

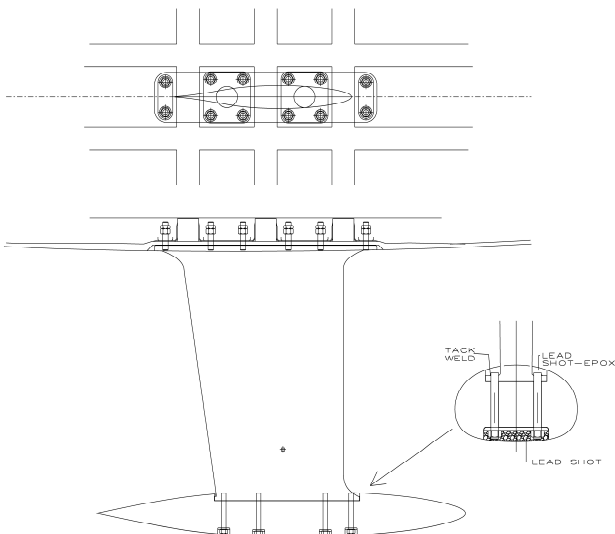


THE SOLARIS ONE RANGE

SOLARIS ONE RANGE – THE SUCCESS GOES THROUGH THE DESIGN CHOICES

The structural continuity

All the Solaris yachts are built following the construction standards of the oceanic maxi-yachts, in fact there is structural continuity of the main elements: mast, main bulkhead, chainplates and keel attachment. On all the Solaris One line the main and forward bulkheads are made in composite sandwich with a thickness from 25 to 40 mm, the bulkheads are not resin bonded to the inner moulding of the ceiling, but they directly resin bonded to the deck. The chainplates are made of unidirectional and bidirectional fibers, vacuum glued and resin bonded to the hull. The advantage in using materials with the same mechanical characteristics is evident over time. The junction between steel chainplates and GRP (used in virtually all production yachts) has involved problems of infiltration of water and galvanic currents. All our keels have the fin made in cast iron and the bulb in lead. The choice of the two materials gives the possibility to have the fin with less weight in the upper part, because it has lower specific weight, and to increase the weight in the bulb, so a bigger righting moment and less immersed volume; the final result is better sailing performance and comfort. The junction between hull and keel is made using a recessed flange plate, this enables transverse weight distribution to the attached 20mm keel bolts and reduces stress to the hull.



Keel 2.4 Solaris One 37

Hull windows

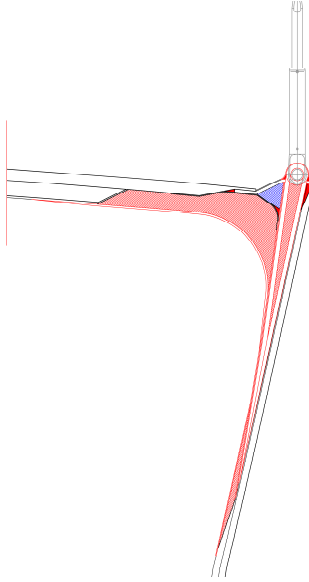
Using tempered crystal instead Plexiglas is an expensive but durable and safe choice: On the entire One line the lateral and hull windows are constructed using double tempered crystal. The advantages are important: the crystal is not subjected to volume changes, so water infiltration is avoided over time; the glass is also easy to clean without the streaks commonly visible on Plexiglas windows. The double layer provides additional safety from the hull impacts. An important feature to underline is lateral portholes on the coachroof. The Solaris choice is about safety: we do not use portholes that open outwards; we do not consider them to be safe as they are an obstacle on deck and can interfere with sheets and general sail handling.

Opening Transom Door

Every Solaris has an opening transom door/bathing platform. The opening mechanism is electro-hydraulic to avoid fastidious manual mechanisms, which are difficult to manage. On the Solaris One 48, 54 and One 60 the transom door also provides access to the tender storage garage. The construction method of the transom doors provide a watertight and proper storage solution for an inflatable rib.

