

LEBRETON

SIG
45

IMAGINE A YACHT...

...with the refined responses of a race boat, which responds predictably and sensitively to every command, as if an extension of your own being.

Imagine a yacht, which will effortlessly carry you to the horizon at well over 20 knots.

Imagine a yacht with lines so elegant that it will turn heads in any company.

Now imagine that this yacht has luxurious accommodation for six, a 45m² cockpit free of lines and steps, and can easily be sailed by a couple.

This yacht is the SIG45, a paradigm shift in performance cruising.





SPEED

INNOVATION

GRACE



THE BIRTH OF THE SIG45 CONCEPT

Modern offshore racing multihulls cruise at over 30 knots. Most cruising yachts rarely exceed 10 knots. The SIG45 bridges the gap between these two worlds.

The SIG45 is a unique combination of state-of-the-art racing multihull design, and the elegance, luxury and safety of a cruising yacht.

Our peerless design team includes the architects of the planet's fastest inshore and offshore sailing yachts, a superyacht designer, and a multiple world sailing record holder.

Our yachts are crafted by hand using racing boat materials and superyacht attention to detail.



SHORT-HANDED SAILING

Short-handed sailing is a pleasure thanks to the intuitive, ergonomic deck layout. The simple, but state-of-

the-art, sail handling systems were refined on singlehanded race boats.



EFFORTLESS PERFORMANCE

Easy speed translates to an extended
cruising range.

Or half the time to your favourite
anchorage.



ACCELERATION, EXHILARATION

The deck layout will satisfy the most demanding racing crews.

Blade like hulls give an astonishingly smooth, dry ride.



A SPACIOUS AND WELCOMING INTERIOR

The innovative layout of the SIG45 provides a startlingly comfortable interior, with generous accommodation for six in three double cabins.

Large windows provide expansive views and flood the accommodation with natural light.

Accommodation arranged across two separate hulls provides unprecedented privacy for a 45ft yacht.



PORT OWNER'S HULL

Large galley, saloon, aft master cabin and spacious heads.



STARBOARD HULL

Navigation and off-watch cabin,
two double cabins and large heads.



VAST OPEN COCKPIT

Cockpit and interior are connected by gullwing windows.



Expansive open cockpit free of lines and trip hazards for entertaining and relaxing.



An adjustable carbon hard top
bimini can provide welcome shade
and protection in hot climates.

A lightweight windscreen protects al
fresco diners from the breeze.

