SOLARIS 37



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1 General

The following specification describes materials and the main production stages necessary to build an 11.40 m Solaris sailing yacht. This specification gives a general view.
The Solaris 37 is a true Cruiser Racer.
All mentioned dimensions and data are given by the designers and have to be considered as executive dimensions.
Additional equipment can affect trim and displacement.
The boatyard reserves the right to make changes during construction, also replacing materials no more available on the market.
The boatyard and the sales network guarantee an excellent consultation for choosing additional equipment with their specialist knowledge.

1.1 General characteristics

LOA	11.40 m
LWL	10.45m
Beam	3.85 m
Draft	2.40m - 2.10m opt.
Displacement	7.800 kg
Ballast	2,700 kg

1.2 Sail area

Sail area	64 sqm – 82 sqm optional
Genoa	28 sqm - 35 sqm optional
Mainsail	36 sqm - 47 sqm optional
I Genoa	13.20 m
P	13.40 m
E	5.50 m
J Genoa	4.08 m

1.3 Engine

Volvo Penta D1-30 30 hp	optional D2-30 40 hp
Transmission	S-Drive

1.4 Tanks

Water	300 l
Fuel	210 l

1.5 Certification

CE RINA	Open Sea Category A

1.6 Drawings

- Javier Soto Acebal (naval designer): water lines, hull lines, structural plans, appendix and sail plan
- Solaris Design Team (Boatyard): Hull and deck construction, interiors, stability and weight calculation, water, hydraulic, electric and electronic system.

1.7 Materials and workmanship

All materials and manufactured articles furnished by the Builder shall be suitable for marine installation and are of the best quality for their respective purpose. It shall be the responsibility of the Builder to check its purchase orders and also check all materials delivered, to insure confirmation with the details of the specification and with all normal working requirements.

1.8 Inspection

The Architects and the Owners or their representatives shall have access, previous agreement, to the vessel and everything pertaining to the vessel during the normal working hours.

1.9 Insurance

The builder will insure the yacht and all accessories supplied by the owner. The owner must insure the yacht at her delivery ex works boatyard.

1.10 Accessibility for maintenance and cleaning

All installations and compartments are built to be easily accessed, cleaned and maintained.
The builder will keep the yacht reasonably clean at all times. Particular care will be taken to ensure that all dust, shavings etc. are removed and the surfaces are accurately cleaned before painting.
Upon delivery, the bilges and all sections of the yacht will be clean.

1.11 Weight and stability calculation

The Builder will make and check the weight calculation. The total displacement will be calculated in the following condition: fully loaded ½ tanks. Transversal stability to be made in accordance with the CE rules (MOC - Minimum Operating Condition) to obtain the A class "Open Sea".

1.12 Trim

The Builder reserves the right to add internal ballast to balance the yacht in the event of differences.

1.13 Mast and rigging

The Builder will check, with the Architect (Javier Soto Acebal) and mast manufacturer, the proper dimensions for the mast and rigging.
Standard is a fractional sloop rig, with light alloy aluminum mast and boom, designed for a full batten mainsail.

1.14 Documentation

The yard will issue drawings and plans regarding plumbing, electrical and ventilation systems, engine and whatever necessary to control and maintain all the on-board systems. The instructions of all the equipment will be delivered on board. A detailed owner's manual with pictures will be provided as standard in Italian or English language.

1.15 Systems descriptions

All systems are clearly labeled in English or Italian language. All cables are coded.

1.16 Warranty

The Builder shall accept responsibility for any defective workmanship and/or materials up to two years after delivery, given that this is not the result of gross negligence or incorrect use of the yacht.
The Builder will carry out warranty work in any marina within the Mediterranean Sea. Transfer costs of personnel will be paid by the owner, unless the yacht is moored in outside the EC.
The Builder shall not be held responsible for equipment supplied by the Owner.
For additional equipment, the manufacturer's warranty is held liable.

