

pedigreed for performance, design, and engineering



60-METER HIGH-PERFORMANCE CRUISER



Donald L. Blount and Associates



Mills Design



Redman Whiteley Dixon

Mills Design, Redman Whiteley Dixon, and Donald L. Blount and Associates are pleased to present a design for a high-performance 60-meter sailing yacht. Driven by performance, the design focuses on the discriminating yachtsman who truly enjoys the feel of a performance-oriented yacht without sacrificing the yachting lifestyle and accommodations appropriate for the owner and eight guests aboard a state-of-the-art superyacht.

Design Overview

The HPC60 design thesis was formed by observations of what is uncommon in the realm of large sailing yachts. A number of sailing yachts provide accommodations for owner and 8 guests but lack the high level of performance that some owners desire. Further, the sailing experience itself is muted on many large sailing yachts by the cockpit arrangements. The intent became clear: to develop a yacht with a cockpit arrangement that provides the very best sailing experience and accommodations typical of a more moderate performance yacht in the 45-50 meter range, and to then allow the length to grow around that arrangement until a desirable performance level is achieved.



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Mills Design is a performance yacht design firm headed by Mark Mills. Since the firm opened in 1995, it has enjoyed continuing success, particularly under the IRC rule, where its boats, both custom and production, have achieved racing victories all over the world. In 2009, Mills Design yachts have been National IRC Champions in four different countries. The firm continues to be involved in increasingly larger projects both for racing and cruising, and has established a worldwide base of partners and contacts to draw on for cross-disciplinary skills as applied to competitive and cruising projects.

For the HPC60, Mills sought out the acclaimed studio of Redman Whiteley Dixon to design the interior, and approached Donald L. Blount and Associates to take advantage of their experience in large-scale marine-engineering and production-engineering projects.

Since it was founded in 1993, the design studio of **Redman Whiteley Dixon** has expanded from its roots in the design of sailing yacht interiors, and has gathered international acclaim as one of the world's foremost design firms, specializing in interior and exterior design and styling of both sailing yachts and motor yachts. For more than 15 years, the firm has been responsible for some of the world's most notable yachts and are currently involved with some of the industry's largest projects.

Donald L. Blount and Associates is an internationally-recognized naval architecture, marine engineering, and yacht design firm offering services for the development and construction of state-of-the-art marine craft. Since 1988, the firm has specialized in the design, evaluation, testing, and construction management of motor yachts, custom sport fishing boats, production boats, commercial, military and paramilitary vessels, and regularly develops and directs research programs to extend new technologies that advance maritime applications.



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Performance/Sail Plan/Particulars

The high performance levels expected of this design moved us toward parameters more often associated with Maxi racing yachts than conventional superyachts. The significant sail plan, deep lifting keel, large bulb size, and slim long hull shape are directly derived from our racing design experience, and are all geared to produce the most rewarding performance possible for a yacht of such comprehensive specification.

After preliminary weight estimates established the target displacement and required hull volume for the interior, a range of length/beam options were examined before selecting the combination of increased length and reduced beam to produce the highest ultimate performance. A slippery hull shape was developed using America's Cup CFD resources to exhibit reduced upright drag, using the flying plumb bow and powerful stern sections to maximize sailing length when heeled.