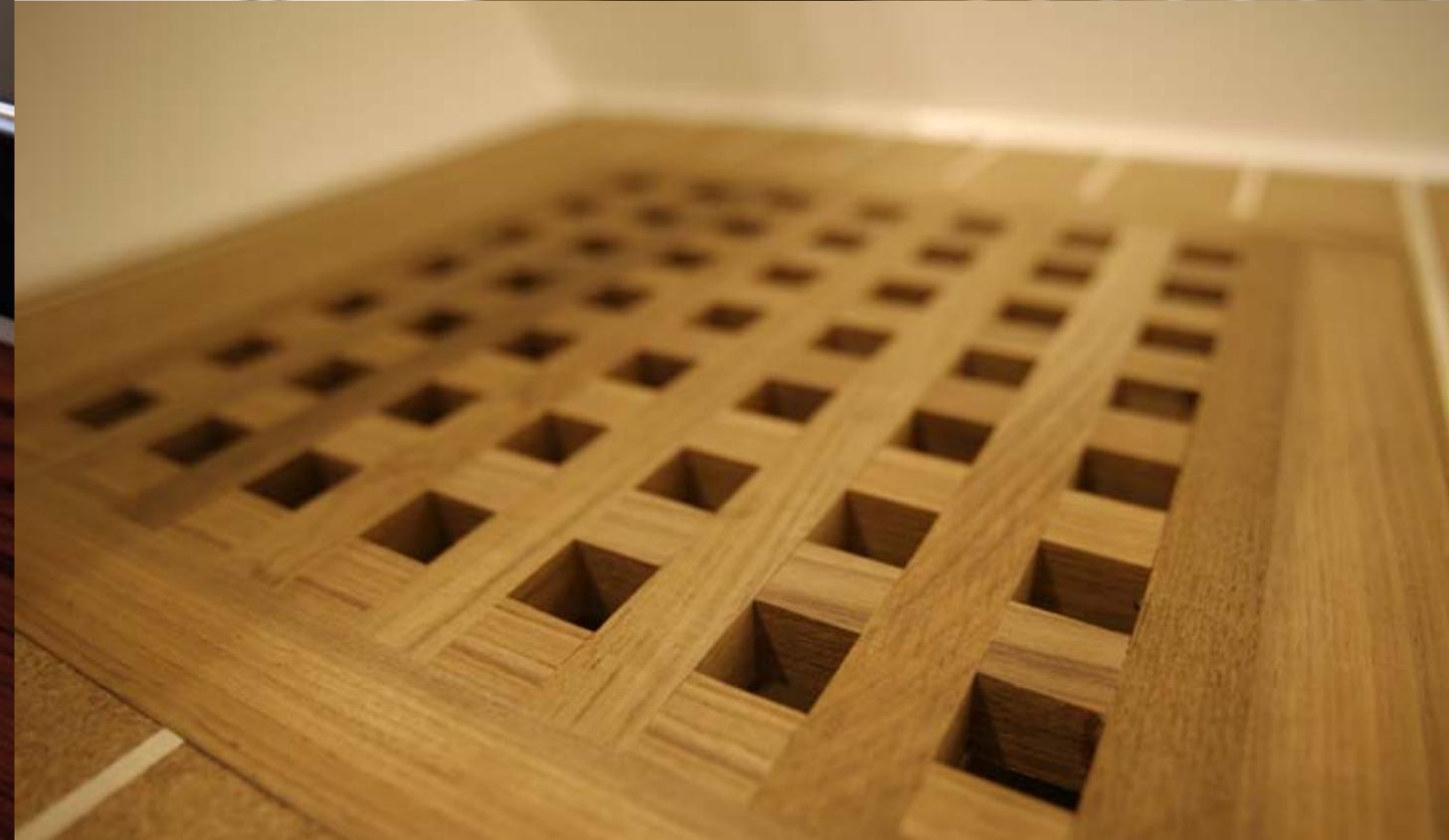




21ST CENTURY MATERIALS WITH A HUMAN TOUCH

The SIG45 is hand built by skilled craftsmen, using the best available modern materials. Our experienced boat builders have a wide range of experience, from all out racing machines to luxury cruising boats. This allows the SIG45 to combine race boat quality lamination with high levels of interior finishing and systems.

The SIG45 has a highly optimised carbon fibre and epoxy resin structure, giving it remarkable stiffness. Carbon with epoxy resin has nearly ten times the tensile strength of glass and polyester resin. This translates to a strong, stiff and safe platform, which converts the power harnessed by sails directly into speed.



THE DESIGN TEAM

The thousands of hours spent on the design of the SIG45 are only the tip of the iceberg. Le Breton Yachts has assembled a phenomenally talented team with vast experience to draw upon.

Van Peteghem Lauriot Prevost (VPLP) is the world's foremost multihull

design firm, responsible for yachts ranging from offshore racing trimarans to luxury custom cruising catamarans, and most recently, BMW Oracle's giant America's Cup winning multihull. VPLP designe boats currently hold the round-the-world, transatlantic, 24 hour and 500m world records.

Award-winning designer Bjorn Johansson has created interiors and exteriors for yachts ranging from sailing catamarans to 85m superyachts. Bjorn has created an inviting and remarkably spacious interior with a touch of superyacht glamour.

Legendary sailor Bruno Peyron is a three time holder of the round-the-world record, most recently aboard his mega-cat Orange 2. As the technical consultant for the project, he focussed on the rig and deck layout.

Photo credit: Benoit Stichelbaut



INNOVATION AND METICULOUS ATTENTION TO DETAIL

RACE BRED DESIGN

The slender hulls of the SIG45 are derived directly from the 60ft racing trimaran Groupama 2, winner of the 2006 ORMA Championship, and 2007 Transat Jacques Vabres.

The relationship between the two boats is most evident in their distinctive, low drag, concave profile bows. Main beam clearance is 1.4m above waterline, making slamming extremely rare. These features result in an extremely

easily driven yacht, with an astonishingly smooth motion more akin to a much larger vessel.

The adjustable high-aspect daggerboards, drawing 2.6m when down, yield excellent upwind performance and low drag. The rudders are slightly oversized, providing fantastic control in a range of conditions. The section of the rudders originates from the ama rudders of an ORMA60.







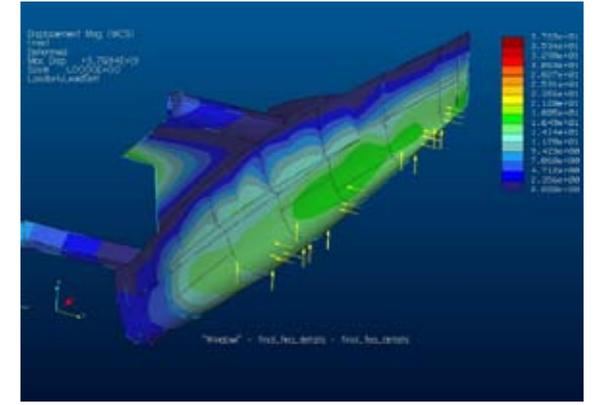
Rotating carbon mast provides optimum aerofoil shape for fully battened mainsail.