2 Construction

The materials used and construction methods are designed to construct a light, yet strong and stable hull, without affecting the strength and stiffness. Hull and deck, as well as all other parts of the yacht, are designed to take high loads, providing maximum product durability.
Hull and deck are constructed in a negative mould.
All visible hull and deck surfaces are varnished with white gelcoat.
Materials and construction are controlled by Italian Shipping Registry (R.I.N.A.). RINA is also approving the yachts construction before issuing the CE certificate.

2.1 Hull and deck

- Hull and deck in sandwich construction (type PVC Airex Core) in E-fiberglass.
- This kind of structure gives a light hull which is, however, far more resistant to dynamic stress and is far more rigid than a plain resin bonded laminate construction.
- Airex type core, an expanded closed-cell vinyl polychloride.
- Vacuum system for the sandwich gluing.
- Where needed reinforcements are done in undirectional and bidirectional lamination and stratification core substituted by plywood or more density inserts.
- The strength of resin bonded laminates conforms to the designer's specifications and they are regularly controlled by their competent technical departments.
- The transversal (floor) and longitudinal reinforcements of the hull are made in E glass fibres and then resin bonded to the hull.
- The main and the forward bulkheads are made in composite.
- The waterlines are in Gelcoat or polyurethane paint; the cove stripe and the yacht's name on the transom are adhesive (charcoal grey).
- The stern cannot be opened.

2.2 Ballast

- The bulb keel is designed and built for high speeds and guarantees performance and stability.
- The keel ballast is made of lead /antimony.
- The keel fin is made in cast iron and is attached to the hull through stainless steel bolts. There is a recess in the hull for the stainless steel backing plate for the keel.
- The keel is treated and protected by epoxy products.

2.3 Chain plates

- The deck area around the mast and the chain plates will be reinforced. Where needed, the sandwich core will be made in marine plywood instead of Airex core.
- The main and aft chain plates are realized in composite with unidirectional and bidirectional fibres, vacuum laminated, well resin bonded to the yacht structure.

2.4 Stays

- The dimensions of all shrouds and stays are defined by naval architects according to their working load.
- 1x19 stainless steel wire is chosen as a standard.
- Optional, rod rigging is available.

2.5 Structural bulkheads

- The main and the forward bulkheads are composite material, type Airex. All the other bulkheads are made in oak plywood, well resin bonded to the hull and the deck.

2.6 Mast base

- The inox steel mast base is bedded on a GRP support which is connected to the longitudinal, and connected to the hull with bolts.

2.7 Access to the bilge

- The tidy bilge is easily accessible.

2.8 Engine bed

- The engine bed is made of single skin GRP, well resin bonded to the hull and to longitudinal and transversal reinforcements.

2.9 Drain holes

- The bilge drainage system is designed to get all water to the lowest point of the bilge in order to discharge outboards.

2.10 Rudder

- Balanced rudder in GRP foam core.
- The rudder blade is reinforced by steel frames, welded to the shaft.
- Stainless steel shaft.
- Jefa steering system.
- One compass mounted in front of the helm station on portside.
- 900 mm steering wheels with single spokes.

