# SOLARIS ONE 37

**SOLARISYACHTS-NORTH GmbH**
Oberneuhofstrasse 5, CH-6340 Baar, Switzerland
Tel. +41 41 768 05 63, Fax +41 41 768 05 64

info@solarisyachts-north.ch
www.solarisyachts.com

**Cantiere Se.Ri.Gi. di Aquileia S.p.A.**
Via Curiel, 49, I-33051 Aquileia (UD), Italy
Tel. +39 0431 91304, Fax +39 0431 919484

info@solarisyachts.com
www.solarisyachts.com

R201110, V101

# Table of Content

# 1 General

**The following specification describes materials and the main production stages necessary to build a 11.40 m Solaris sailing yacht. This specification gives a general view.**

The Solaris One 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 specialistic knowledge.

## 1.1 General characteristics

| | |
|---|---|
| LOA | 11.40 m |
| LWL | 10.45m |
| Beam | 3.85 m |
| Draft | 2.40m – 2.10m opt. |
| Displacement | 7,100 kg |
| Ballast | 2,700 kg |

## 1.2 Sail area

| | |
|---|---|
| Sail area | 78 sqm |
| Genoa | 34 sqm |
| Mainsail | 44 sqm |
| I Genoa | 14.60 m |
| P | 14.80 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 | 320 l |
| Fuel | 200 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
- Serigi 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, i.e. at her launch.

## 1.10 Accessibility for maintenance and cleaning

All installations and compartments are build 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 – Minimun Operation 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 fractione sloop rigg, with light alloy aluminium 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 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.

## 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 an Italian port.

The Builder shall not be held responsible for equipment supplied by the Owner.

For additional equipment, the manufacturers warranty is held liable.

The warranty starts with the day of signature of the delivery report.

# 2 Construction

The used materials 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 resinbonded 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 resinbonded laminates are conform to the designer's specifications and 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 resinbonded to the hull.
- Waterline and the yacht's name on the transom are painted with polyurethane varnish.
- The stern can not be opened.

## 2.2 Ballast

- The bulb keel is designed and built for high speeds and guarantees performances and stability.
- The keel ballast is made of lead /antimony.
- The keel fin is made of a resinbonded steel construction, which is attached to the hull by stainless steel bolts.
- The keel is treated and protected by epoxy products.

## 2.3 Chain plates

- The deck area around the mast and the chainplates 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 undirectional and bidirectional fibres, vacuum laminated, well resinbonded 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 resinbonded 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 resinbonded 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 rudderblade is reinforced by steelframes, welded to the shaft.
- Stainless steel shaft.
- Jefa steering system.
- Two compass mounted in front of the helmstation.
- 900 mm steering wheels.

# 3 Interior

## 3.1 General arrangements

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

- 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 furnitures are made in high quality oak, varnished with matt open pore finish.
- All woodwork is carried out with the best nautical tradition.
- Rounded edges for all hatches, bulkheads, seating, lockers, etc.
- Batteries are placed below the dinette seats. 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

### 3.2.1 Standard Layout 1

### 3.2.2 Standard Layout 1 – 2 Cabins, 1 Bath

## 3.3 Layout

- A Solaris One 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 Serigi tradition.

## 3.4 Flooring

- Built to be completely removable for bilge inspections.
- 20 mm wood floorboards, anthracite color, varnished.

## 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.

## 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 Serigi 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 Toilette

- 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 toilette type Jabsco Regular.

## 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, chartlocker
- 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 Main 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 helmstations.

## 4.2 Fuel tanks

- 15/10 stainless steel tank.
- Total fuel capacity approx. 200 l.
- Copper tubing for fuel lines.
- Fuel filter and 1 water seperator 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 with control placed in the aft cabin.
- Six fire extinguishers are mounted in the yacht.

## 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 bronze, quick operational, easily accessible.

## 5.2 Fresh water tanks

- Rigid polyethylene fresh water tanks. Access for inspection and cleaning.
- Total water capacity of 320 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

- Toilette aft discharges in a stainless steel black water holding tank, with drainage by discharging outboard.

## 5.5 Deck cockpits

- The water on deck is drained by rubber pipes directly resinbonded 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 heatexchanger of the engine.

## 5.8 Cockpit shower

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

# 6 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 salon in tempered crystal.
- 4 fix salon windows in tempered crystal.
- The windows are made in shaded tempered glass.

## 7.6 Portholes

- 4 opening portholes Lewmar on coachroof for galley, bathroom and cabin

## 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 44 or equivalent.
- 2 winches for mainsheet system 44 or equivalent.
- 2 mast winches for halyards 40 or equivalent.
- Standard supply of 2 aluminium 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 pullpit will be open for landing on bench.

## 7.12 Toe rail

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

## 7.13 Deck

- Cockpits, included seats and aft surfaces covered with laid teak. Teak battens bonded onto the deck with epoxy resins.
- Forward deck surfaces and deck walking horizontal surfaces are painted with anstiskid paint. Optional they can be fitted with teak.

## 7.14 Handrails

- Stainless steel handrails placed on the sides of the coachroof.

## 7.15 Deck

- Removable bathing ladder at the stern.

## 7.16 Peaks

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

# 8 Steering system

- The Solaris One 37 is equipped with two GRP helmstations. Stainless steel steering wheels are covered in leather
- 2 compasses in front the helm stations.
- The steering system and equipment is by Jefa.
- Steering gear is protected, still easy accessable for inspection.
- Stainless steel emergency tiller to fit directly onto the rudder shaft.

# 9 Rigg/Sails

## 9.1 Rigg

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

## 9.2 Mast

- Sparcraft mast is stepped through deck, 2 pair of spreaders as standard.
- Tapered on masthead.
- Equipped with blocks and tracks for 1 mainsail, 2 genua 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 fasten on the shrouds.
- Equipped for lazy jacks.
- Boom attachment on mast, toggle and boom attachment of aluminium 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 Hydraulic set

- Hydraulic manual backstay cylinder with integrated pump of proper dimensions for backstay.

## 9.7 Running rigging

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

- All halyards and sheets are in spectra, spliced und if neccessary 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 shore power or main engine alternator. Alternators:
- 1 engine driven alternator capacity 80 Ah 12 V to recharge the batteries.

### 10.1.1 Batteries

- The 6 V servicebatteries have a capacity of 180 A/h.
- Starter batteries, 12 V of 55 A/h, charged by main engine
- Mastervolt battery charger Mass 12/70 capacity of 70 A/h.
- Newest generation gel batteries as standard.
- Service group is feeding: Lighting system, bilge pumps, pressure pumps, anchor winch, refrigerator, discharge pumps, autopilot, navigation lights

## 10.2 220 V / 50 Hz system

- The 220 V 50 Hz group supplies the ac users such as: boiler, battery charger, 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, lightswitch close to the hatch.
- Cockpit light below the boom.
- White/red chart light.
- Forward deck light on mast.

## 10.5 Navigation lights

- Navigation light switches on the interior panelboard.
- Led green navigation light model Lopolight 300-001.
- Led red navigation light model Lopolight 300-002.
- Led stern light model Lopolight 300-006.
- Led anchor light on masthead model Lopolight 200-012.
- Led steaming light model Lopolight 200-011.

## 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.