Sails can be automatically released by an anti-capsize device, should pitch or heel thresholds be exceeded.



Sheet winches and navigation instruments (including autopilot) are within easy reach of the helmsman).



The latest computer simulation tools, including Finite Element Analysis (FEA), were used to optimise the balance of weight and strength of the SIG45's structure.



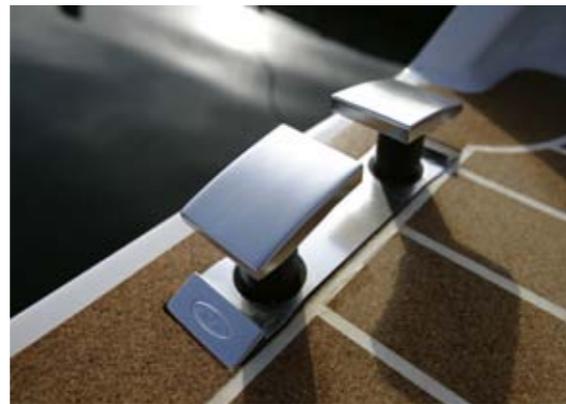
All furling, reefing and mast rotation lines and halyards are led to the mast base. No lines run across the decks, making for a safe environment for non-sailing guests.



Easy access to storage and autopilot via bathing platform.



Finger light steering thanks to self-aligning bearings and direct linkage.



High quality deck hardware throughout.

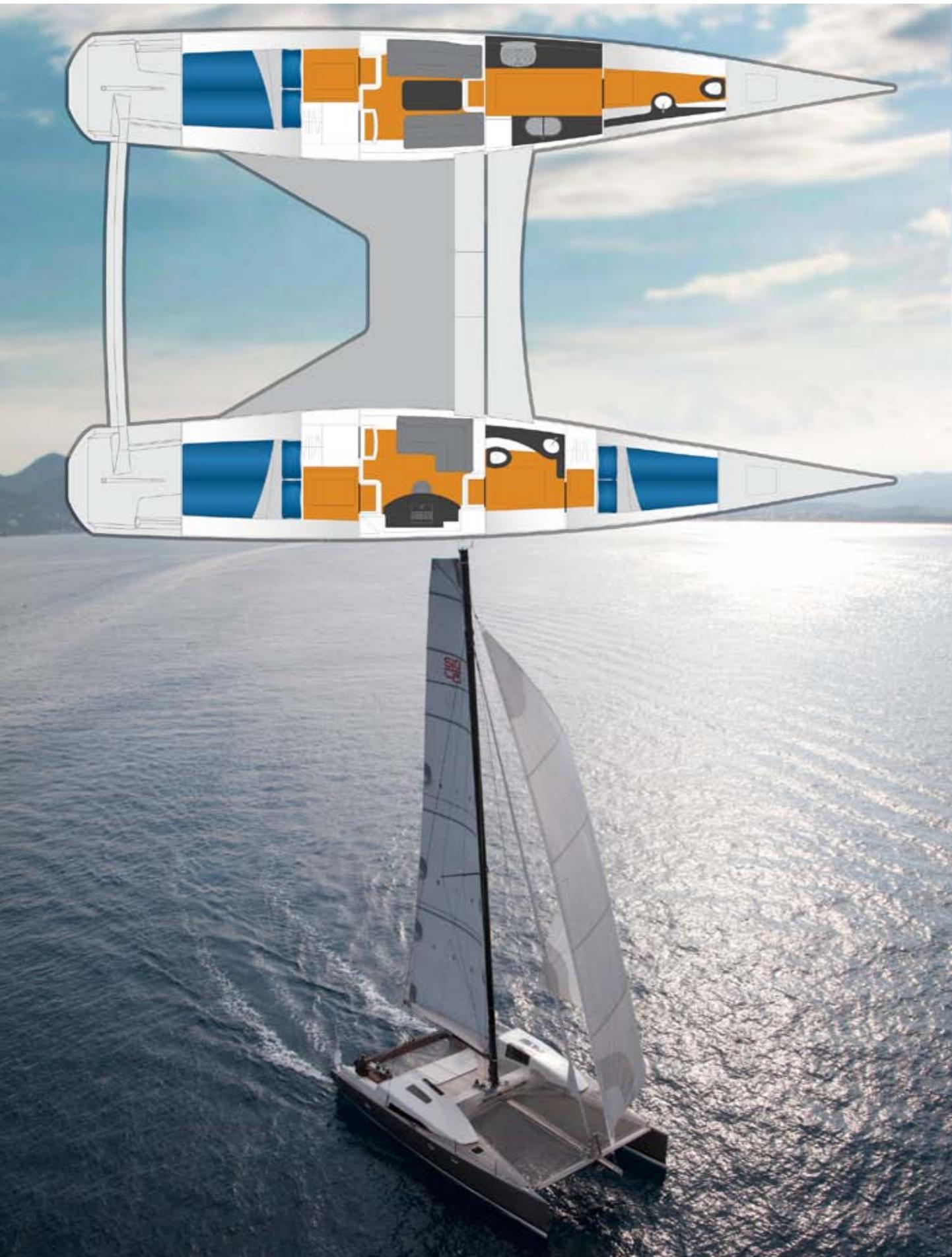


SAIL PLAN

The modern sail plan benefits from VPLP's years of experience with high performance multihulls, including ORMA60s and round the world race boats. The highly efficient design makes the boat fast in light or heavy air, with a versatile ORMA60/ IACC style high aspect flat-top main, self-tacking jib, staysail, reacher, upwind