3 Interior

3.1 General arrangements

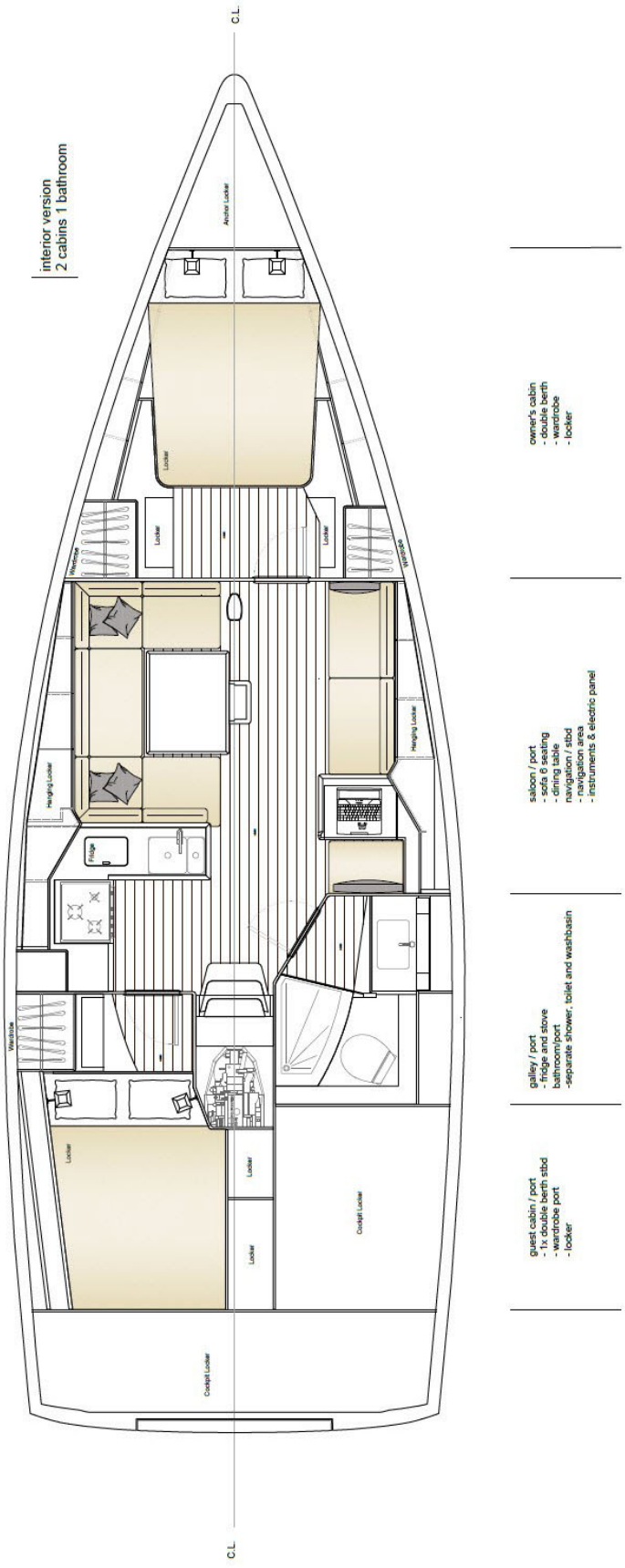
The standard price is based on the following description. Optionally, some changes can be made.

- The boatyard is monitoring the optimum weight distribution.
- Stowage is maximised by using all spare space.
- The builder recommends marine plywood for internal, non-visible surfaces.
- Bulkheads covered with marine plywood.
- Galley and bathrooms topsides are made of wood. Optional Corian.
- High quality fabric is used for all cushions.
- All furniture is made in high quality oak, varnished with matt open pore finish. The doors of the upper cupboards are white painted.
- All woodwork is carried out with the best nautical tradition.
- Rounded edges for all hatches, bulkheads, seating, lockers, etc.
- The main switchboard is placed at the chart table.
- The high production quality, the clear, simple lines of the interior corresponding to the Solaris design, making a Solaris a unique yacht.