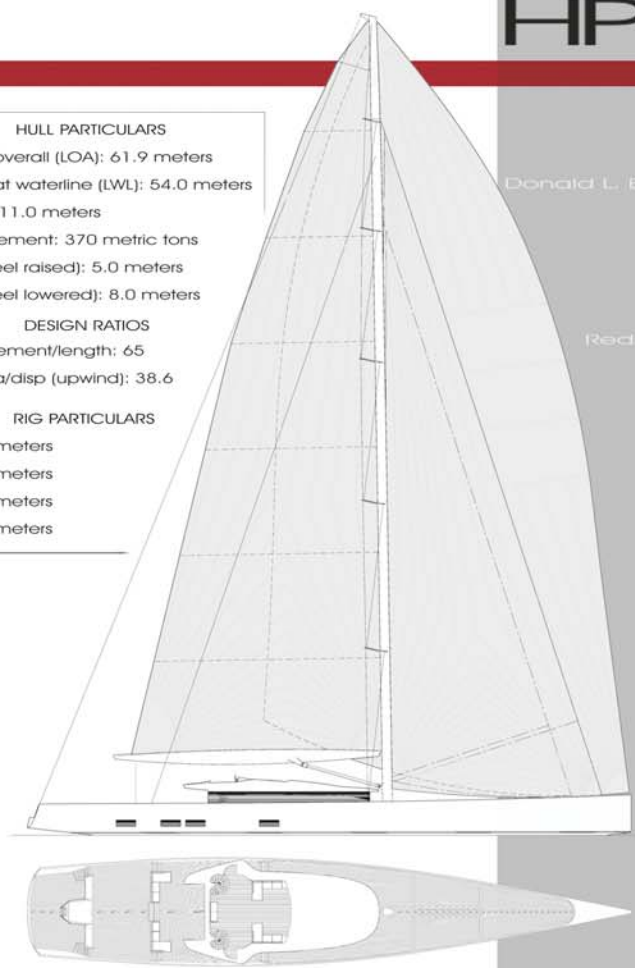
With the emphasis firmly on the experience of sailing, the basic relationship of stability and rig size had to be integrated with keel and rudder planforms and sizes, location, and configuration. Ensuring that such a large yacht is a pleasure to sail, as well as being fast and seaworthy, relies on these relationships being in harmony. Her innate stability is augmented by the high ballast ratio, enabling the design to stand up to the large sloop rig for sparkling performance in the lightest of conditions.

The size of this sail plan led us to develop the simple swept spreader configuration with non-overlapping jibs and masthead spinnakers to cover the full range of competition requirements to controllable ocean passagemaking. The reduced weight and high modulus properties of the carbon mast and standing rigging contribute significantly to performance, without compromising its suitability offshore. anned yacht to meet the highest of demands.

HULL PARTICULARS	
length overall (LOA):	61.9 meters
length at waterline (LWL):	54.0 meters
beam:	11.0 meters
displacement:	370 metric tons
draft (keel raised):	5.0 meters
draft (keel lowered):	8.0 meters

DESIGN RATIOS	
displacement/length:	65
sail area/disp (upwind):	38.6

RIG PARTICULARS	
I:	70.0 meters
J:	21.5 meters
P:	74.6 meters
E:	25.6 meters



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Exterior Styling

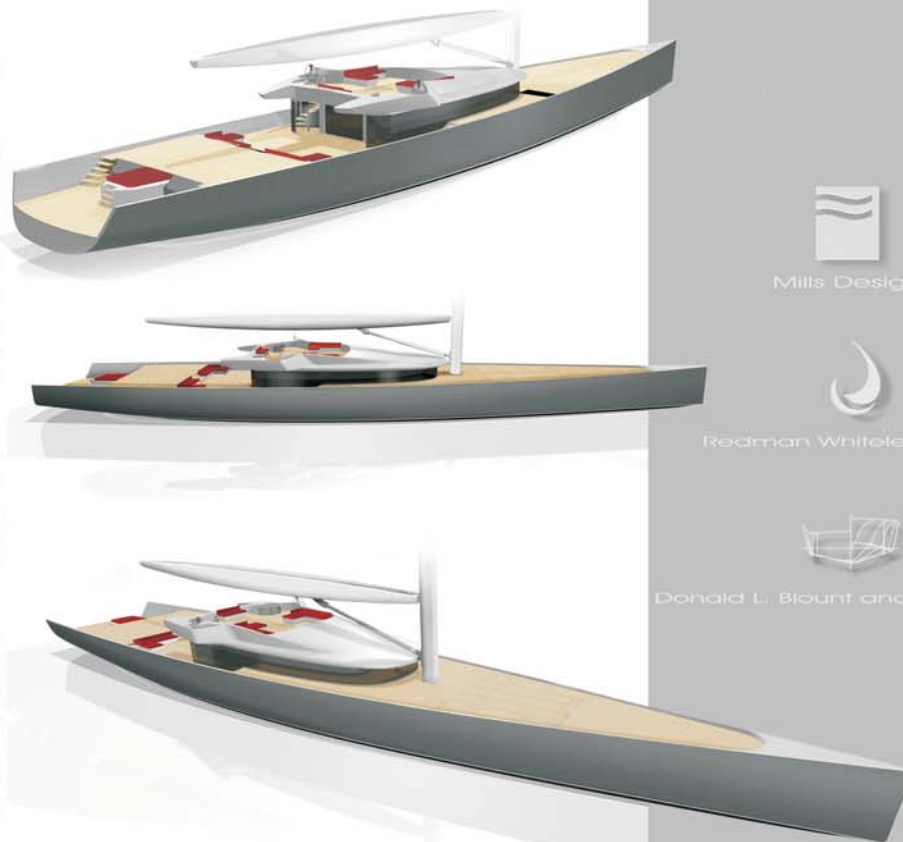
Three main features drive the arrangement and styling of the HPC60's exterior: an optimal helm position, a stern beach deck, and uncluttered exterior spaces.