Code 0 and masthead asymmetric spinnaker. Headsails are on roller furlers leading to the base of the mast.





SIG45 OD SPECIFICATIONS

LOA	13.7 m*	45 ft
LWL	13.7 m	45 ft
Beam	8.4 m	27 ft 6 in
Displacement race	4.8 tonnes	10500 lb
Displacement cruise	5.5 tonnes	12000 lb
Mast height (above DWL)	23 m	75 ft 6 in
Mast area	9 m ²	100 sqft
Mainsail	94 m ²	1010 sqft
Selftacking jib	40 m ²	430 sqft
Gennaker	105 m ²	1130 sqft
Asymmetric spinnaker	140 m ²	1500 sqft
Draft (boards down)	2.75 m	9 ft
Rudder Draft (ie. boards up)	1.15 m	4 ft

Propulsion

2 x 29hp Yanmar diesel or optional diesel electric hybrid (2x 20hp electric motors + 14kW generator)

* 14.2/46.5ft including bowsprit

Le Breton Yachts reserves the right to make changes to details and specifications.

Outputs of the velocity prediction programme are estimates and are subject to a margin of error.

EXPANDING THE SIG RANGE

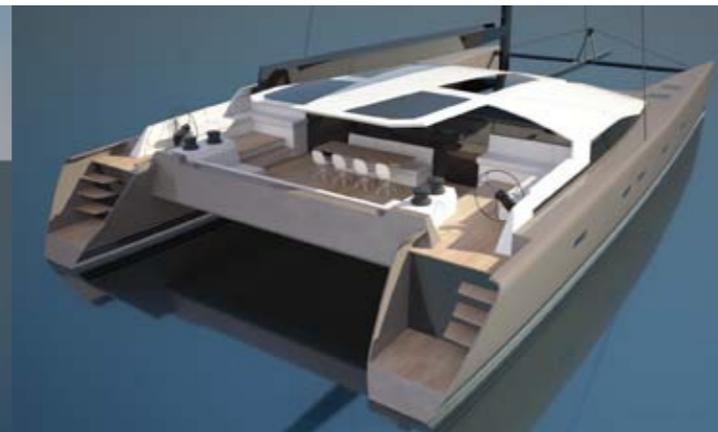
Le Breton Yachts is currently developing two new models: the SIG60 and the SIG80. Designed by Le Breton Yachts, in collaboration with Adam Voorhees and VPLP, these new yachts combine stunning lines with VPLP's legendary naval architecture. These vessels are both high performance sailing yachts, and offer genuine blue water cruising amenities and comfort.

They boast the same elegance as the SIG45, and many of its innovative fea-

tures, such as dedicated steering cockpits with high protective coamings.

The SIG60 is designed to be sailed short-handed. To maximise safety at sea, all lines are brought back to the cockpit – it is no longer necessary for the crew to venture forward of the mast in inclement conditions to reef.

The SIG80 will be a spectacular sailing yacht, with vast accommodation, and the capacity to sail at speeds exceeding 30knots.



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ENVIRONMENT

Le Breton Yachts takes its responsibilities to the environment seriously, seeking to minimise its impacts wherever possible. For example;

- Any wood used in construction is from certified sources.
- Carbon's strength means that less material is used, and pre-preg materials release very few emissions to the environment and minimise the use of resin*.
- LED lighting uses as little as 10% of the energy of a conventional halogen light, meaning less battery charging and less CO₂.

- The SIG45 is offered with an optional diesel electric hybrid propulsion system, which reduces noise and CO₂ emissions.
- Light displacement leads to small, highly efficient engines. Excellent light wind performance enables sailing when other boats are forced to motor.
- Finally, the SIG45 reaches speeds under sail more normally expected of powerboats, without any CO₂ emissions.

*UK based research institute BRE found that vacuum-bagged pre-preg carbon fibre on a foam core had the least environmental impact of the composite materials studied.

THE COMPANY

The foundations of Le Breton Yachts are a passion for sailing, and integrity. The vision of the company is to combine the incredible advances in

ocean-racing multihulls with modern design, to create very fast and beautiful, but above all, fun, safe and usable yachts.





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