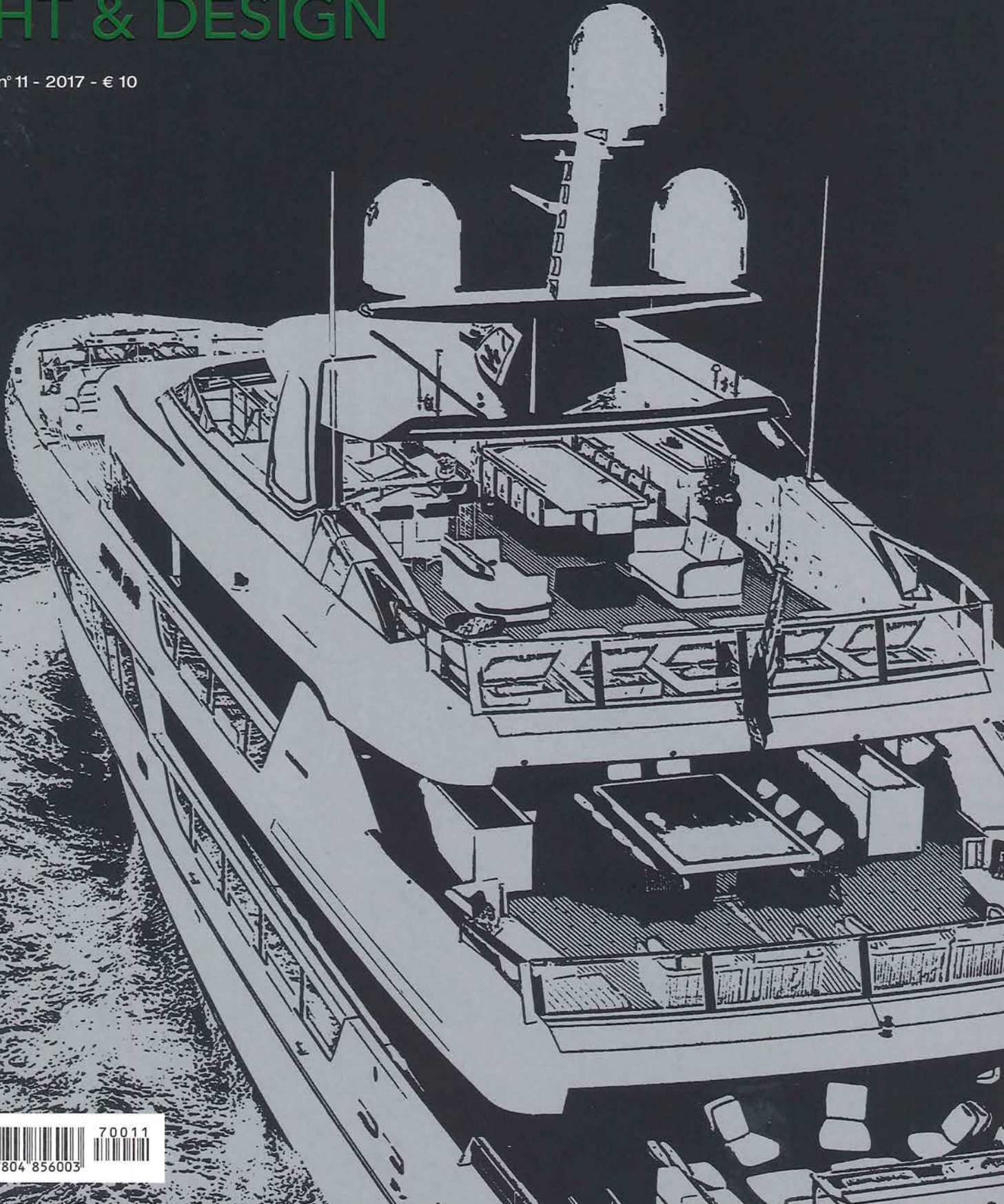


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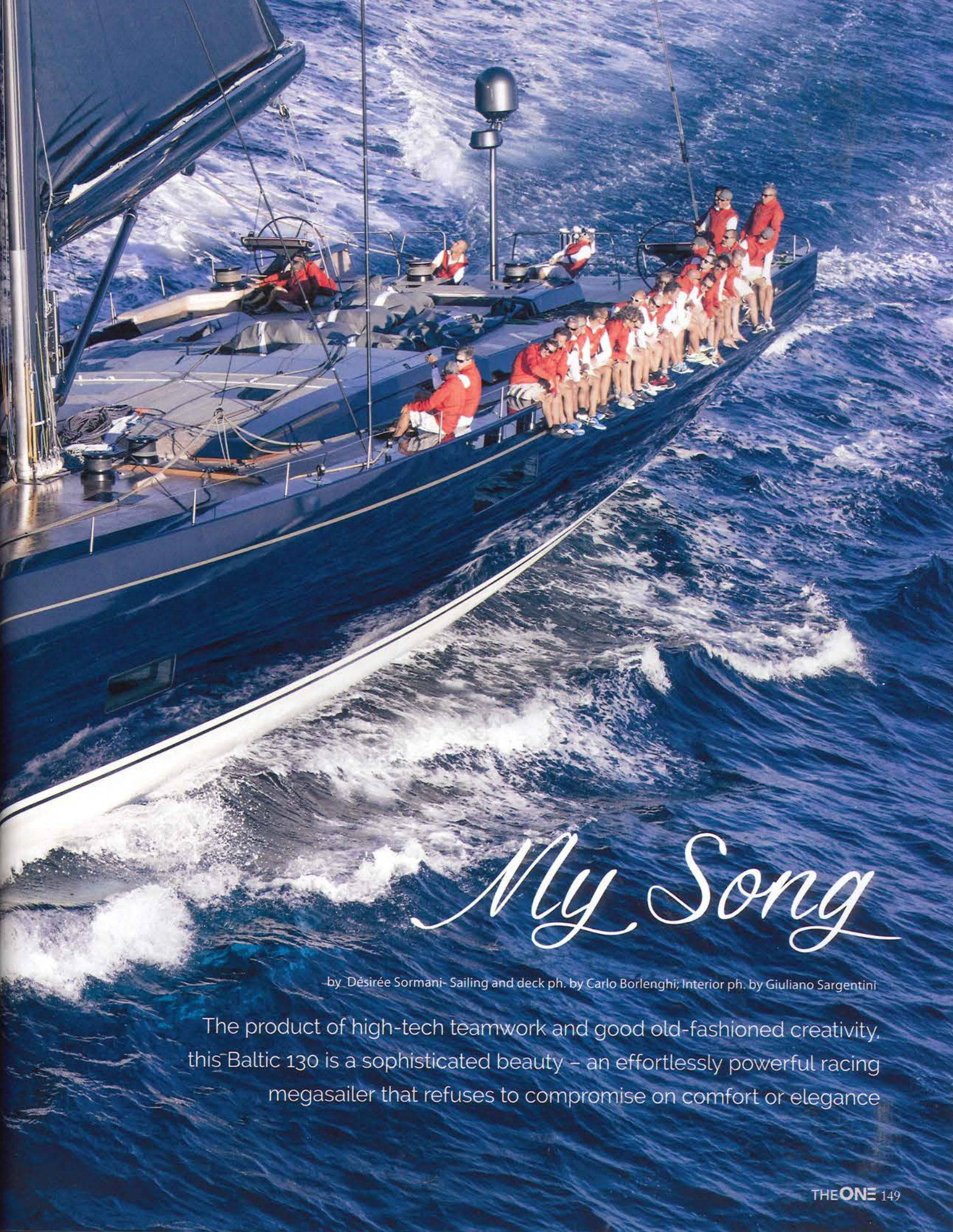


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[MEGAYACHT]





My Song

by Désirée Sormani- Sailing and deck ph. by Carlo Borlenghi; Interior ph. by Giuliano Sargentini

The product of high-tech teamwork and good old-fashioned creativity, this Baltic 130 is a sophisticated beauty – an effortlessly powerful racing megasailer that refuses to compromise on comfort or elegance

