as spare main halyard, 1:1 gennaker halyard 1:1. Self-tacking jib sheet 2:1 purchase, 2 x lazy-jacks 6-in-1, 2x flag lines to first spreader. HARKEN switch track, 32 mm for easy mainsail storage. Hydraulic jib halyard tensioner and backstay cylinders connected to aft manual hydraulic panel.

### 0811 BOOM

Carbon monocoque V-boom from AXXON, high modulus prepregs in female mould, autoclave cured, spray painted black. 2 x single line reefing. Hydraulic outhaul. Boom vang, hydraulic vang and outhaul connected to aft manual hydraulic panel.



# 0900 STEERING

# 0910 RUDDER

Double rudder system with two semi-balanced rudders made of glass composite, stainless steel stocks with self-aligning roller bearings. Bearings and housing are in fully laminated fittings to achieve maximum connection to the hull.

# 0911 STEERING SYSTEM

Transmission via tubes, gearboxes and arms. Emergency tiller, aluminium.





# 1000 KEEL

The structure of the keel blade shall be high resistance steel type WELDOX. The bulb to be a lead alloy casting containing 3.5% antimony by weight.



# ANNEX 1 TO THE TECHNICAL SPECIFICATION

# GENERAL ARRANGEMENT PLAN

# Standard Layout



# Layout 2



# Layout 3



# Layout 4



# Layout 5

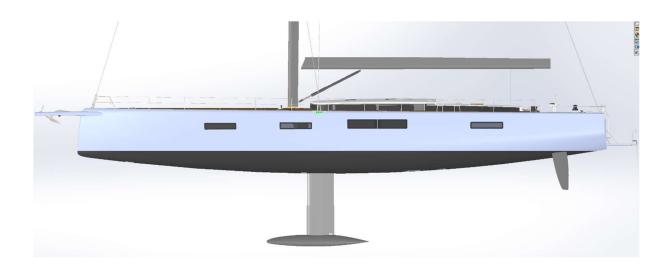


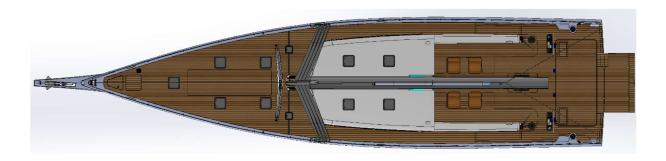


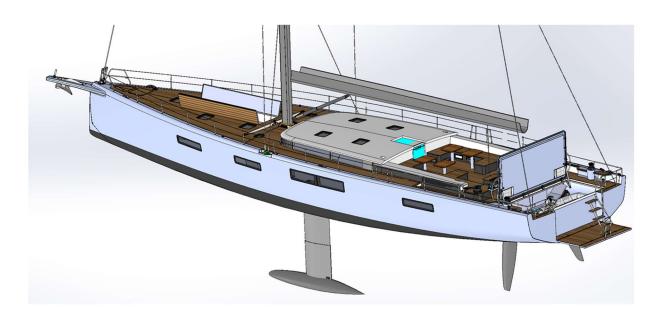


# **ANNEX 2 TO THE TECHNICAL SPECIFICATION**

# SIDE PROFILE & DECK PLAN









# ANNEX 3 TO THE TECHNICAL SPECIFICATION

# **SAILPLAN**

# Sail Dimensions: Sail Dimensions: I = 36.75 m I2 = 28.58 m J = 10.30 m J2 = 7.35 m P = 36.30 m E = 12.90 m ISP = 39.46 m STL = 13.24 m CPW CL 1/2 = 3.04 m RM data available from TDNA upon request Chainplates: V1 is 23 deg, from mast centroid at deck. Sail Area Main: 272m2 Sail Area Jib (100%): 188m2



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