Deck equipment

The steamhead fitting is electro-welded stainless steel plate which completely covers the stem and includes an anchor fairlead with a balance mechanism. The strength of the fitting is necessary for absorbing the loads when the yacht is at anchor and the balance is useful to raise the anchor easily when you have to weigh anchor quickly. All running rigging is in spectra and where necessary fitted with a shackle. The steering binnacles are recessed and mounted flush with the cockpit sole and do not flex under the weight of the helmsman in rough conditions. The coachroof handrails are stainless steel and guarantee a safe hold for going forward on deck. On the One 44, 48 and 60 there is an indispensable foredeck sail locker for the stowage of sails and other equipment, and on the One 37 there is a wide storage locker aft for the stowage of sails and other equipment. The recess for the sprayhood is not only a characteristic of our yachts, but also provides protection during sailing and helps to keep the cockpit dry. The hatches are constructed with a GRP integrated drainage system and are completely flush with the deck and not deck mounted with aluminum frame.

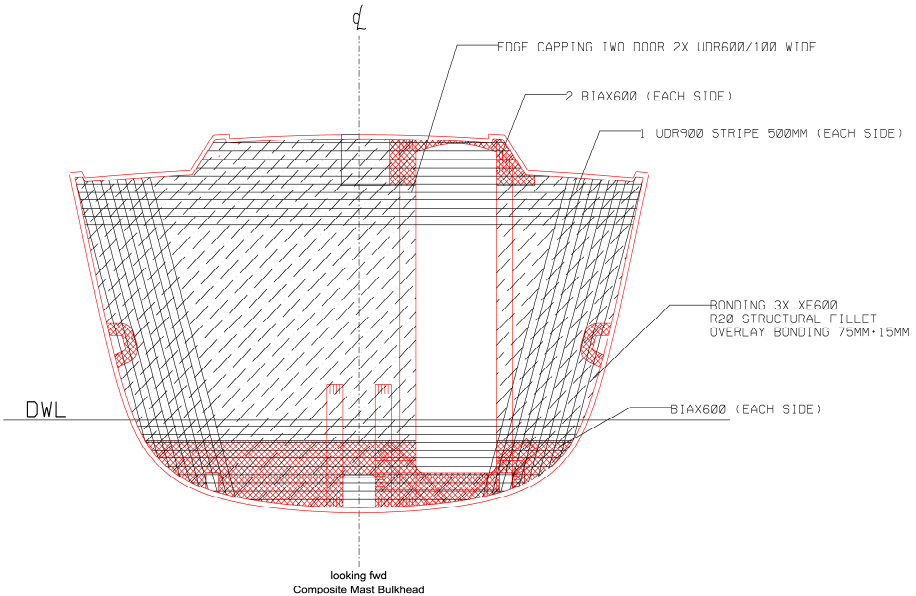


Hull chainplates attachment

Interior equipment

For more than 35 years Solaris has been renowned for precision and craftsmanship. The One line is characterized by a modern interior design, but which also embodies the Solaris tradition. The fiddles in the galley and in the chart area have a linear appearance but are also designed to function as handrails. The fridges have a concealed door in stainless steel. There is a division between the galley and dinette to avoid cooking from spoiling the upholstery. The floorboards are simply placed on have a constant gap to enable easy lifting when sailing (no trapped dirt). Every accessible area is, as per Solaris tradition, used as locker space. There is a white-red navigation light at the chart table and courtesy light in the dinette. The soundproofing of the engine room is built with high quality sound insulation material and white painted perforated aluminum panels. The antiskid finish of the companionway steps is applied with transparent varnish to avoid the adhesive stripes!

Composite main bulkhead



Electrical system

The electrical system is designed to guarantee the functionality of the yacht even under extreme use of all the systems. The engine batteries are completely separate from the domestic system, ensuring there is no interference with the engine battery charge. The batteries are specified for their use, the service batteries are 6 V in series to obtain 12 or 24 V and then placed in parallel. The choice of AGM batteries guarantees stable output and fast recharge. The system provides an alternator and a battery charger using Mastervolt as standard.