*W*e wanted to win but it just didn't happen – it was a very competitive fleet..." The words of My Song's owner after her maiden race in the Loro Piana Superyacht Regatta at Porto Cervo in Sardinia in June. The Baltic 130 finished a very honourable third but, like all thoroughbreds, she requires a little getting to know. "She's challenging and exhilarating. It'll take some time to before we really get the best out of her," adds the expert sailor for whom Nauta Design created the general concept and exterior and interior design of this and his three previous My Song racing sailers, as well as a 47' motor tender. Also on the team this time are San Diego-based performance-oriented naval architects Reichel Pugh flanked

by carbon-fibre experts and all-round construction innovators, Baltic Yachts of Finland with Nigel Ingram of MCM drawing it all together on the project management front.

The owner made it clear from the outset that he would be using his new yacht for a combination of blue-water cruising around the world and occasional superyacht racing. This demanded a clean-slate approach to deliver a blistering racer that was also a cruiser with all the home comforts of a floating villa. Just to start with, a sound-damping layer was added to My Song's race-optimised, high-tech, lightweight carbon-fibre hull. Her deck gear is the stuff of a Maxi 72 supersized for a 130' yet unobtrusive in cruising mode. The clean, uncluttered cockpit is perfect



for sail stowage when racing but also has very comfortable touch-button sun loungers tucked under its decking.

Baltic has produced a hull with an LOA of 40 metres that displaces a feather-light 105 tons. To do so, it adopted a construction technique once popular for racing and multi builds whereby the port and starboard halves of the yacht were laminated as complete "vertical" components. Quite a radical approach for a superyacht but much more accurate and, significantly, faster to finish too.

Carbon and Nomex composites were used almost everywhere from the bulkheads to the deck and all the doors and surfaces in the interiors.

Another radical new feature is the Retractable Propulsion System (RPS). When it is in stowed position, the hull is completely flush, optimising speed and manoeuvrability – a particular plus in competition. Also a sophisticated laminate schedule for the carbon keel trunk guarantees the yacht will cope with running aground regardless of the position of the tapered keel fin. Speaking of which, My Song's lifting keel varies

her draft between 4.8 and 7 metres. She thus has an impressive righting moment for blistering speed in competition. A raised bulwark around the gunwale has yielded a cleaner profile, with a sleeker coachroof that disappears behind the bulwark top. Freeing ports in the bulwark and topsides not only act as scuppers but also allow an abundance of natural light into the deck saloon.

Nauta has also pulled out all the stops in the interior, producing a warm, elegant, contemporary look. Dominant warm tones are matched with leitmotif white-lacquered laminated linen fibres resulting in a timeless, nautical ambience. All of the furnishings are bespoke-designed.

Light pours into the saloon from numerous skylights enhancing its low-key but inviting maritime aesthetic. The owner's quarters forward includes an office that can convert into an extra guest cabins, as well as two separate bathrooms. My Song's guests will be accommodated in two cabins aft of the saloon, both en suite twins.

www.balticyachts.fi



My Song in racing trim. The need to meld uncompromising performance and absolute comfort meant the design and build took more than two years. Every single component was reviewed to deliver the 105,000 kg displacement target without impinging on comfort or amenities.