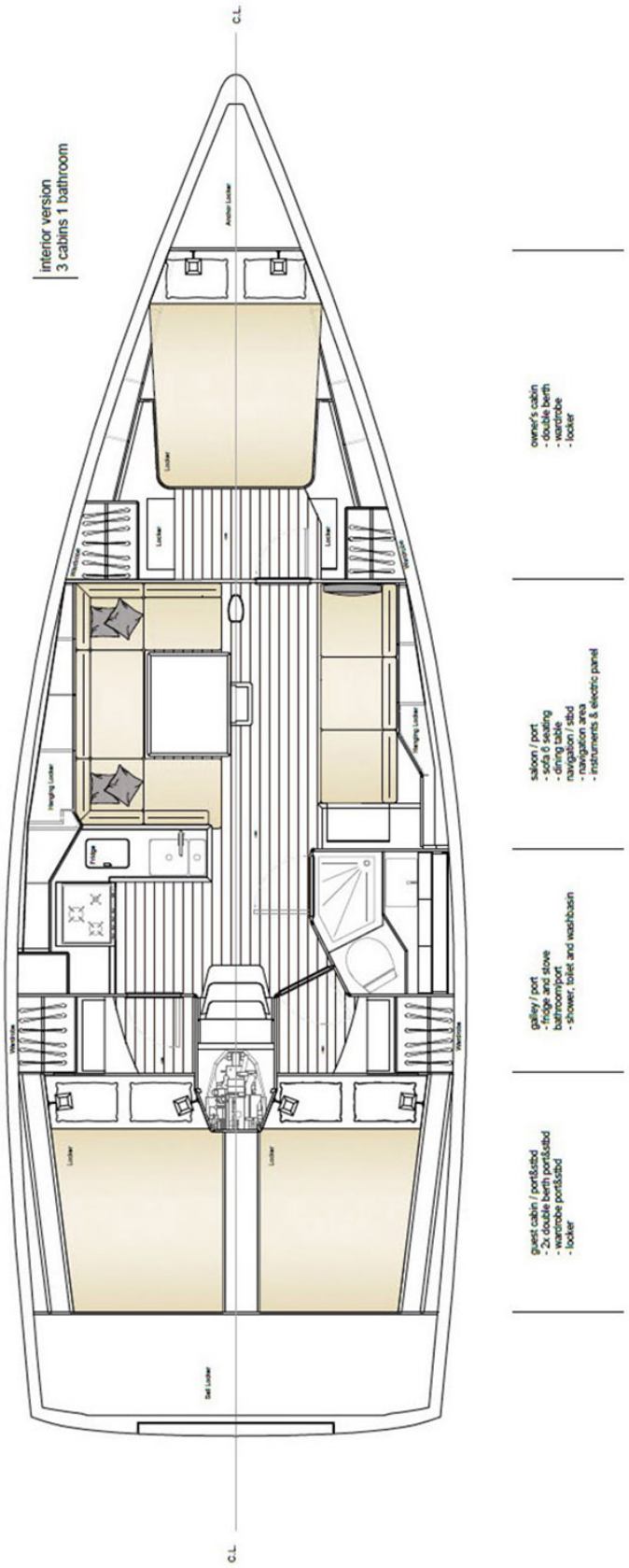


3.2 Standard Layout and Optionals

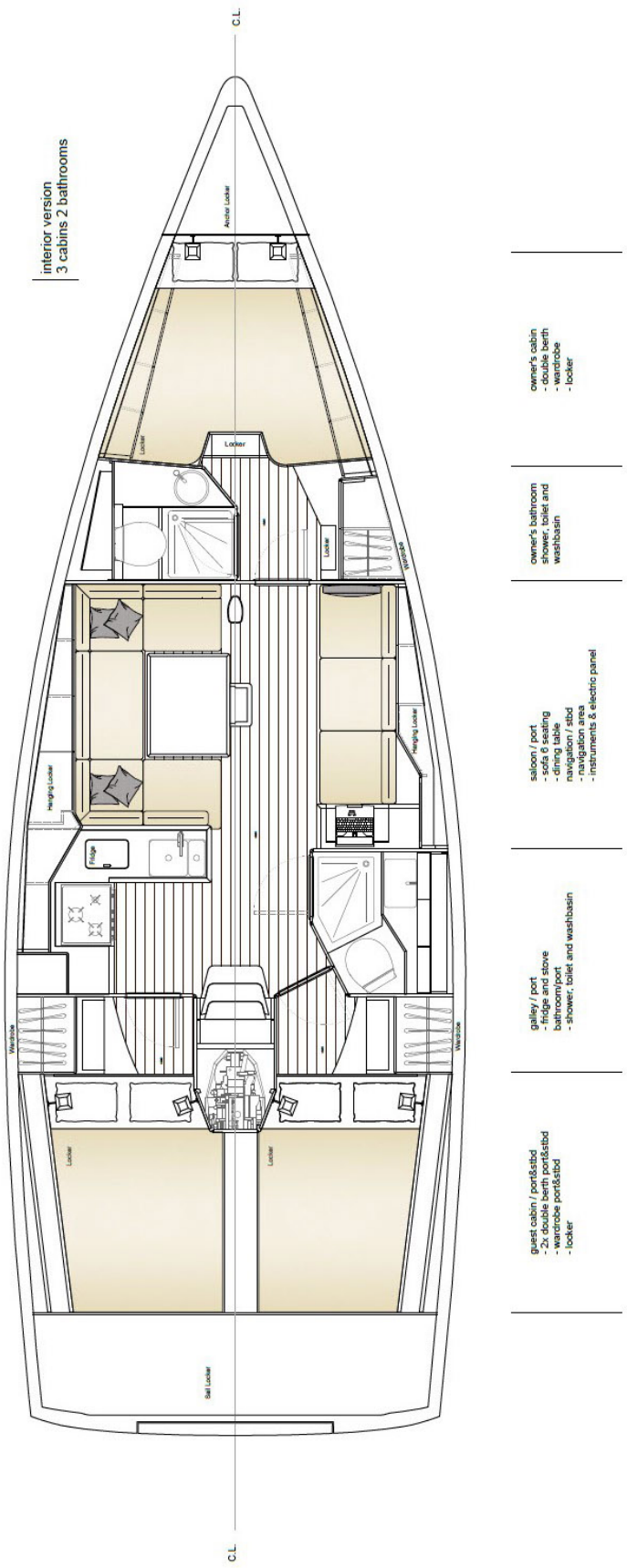
3.2.1 Standard Layout - 2 Cabins, 1 Bath



