



Advantages of an aluminum built catamaran yacht

Light, strong, robust and durable, easy to repair and maintain, aluminum is the ultimate choice material for ship- and yacht building.

Lightness and resistance

Aluminum construction allows hulls and superstructures to be built both strong and light. Due to its exceptional properties of strength and resistance, an aluminum hull can take more of a beating than for example a polyester one. Aluminium material will allow a great deal of deformation before actually breaking. It will dent before it will crack.

Being composed of multiple plates and profiles, each with specific advantages in special situations, an Aluminium hull construction can easily be extra reinforced on water line preventing ice or other impact. Especially for voyages in Nordic or Southern hemisphere with possibilities facing drifting ice, or in other adventurous waters, these are reassuring extras. An aluminum boat is therefore safer and better suited to blue water sailing.

Durability

Aluminum also offers the advantage of an incomparable longevity. Little maintenance is required and the structure does not deteriorate over the years. An aluminum boat does not have a lifetime limit. Another major asset of aluminum is its remarkable resistance to corrosion.

High resistance to corrosion

The Aluminum-alloys that have been in use in the nautical industry for many years now have proven their high resistance to corrosion and to the structural fatigue. The state of the current knowledge of aluminium qualities do not only allow to determine the life cycle of a structure in aluminium; experts consider its longevity as almost permanent.

Since the likely sources of galvanic (or other) corrosion on aluminum hulls are well known, preventive measures have been intergrated in all aspects of the Aluminium Yachtbuilding process. Special alloys for use in Marine environments have been developed. Possible sources and structural solutions that might be subject to corrosion have been redesigned and eliminated. Electrolysis and contact between aluminum and (stainless) steel parts are no longer an issue in a well designed and well built ship.

Of course the quality of work (perfect insulation between the material) and controlled welding procedures will also have a direct impact on the results. Electricity on board a yacht has to be designed and managed by professionals, who know how to insulate materials and electrical equipment in order to minimize risks.



Our CATMAR Range 5 and Range 6 catamarans are built at a shipyard specialised in building aluminium catamarans in Holland. This shipyard also constructs pilot vessels and utility catamarans for offshore wind parks. Ships that are in service 365 days each year, in all weather and sea conditions. Proven technology, workmanship, quality.



Comfort

The robustness of an aluminum hull is reassuring. Resilience to cracking is vastly superior to other materials. It does not creak at sea. Another advantage is that no dangerous vapours accumulate in enclosed spaces (smell of styrene in polyester boats). Forming a protective oxide shell automatically, it is not required to add a protective paint-layer to Aluminium surfaces, eliminating the risk of evaporating paint-solubles in the vessel.

Customized accommodation

Not requiring large moulds, Aluminum offers more possibilities when planning the accommodation. Thus, it is possible to adapt each catamaran to the specific needs of the owners. It is quite conceivable to modify the layout or even the superstructure.



Safety

Safety at sea is a major concern for every owner. Aluminum will not catch fire and does not fuel a fire. And, as mentioned before, its resilience to impact is a huge advantage. It will 'give' before it will break. A reassuring thought.

Resale value

Aluminum boats are extremely sustainable and keep their value on the resale of the boat, because the structure does not wear out and does not deteriorate over time. No osmoses possible.

Environment

Since Aluminium is 100% recyclable without degrading, retaining 100% of its original material properties, it is significantly more environmentally friendly than oil-based products like Polyester and Epoxy. 75% of all Aluminium ever produced is still in use today, and recycling Aluminium requires significantly less energy compared to the original production process.

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