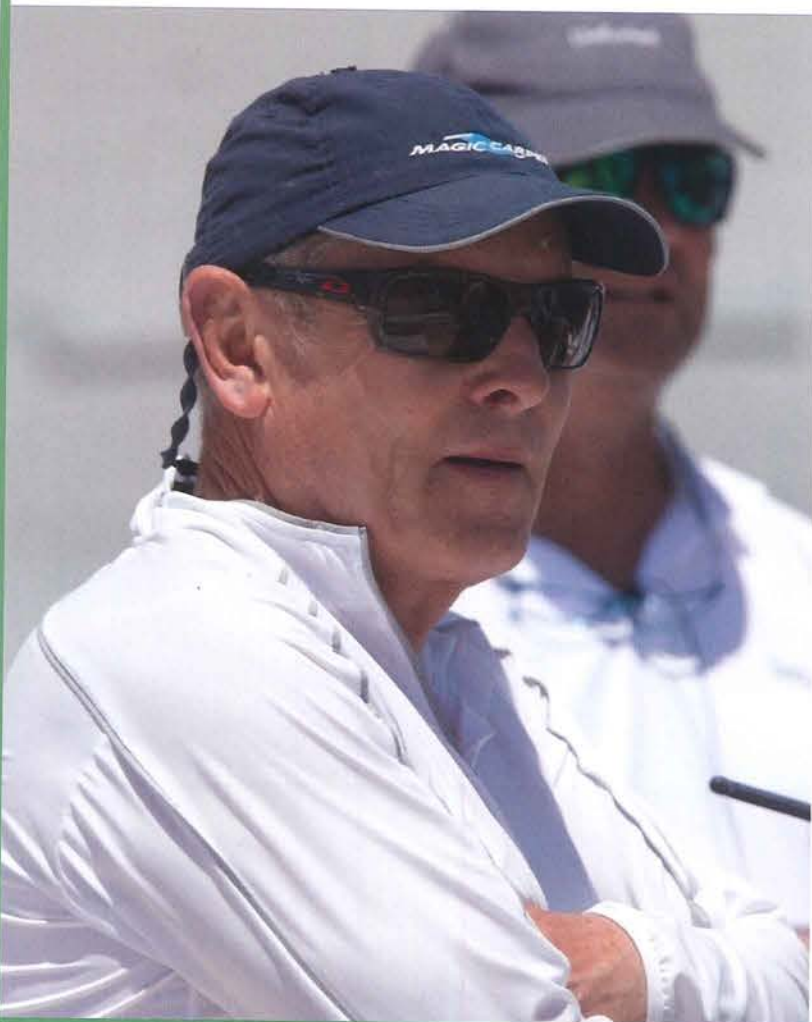
Left, the expansive deck is arranged to optimise the crew's work in racing trim and provide ample leisure space for guests while cruising



The elegant interiors have a warm, clean nautical aesthetic. Ceilings and floors, made in pure linen fabric laminated with resin, are dark and beautifully contrasting with the composite built, wood veneered and white lacquered vertical surfaces and bulkheads. Big comfortable sofas draw guests together and create an atmosphere of relaxed conviviality.



Reichel Pugh



Jim Pugh, left, and John Reichel, right, founders of the San Diego-based studio behind My Song's naval architecture. Opposite, top, a wide stern is a signature of modern high-performance racing yachts and My Song continues that trend

This latest My Song is significantly larger than the owner's previous yacht with a more modern hull shape. The use of composite materials throughout the interior has saved weight. The wide beam offers increased interior volume, but also adds significant form stability, which allows the keel bulb to be lighter, an advantage in the light to moderate conditions often found in the Mediterranean.

My Song's modern hull shape evolved from those employed in grand prix maxi racing yachts, and an extensive computational fluid dynamics (CFD) study comprising nine candidate hulls and multiple appendage configurations. This study determined the final length of 39.62m and optimised the keel fin shape. The keel fin is tapered in chord as well as thickness over its full span, providing a more efficient lifting surface and reducing both wetted surface and fin weight.

The modern sail plan has a conventional pinhead main for

cruising and a grand prix style square-top shape mainsail racing. The result is a marked increase in performance and the team predicts an average speed of 16.5 knots, increasing to 27-29 knots when planing downwind.

Lightweight materials had a large impact throughout the design. The early design process is iterative and there may be multiple design 'loops' as the end result is refined. For example, using lightweight materials in the interior and hull construction reduces displacement, which means the yacht is powered more easily, and in turn the sail plan can be reduced, which decreases the sail handling loads. So, without the need for so much sail area, the structural foundations and the ballast can be lighter, which means the overall displacement is less. This means the hull form can be adjusted to reduce wetted surface, and so the process repeats itself.

Each 'loop' through this design spiral, as it is known, yields

performance gains and the end result is an optimum hull shape. This is how the choice of materials can influence both performance and hull shape at once.