3.2.2 Extra Layout - 3 Cabins, 1 Bath



3.2.3 Extra Layout - 3 Cabins, 2 Baths



solaris 37 / interior layout

3.3 Layout

- The Solaris 37 has a layout with two cabins, one bathroom, a saloon with galley, a sofa, a dining table and a chart table. The chart table is practical and placed near the companion way.
- Every area to have space exploited at the best and where ever possible, there will be stowage areas as in best Solaris tradition.

3.4 Flooring

- Built to be completely removable for bilge inspections.
- 20 mm oak wood floorboards, with transversal grain.

3.5 Ceiling

- Plywood ceiling panels, covered with white vinyl upholstery treated against mould.
- To be fixed with Velcro.

3.6 Cabin doors and drawers

- All doors are fitted with a door lock.
- Drawers made in plywood. Front in solid wood and fitted with press button locks.

3.7 Berths and sofas

- Berths and sofas to have drawers or lockers wherever possible.

3.8 Companionway

- Wooden companionway ladder.
- To have steps with antiskid.

3.9 Handrails

- Polished stainless steel handrails in various parts of the yacht.

3.10 Access to engine compartment

- Engine room with one entrance.
- The entrance is positioned to have an easy access to all technical equipment at sea.

3.11 Soundproofing

- Soundproofing is a strong characteristic of a Solaris yacht.
- The soundproofing of the engine room is made of high quality sound insulation material and specially furnished plywood, with integrated lead plates.

3.12 Galley

- Stainless steel 3-burners oven on gimbals.
- All surfaces in wood. Optional corian or stone.
- One stainless double basin sink.
- Galley with lockers and drawers to store dishes, glasses, pots and galley accessories.
- Plexiglass protection between galley and sofa.

3.13 Toilet

- Bathroom locker is easily accessible for maintenance.
- Wooden topsides, waterproof, varnished.
- Composite sinks, headlocker with mirror front.
- Flooring in wood, shower cabin in polyethylene grating.
- Shower and basin are discharging outboards.
- Bathroom with separated shower.
- Manual toilet type Jabsco Regular.
- Wide wet locker.

3.14 Black out screens

- Hatches, portholes and windows with sun screens.

3.15 Fore cabin

- Wide double berth with big drawers underneath.
- Spacious wardrobes.
- Side shelves.

3.16 Salon

- A wide U shape sofa for 6 people with drawer for stowage.
- Table to be of solid wood.
- Sofa in front of the dinette.
- Nav. station with seat, chart locker.
- Locker for instruments.
- Electric panelboard with hinged door for inspection at chart table.