As a true performance sailing yacht, the experience of sailing was held paramount, and the importance of visibility from the helm was emphasized. With the flybridge overhangs extending almost to the yacht's maximum beam, the unique port and starboard helm positions offer superior visibility over traditional cockpit layouts.

Relaxing, sunbathing, swimming, and boarding a tender are all impacted by the arrangement of the stern. The beach deck of the HPC60 was designed to facilitate these yacht-lifestyle activities without compromising the overall performance goals. In adhering to stringent weight management required in the development of a high-performance yacht, the beach deck provides a large and low water-access area without relying on hydraulically-lowering platforms, doors, or other heavy mechanisms.

Contemporary styling and ease of accessibility drive the theme of the exterior spaces. Large expanses of uncluttered teak with port and starboard stairways between every exterior level allow for easy access to any area of the exterior decks. Minimalistic furniture and sunpads have been integrally designed into the architecture of the exterior, while stowable furniture that can be hidden when not in use allows for a clean and ultimately user-defined exterior arrangement.

Beyond the yacht's signature features, the accoutrements expected of a state-of-the-art vessel have not been ignored. An inconspicuous spa is located on the beach deck, obscured by the sunpad. Flush hatches in the foredeck conceal two 5-meter inflatable tenders. A large dining area is located on the main deck exterior immediately aft of the house, and can be either exposed to the sun or shaded by a retractable awning that spans the flybridge overhangs. Port and Starboard stairways provide access to the flybridge, where, in addition to the port and starboard helm stations, there are over 40 square meters of space for relaxing and sunbathing.



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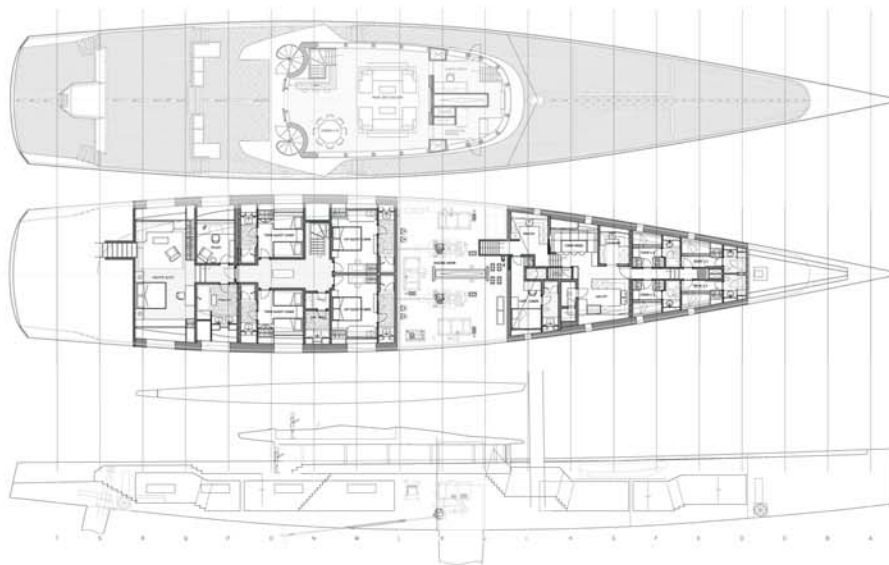
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Interior Design

The general arrangement has been carefully considered to accommodate 8 guests in great comfort, whilst still giving the owners a superb private suite with their own lounging area, a large modern bathroom with wet room, and direct access from the cabin up to a sea terrace and private jacuzzi.

Running seamlessly from the exterior lounging areas through glass doors into an atrium of light, is the main living space. This saloon has apartment-sized sofas which can be moved into different configurations. The bar and dining areas are served by crew accommodations separated by discrete sliding panels. The crew of 10 are well catered for within this arrangement, and with dedicated laundry, excellent galley and pantries which are perfectly placed to cater for all the guests' requirements, this is a professionally-planned yacht to meet the highest of demands.