My Song, like most contemporary superyacht projects, was a collaboration between many groups. On the design side, Reichel Pugh was responsible for the naval architecture and the structural engineering. For structural engineering Finite Element Analysis is a crucial tool for global laminate design, and particularly for projects of this size. Reichel Pugh engineers used Altair Hyperworks to model the entire structure and analyze the deflection to ensure the target stiffness for this yacht would be met. Leveraging a co-located naval architecture and engineering team enabled development of real time structural and ergonomic design solutions and allowed a shared Baltic and Nauta a detailed weight study as the project progressed.

The Reichel Pugh design and engineering team had daily communications with the Baltic build team and weekly scheduled skype calls with Baltic, Nauta Yachts and MCM project manager Nigel Ingram. Scheduled team meetings were also held at Baltic Yachts. Reichel Pugh engineers had thousands of hours invested in engineering producing state of the art drawings who also combined Gurit Engineering into the project to help maintain the tight drawing delivery schedule.

In all, this project has been an incredibly rewarding build for the Reichel Pugh team. It required several years of work and there were some challenges along the way, but we are proud to have contributed to such a superb yacht. By utilizing the combined expertise of all parties involved, this team has truly launched a prime example of what the state-of-the-art hybrid luxury superyacht looks like today.





The design philosophy behind this fourth craft hasn't changed but the present My Song is an important technical and stylistic evolution of her predecessors' DNA: a successful combination of top performance and classy, elegant styling.

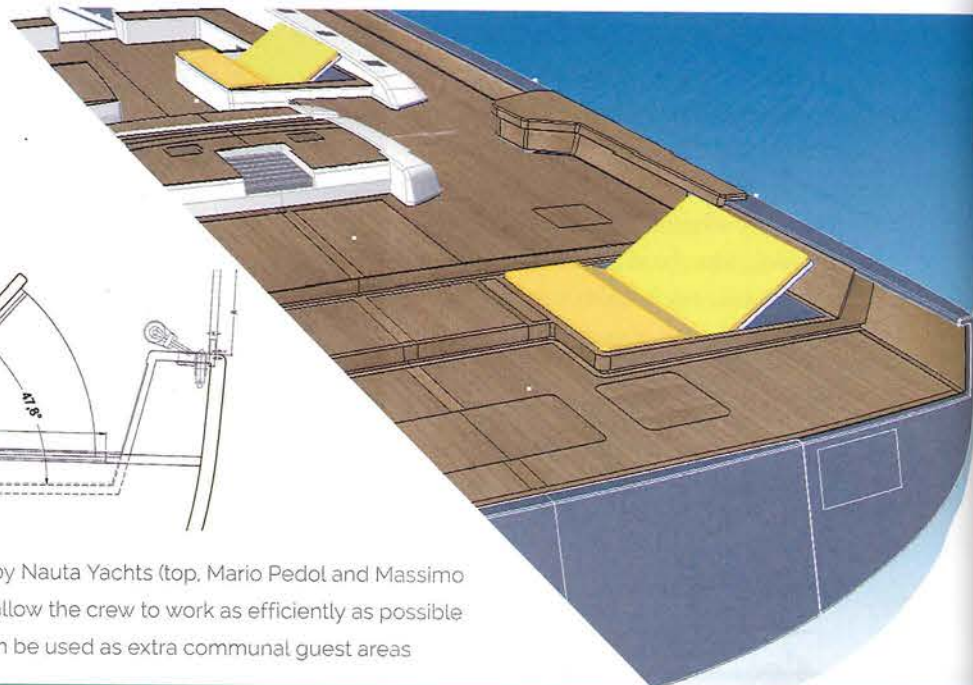
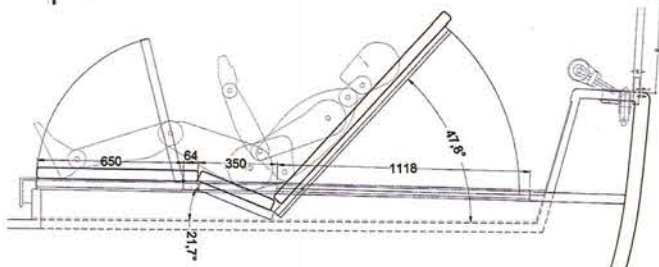
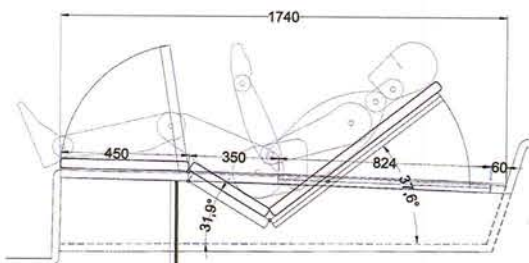
My Song's cocktail of performance, elegance, comfort and functionality is what defines her. Lightweight construction is combined, of course, with a determination to set a new benchmark in terms of uncompromising comfort. The exterior look is defined by a very modern, sleek line where the coachroof profile is low slung and almost hidden by 30 cm high gunwales which double as footholds when heeling. When cruising, they provide additional seating with the handrails acting as backrests. The boat has very elegant interiors, for instance, and also has a deck that is ideal for quality cruising.

