by Pamela Paci

SERGIO CUTOLO | HYDRO TEC HOLISTIC ATTITUDE



f he was an entry in encyclopedias, the description would sound like this "With Sergio Cutolo the world of yachting has had the first model of hybrid boat. His Columbus 40 Sport Hybrid has been the first boat certified by Rina as *Hybrid Class*". It was the year 2014 when this primacy characterized his career. Since it was established in 1995, his naval engineering and architecture studio, Hydro Tec, has designed almost 100 boats. He is one of the best renown names of the Made in Italy yachting, close to reaching again another primacy. The 80m megayacht currently under construction at Columbus Yachts - whose delivery date is scheduled in summer 2019, is today the largest boat ever built in Italy completely designed by an external studio, from the naval engineering to the architecture and exteriors.

This solid, reputable backgroud allows the firm and to the Cutolo's hand to take full possession of his worktable and to draw with awareness and maturity a forward-looking concept of 100 meters in lenght, named *Crossbow*.









The holistic approach by Hydro Tec can be found in the way they can provide the client a 360-degree service, from the design of the very first sketch to the final layout of the exteriors, from the naval engineering to the naval architecture. But it is also enclosed in the creation of single projects, such as the last one unveiled, that seems to be contaminated by the automotive and the architectural world.

During our visit at the Hydro Tec studio in Ovada, recently moved from Varazze, Sergio Cutolo has shown us the last in the line of their projects. Named *Crossbow* the project has a unique design that is hard not to notice. It clearly draws inspiration from the automotive, absorbing those typical aggressive lines of car design. The sleek and sporty lines can be immediately detected along the whole profile. The yacht's design aims to give the impression of a large continuous glass through a curved windscreen, which reminds to the line of iconic cars such as the Jaguar E-Type. But, as said, there are more elements borrowed from the automotive: the lateral profile shows in three points some specific references: the spoiler at bridge deck, the elaborated structure of the glass at owner's deck (rear) and the wavy line of the central decks that in their final parts, towards the aft, nostalgically remind the line of the picturesque Duesenberg cars.

(opposite page) JAGUAR E-TYPE CONVERTIBLE - 1962 SERIES 1 ROADSTER E-TYPE © Jaguar, 2011



AUTOMOTIVE INSPIRATIONS





Looking at the design, you can discover its many details and how much it is embellished through sophisticated elements. "It is peculiarly drawn with a sort of maniacal obsession for details", explains Sergio. "We can dare such elaborated designs because we are perfectly aware of the whole structure - external and internal - and especially, we know how the architecture will impact in the interiors, what the engineering will require in terms of space in order to performe at its best. In this respect, we can quote the complex works by Santiago Calatrava, as an example of integration of architectural design and structural engineering. Only a deep knowledge of the materials allows you to play with shapes and structures in a perfect dialogue between architecture and engineering".

In Crossbow the design is very much elaborated but the repetitive lines are simple and dynamic at the same time so to give the structure the right rythm and lightness.

(opposite page) Palau de les Arts Reina Sofia, opera house and cultural centre in Valencia, Spain. Architecture: Santiago Calatrava



ARCHITECTURAL HERITAGE



THE CONCEPT

Crossbow is a unique concept for a 100-meter superyacht, based on an aluminium hull and superstructure. The sleek design has a beam of just 12.5 metres — more than a metre less compared to the average in this size bracket. What's more, the draught has been kept to just 3.5 metres to ensure *Crossbow* can reach cruising grounds that would normally be off-limits for such large yachts.

Designed around the idea of high performances and efficiency, this all aluminium vessel is fast and light, with a sleek sporty aesthetic. "The large curved windscreen, covering two decks, is the most unconventional aspect of this design. With the location of the superyacht wheelhouse being moved to the uppermost deck, leaving room for a doubleheight forward-facing atrium on the main deck". The exterior deck areas have been designed with speed in mind, keeping the fixed furniture light and well protected from the wind, with the bow transforming at anchor into an expansive entertaining and sun bathing area.

Crossbow has also been designed to remove the reliance of a support vessel for extra toys and tenders. "We have integrated an opening heli-hangar on the foredeck as well as 2×9.5 mt custom tenders and toys in the aft garage located in front of the 135m2 beach club".

The arrow-like design is also reflected in the estimated performance figures, reaching a top speed of 25 knots with a pair of MTU 16V 4000 M93L engines. Accommodation is for up to 16 guests split between eight double cabins, while the lower deck crew area allows for a staff of up to 32 people.





THE FAST AND SILENT GIANT WAS CRUISING THE SEVEN SEAS, WHEN...

"When we conceived *Crossbow*, we had in mind a kind of boat of high-technology and top performance". *Crossbow* is a 100-metre yacht project able to cruise at 30knot with hybrid propulsion. The image is that of a sleek giant with aggressive character cruising the seas in perfect silent and full comfort. "We transferred the high-technology-oriented philosophy of the automotive to the yacht design on a large boat, without sacrificing the spaces and the liveability".

As a bow that you draw to charge the energy needed for the largest shooting range, so appears *Crossbow*, a project of 100meters in lenght shot at 30 knots.





As a naval engineering and architecture studio, Hydro Tec can never disregard the purpose each boat is bought for. "We never design projects without asking the client what kind of use he will make of his boat. It is the first question we ask *what do you want to do with your boat?* This is the starting point, then, together with the client we develop the project".

"Some years ago yachting was simply a lifestyle. The client, the owner, usually reflected the spirit of the boat. Living on board included wearing in a very precise way according to the yachting style - or even spending your holidays following a specific protocol. Today, owners are free to choose their style, because the boat, from being lifestyle, has become a personal experience."

With these words, Sergio Cutolo explains why today the boat has to reflect more than ever the owners' needs and requests - no longer the contrary - , which for engineers, architects and designers means being as flexible and open mind as possible.

"*Crossbow* is a beautiful project, aesthetically speaking. But its main feature is in the high-technology with which it is designed. Our goals was to create a large boat with an attractive design - fast, silent, performing - with the best hydrodynamic system. *Crossbow* in one word!"

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