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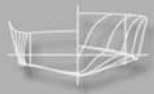
Redman Whiteley Dixon



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HULL PARTICULARS

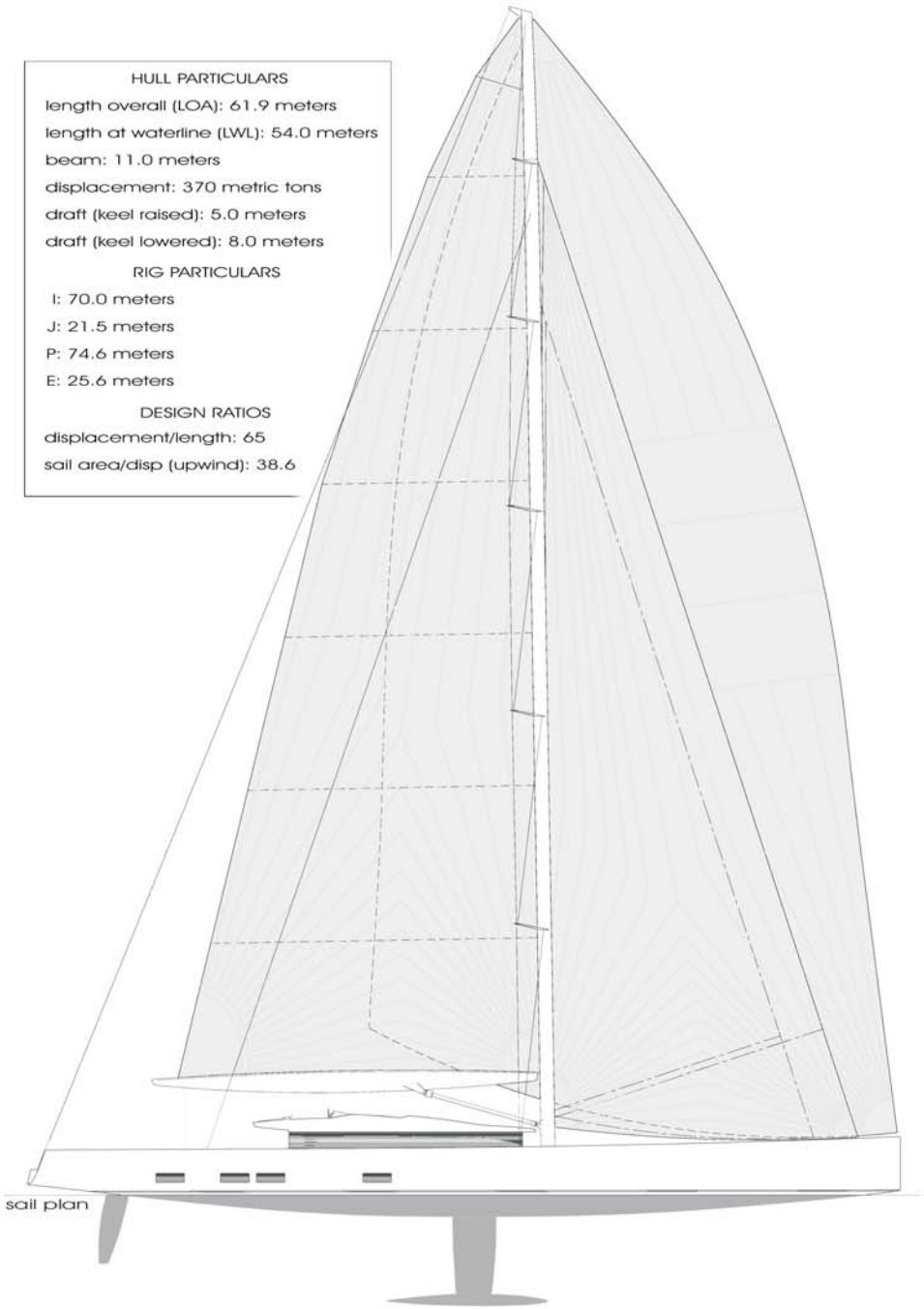
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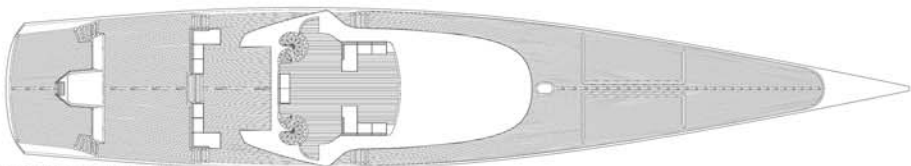
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sail plan