3.17 Stern cabin

- One double berth per cabin.
- Wardrobes.
- Lockers in the main central bulkhead.

4 Engine

4.1 Engine

- Volvo Penta D1-30.
- S-Drive.
- Engine is mounted on shock absorbers.
- Instruments control panel to be mounted at the helm station.
- Engine hours counter, rpm-meter, fuel gauge, accelerator are mounted in cockpit at helm stations.

4.2 Fuel tanks

- 15/10 stainless steel tank.
- Total fuel capacity approx. 210 l.
- Copper tubing for fuel lines.
- Fuel filter and 1 water separator easily accessible.
- Tank fitted with an analog level indicator.

4.3 Fire-fighting system

The whole yacht including the engine room, the electric and technical systems comply strictly to RINA certification.

- Manual fire extinguisher for the engine room placed in the aft cabin.

4.4 Soundproofing

- The soundproofing of the engine room is made of high quality sound insulation material, white varnished.

4.5 Propeller

- Fixed blade propeller.

5 Water systems

5.1 Sea cocks

- All flush seacocks are made of nickel-plated brass, quick operational, easily accessible.

5.2 Fresh water tanks

- Rigid polyethylene fresh water tanks. Access for inspection and cleaning.
- Total water capacity of 300 l.

5.3 Piping

- Approved special non-odour rigid PVC tubing for hot and cold drinkable water.
- The drainage hoses of bilge pumps, sinks, and showers are made of non-odour, solid rubber pipes.
- Stainless steel hose clamps and rubber muffs.

5.4 Black water holding tanks

- The toilet wastewater is collected in a black holding tank which discharges outboard by gravity.

5.5 Deck cockpits

- The water on deck is drained by rubber pipes directly resin bonded to the hull.

5.6 Pumps

- All pumps are easily accessible for maintenance.
- 1 manual bilge pump in cockpit with suction in the main bilge.
- 1 electric bilge pump with large capacity with suction in the main bilge and in the aft bathroom.
- 1 fresh water pressure pump, feeding all water systems.
- All bilge pumps are discharging outboards above the waterline.

5.7 Boiler

- 220 V AC Boiler for hot water, capacity 16 lt.
- Water is also heated by heat exchanger of the engine.

5.8 Cockpit shower

- Warm/cold fresh water shower at the stern section of the cockpit.

6 Cooling Systems

6.1 Cooling systems

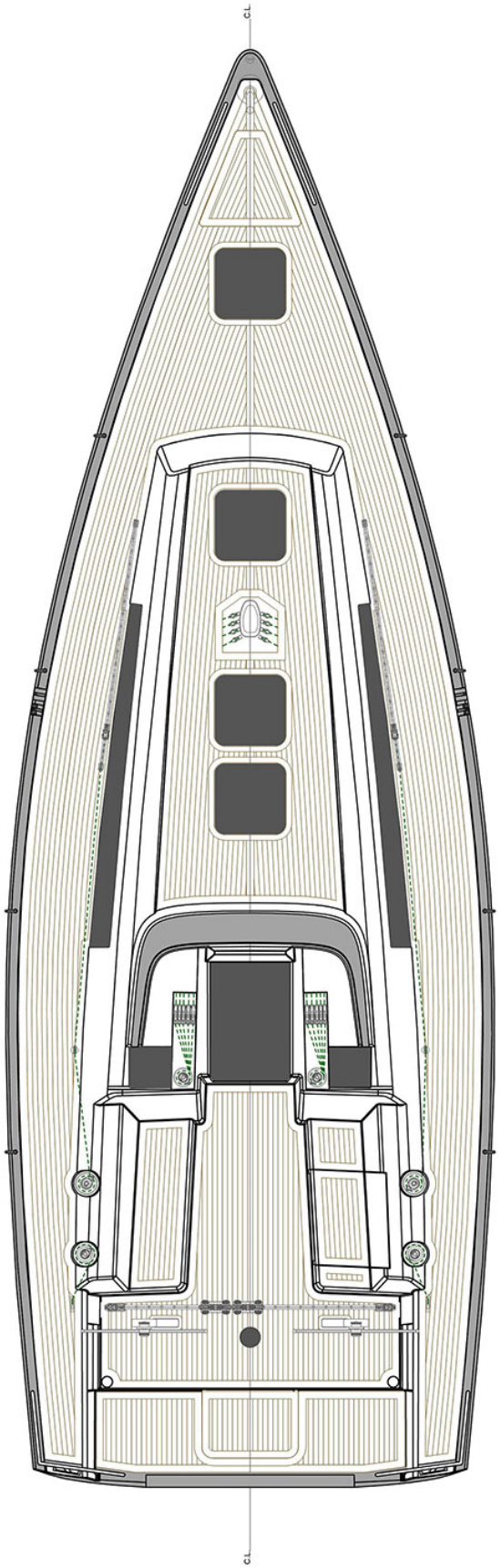
- One 12 V 100 l refrigerator as standard.
- Optional a second 12 V electric stainless steel fridge can be installed.

