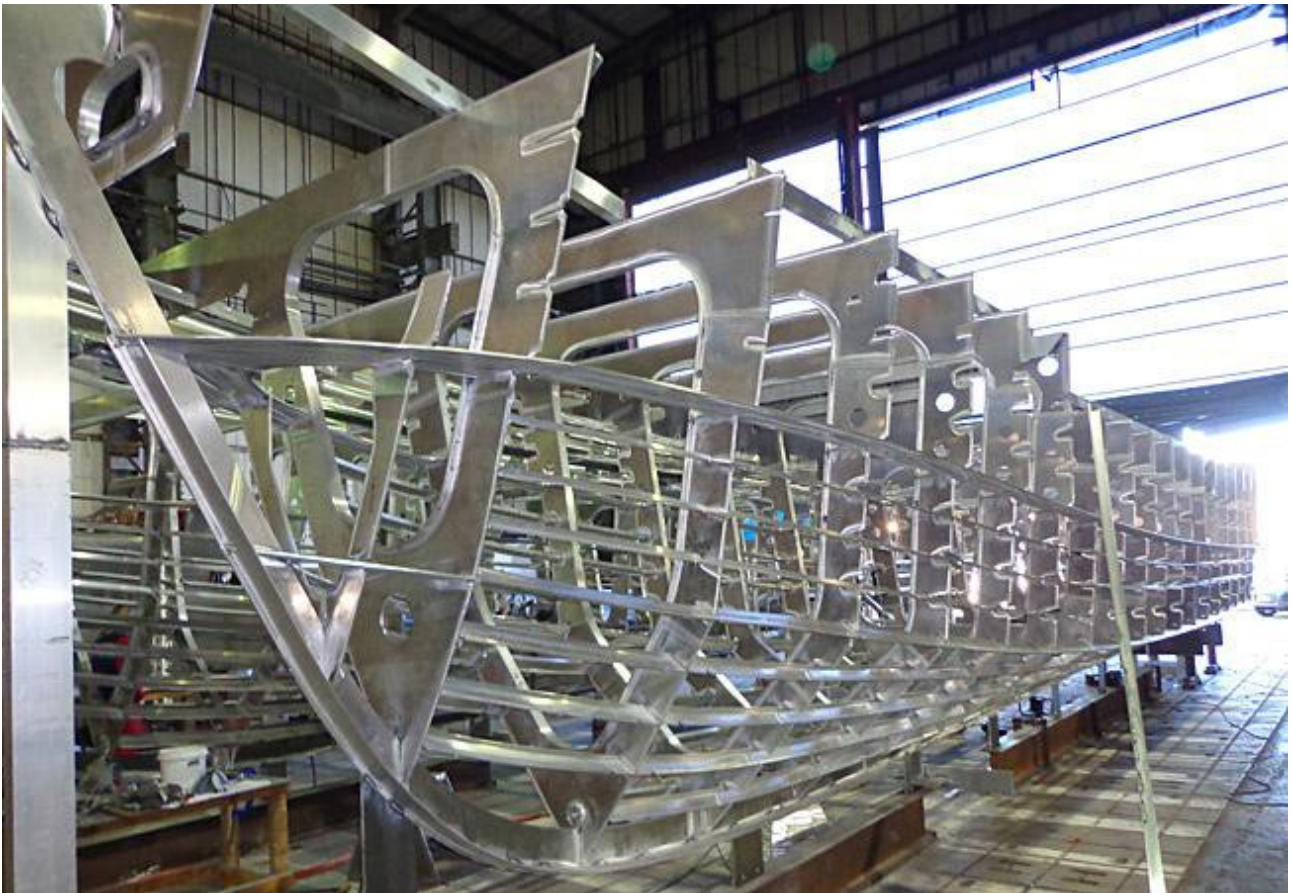


OUR METHOD TO MAKE BOATS



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Our building process hardly changes with the size of each boat. It starts with the construction project carried out by a naval engineering through the elaboration of a model in three dimensions on which distribute the weight of the structure and equipment to determine speed, power, propulsion, stability, trim, load capacity, etc. ., making successive adjustments in the forms and in the equipment to find the ideal point of the hull.

From these forms and following the rules of the Classification Society we determine the scantling, frames, longitudinal reinforces, engine beds, etc. All the components are numbered to be identified across all the building process. The parts with curve forms like the lining are developed to be flat. All pieces are nested in the standard aluminium sheets caring to waste the minimum material possible, generating CAD files compatibles with the water jet cutting machines software.

Although its cost is higher, we prefer to cut the aluminium sheets by means of water jet and not in laser nor plasma systems because these two methods heat the material and then may appear deformations and changes in their mechanical properties in the cutting zone. In addition the cutting borders aren't as perfects like when they are been cuts by means of water jet. Cuts and marked the hundreds of pieces that compose a medium hull the first thing to do is to arrange them to be used when the construction process determines.



We use the traditional shipbuilding method of planting the keel, and placing the frames and bulkheads on it. With all the pieces cut at his exact dimension we must be very careful to control the dimension because a dimensional mistake would made impossible to place the pieces in the right way. To avoid it we prepare a steel jig perfectly levelled where we place the keel and frames. For the same reason the keel sections and are joined in a leveled table, once well-controlled the dimensions and welded, the keel is planted on the jig. The frames are makes in the same way, and after a very strict dimensional control they are fitted on the keel. In our yard we don't use paper drawings, but computer screens with the three dimensions model of the boat we built with all the parts identified with his mark. All measures to assemble the hull are taken from the computer. With everything in place and in his right measure the rest of the construction process is the usual, always following the rules and requirements of the classification societies under which the vessel project has been designed.

For our traditional activity of naval workshop – long before the shipyard – from the design phase we place our experience in engineering of systems and of the installation of equipment such as engines, shafts, rudders, cranes. Large part of this machinery is manufactured by ourselves, of course, we realize also all the hydraulic and mechanical installations in the vessel, ensuring a good performance for the entire product that we control along all the construction process. The only thinks that we don't make and we subcontract to other companies are the electricity and electronics supply and works.