exterior deck plan



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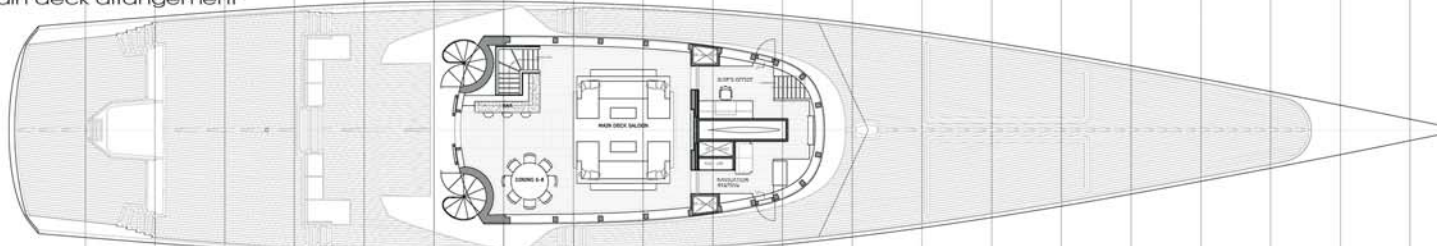


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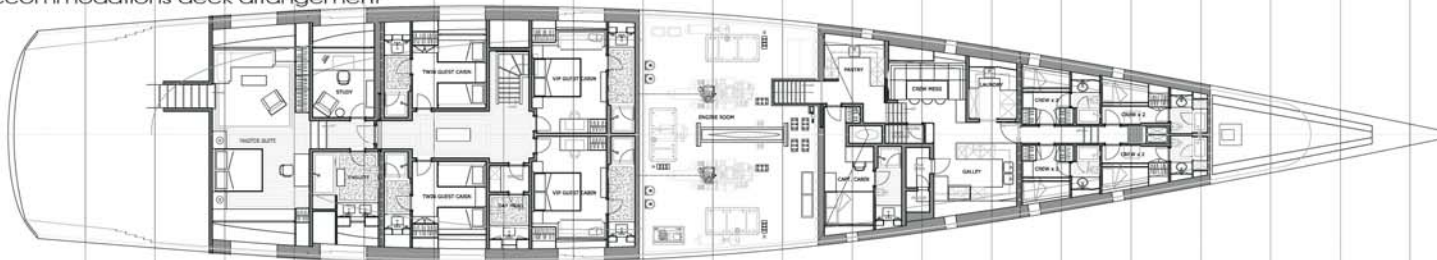
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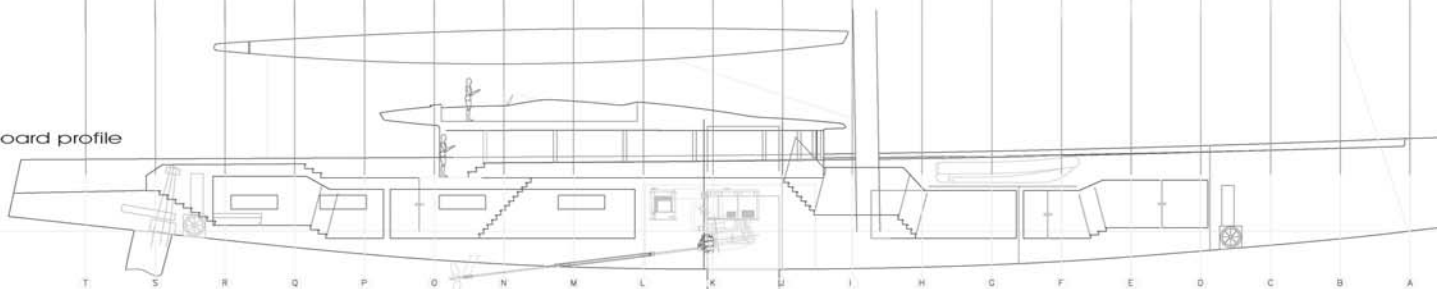
main deck arrangement



accommodations deck arrangement



inboard profile



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