7 Deck equipment

- The standard deck equipment is designed for a sloop rig.
- High quality brands deck equipment, in stainless steel or in anodized aluminum.



7.1 Deckplan



- Optional according to Pricelist and Options: Coach roof and Deck covered with teak planking

7.2 Fairleads

- Stainless steel fairleads: 2 forward and 2 aft.

7.3 Mooring cleats

- Stainless steel mooring cleats: 2 forward and 2 aft.

7.4 Hatches

1 hatch for anchor locker	flush
1 hatch for owners cabin	Lewmar
1 sliding hatch for the companion way	With stainless steel frames and track. 15mm Perspex
1 hatch for salon	Lewmar
2 hatches for aft cabin and bathroom	Lewmar
1 hatch	flush for lazarette
1 hatch	for starboard peak in cockpit

7.5 Windows

- 2 fixed side windows for the saloon.
- 4 fixed hull windows for the saloon made in anti-brake in glass

7.6 Portholes

- 2 opening portholes Lewmar on coachroof for galley and aft bathroom.

7.7 Tracks, slides and leading blocks

- Tracks, slides and leading blocks of the best quality.
- Deck equipment chosen by naval architects.
- All halyards, reefinglines and haules are lead into the cockpit below the deck structure.

7.8 Winches

- 2 winches for jib sheets Radial 46, Harken
- 2 winches for mainsheet system Radial 40, Harken
- 2 mast winches for halyards Radial 40, Harken
- Standard supply of 2 aluminum handles with locking system.
- All winches are anodised light alloy, in black.

7.9 Anchor winch

- Electric anchor winch 1000 W below deck with capstan drum.

7.10 Steamhead

- Anchor fairlead is welded in one piece stainless steel.
- Nylon chain rollers for Delta anchor.

7.11 Pulpit, pushpit and stanchions

- Stanchions in stainless steel, diameter 25x2 mm.
- Stainless steel wire lifelines diameter 5 mm. with turnbuckles.
- Height of pulpit, pushpit and stanchions 610 mm.
- Pushpit to be built in two pieces.
- The pulpit will be open for landing on bench.

7.12 Toe rail

- Toe rail to be integrated in the hull with gelcoat varnish finishings. To have reinforcements for stanchions, pulpit and pushpit attachments.

7.13 Deck

- Cockpit seats are covered with laid teak bonded onto the deck with epoxy resins through the vacuum system.
- Forward deck surfaces, cockpit floor and side decks are painted with ansti-skid paint. Optionally they can be covered with teak.
- Stainless steel handrails placed on the sides of the coachroof.
- Removable bathing ladder at the stern.

7.14 Peaks

- 1 fore peak to stow anchor chain, with discharge above the water line.
- 1 wide lazerette.
- 1 peak under cockpit seat right.