We worked very closely with the owner on the interiors and, as always, it was a hugely stimulating and interesting experience. Having an owner who is a genuine enthusiast as well as a master of elegance is really striking it lucky.

He wanted a warm, inviting look that was also frill-free, clean and, most importantly, elegant.

We feel we definitely delivered on that because we designed elegant interiors functional to life aboard a boat that really does sail.

One significant innovation was the décor materials. We used completely original, customised solutions, some



Both My Song's interiors and exteriors were designed by Nauta Yachts (top, Mario Pedol and Massimo Gino). The deck is extremely clean and uncluttered to allow the crew to work as efficiently as possible when racing. In cruising trim, both cockpit and stern can be used as extra communal guest areas

inspired by the owner's ingenious ideas. The floors, ceilings, some of the bulkheads and surfaces (the work top in the galley peninsula) were made by laminating resin and linen fibres. It took hundreds of tests to get the right ratio of resin and linen to produce a finished product that would have the mechanical characteristics the yard needed and also the colours and finish the owner wanted. The result is a palette of colours obtained by using different linen fibres, types of resin and ratios of linen to resin in the mix.

The linen-resin material is flanked by mahogany inserts in various interior décor elements (such as the floor) and also on deck too. The whole process was fascinating – a gift from the owner.



Henry Hawkins, Baltic Ceo



The owner was looking for a lighter, stiffer, faster but also very quiet new boat.

My Song took 22 months to build and was launched on time and to budget despite design changes and a new propulsion system: 32,000m² of carbon cloth was used - the equivalent of 123 tennis courts!

Although she has over 30 km of cabling and 15 m² of specialist toughened glass in her skylights and portholes, My Song's displacement is a just 105 tons, remarkable for a yacht of her length and complexity. The hull lamination was very challenging due to the raised bulwark and a big cut-out for the freeing port in the highly-loaded midship section. My Song features Baltic Yachts' latest Retractable Propulsion System (RPS) which not only leaves the hull entirely flush when the propeller is retracted, but also acts as a stern thruster as the highly-efficient forward-facing, pull propeller unit can be turned through 90 degrees, port or starboard.

Her competition-style tapered keel fin reduces wetted surface area, provides better lift, speed and manoeuvrability.

We also developed an under-deck carbon sail storage drum controlled by a hand-held remote for faster, safer deployment of the yacht's 1300m² asymmetric sail. All sails are by North. Baltic 130 My Song's all-carbon rig Southern Spars can set a pinhead main for cruising or a square top for more sail area for racing.

We also developed laminated linen for use in floorboards, overhead panels and wall panels for durability and aesthetic reasons.

My Song demonstrates that we can and will fulfil clients' requests and overcome any obstacle to achieve those goals.

Below the waterline: My Song sports Baltic Yachts' latest Retractable Propulsion System (RPS)