8 Steering system

- The Solaris 37 is equipped with two GRP helm stations. Stainless steel steering wheels are covered in Lorica.
- 1 compass in front the helm station on portside.
- The steering system and equipment is by Jefa.
- Steering gear is protected, still easily accessible for inspection.
- Stainless steel emergency tiller to fit directly onto the rudder shaft.



9 Rig/Sails

9.1 Rig

- Aluminum mast.
- Mast is built in one piece and designed for a fully battened mainsail.
- Furlex manual jib furler.
- Tracks, slides and leading blocks.
- Standard is a fractional sloop rig.



9.2 Mast

- Sparcraft mast is stepped through deck, 2 pairs of spreaders as standard.
- Tapered on masthead.
- Equipped with blocks and tracks for 1 mainsail, 2 genoa and 2 spinnakers, 1 topping lift.
- 2 Pairs of spreaders with attachment on mast with passing bar, entering in the spreaders. Spreaders heads with 1x19 predisposition for the fastening on the shrouds.
- Equipped for lazy jacks.
- Boom attachment on mast, toggle and boom attachment of aluminum and stainless steel.
- All power lines are covered in pvc material.
- Fittings for navigation lights, lighting and electronic.

9.3 Boom

- Manual outhaul system.
- Solid vang, 6 to 1 gear transmission ratio.
- 1 mainsheet attachment.
- Equipped for 3 reefing lines.
- Equipped for lazy jacks.

9.4 Rigging

- 1x19 wire rigging and stays.
- Stainless steel wire rigging and stays.

9.5 Furling system

- Manual jib furler complete with sheet and jammer.

9.6 Backstay Adjuster

- Manual backstay adjuster of proper dimensions (Harken). With surcharge the yard can install a hydraulic backstay adjuster. Please refer to price list and options.

9.7 Running rigging

Main halyard	1
Traveller sheets	2
Jib halyard	1
Spinnaker halyards	1
Reefing line	2
Mainsheet	1
Genoa sheet	2
Topping lift	1
Outhaul	1

- All halyards and sheets are in spectra, spliced and if necessary fitted with a shackle.

10 Electrical system

All installations are proofed in maritime use.

10.1 12 V system

- The main electric system will be 12 V.
- Charging of batteries by main engine alternator. The following alternator is installed:
- 1 engine driven alternator capacity 80 Ah 12 V to recharge the batteries.

10.1.1 Batteries

- Lighting system, bilge pumps, pressure pumps, anchor windlass, refrigerator, discharge pumps, autopilot, navigation lights and electronics are powered by 12V batteries with a total capacity of 230 A/h.
- Starter batteries, 12 V of 75 A/h, charged by main engine
- Newest generation batteries as standard.

10.2 220 V / 50 Hz system

- The 220 V 50 Hz group supplies the ac users such as: boiler, battery charger (optional), sockets.
- The 220 V 50 Hz group is supplied by shore power through a stern mounted socket.
- 220 V ac socket in galley and saloon.

10.3 Electric panelboard

Electric switchboard is split into 2 parts.

- 1 switchboard for AC, protection and distribution control with automatic thermomagnetic switches and functioning lights. Automatic main power switch.
- 1 switchboard for DC, protection and distribution control with automatic thermomagnetic switches and check lights for all consumers.
- DC electric system protected from overload and short circuit by general thermomagnetic switches mounted near the batteries, one for every battery group and each consumer.
- The electric panel is mounted near the chart table.

10.4 Lighting

- Interior lighting with recessed ceiling lights and 2 reading lights for every cabin.
- One night-light installed at companion way, light switch close to the hatch.
- White/red chart light.
- Forward deck light on mast.

10.5 Navigation lights

- Navigation light switches on the interior panelboard.
- Led green navigation light.
- Led red navigation light model.
- Led stern light model.
- Led anchor light 360° on masthead.
- Led steaming light.

10.6 Miscellaneous

- Approved marine use electric cables.
- All electric installations are properly fused.

11 Navigation/Electronics

- Not standard (please see Price list and Options).

12 Miscellaneous

- Mattresses lined in fabric. Colour to be chosen. Velcro or Zipper.
- 1 flag pole with national flag.





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