

## **BALTIC 175 PINK GIN**

## CARBON SUPER-SLOOP IS WORLD'S LARGEST

The largest carbon fibre custom-built sloop in the world was launched on time recently by Baltic Yachts following a complex build programme taking carbon composite superyacht building to a new level of accuracy.

Intended primarily for world cruising, this spectacular, silver-hulled 53.90m/175ft yacht blends the past with the present, featuring a straight stem and counter stern above the water and a torpedo-style lifting bulb keel beneath it. Two topsides openings requiring highly specialised engineering are among many stand-out features.

The project brought together the same design team responsible for Baltic 152 Pink Gin, benefitting from the performance pedigree of naval architects judel/vrolijk & co. and the inventiveness of Design Unlimited for the interior and cockpit ergonomics.

#### STUDY IN INNOVATION AND STYLE

This is the second largest yacht Baltic Yachts has built in its 44-year history and is a perfect example of the company's ability to innovate on a large scale. The engineering required for the hull openings alone was highly complex and was achieved in conjunction with Gurit whose specialist knowledge helped Baltic Yachts build this complex structure.

Baltic 175 Pink Gin is not only a highly specialised carbon composite structure, but is also full of innovative features and

styling detail. With her 67.9m/223ft tall carbon fibre mast, 79-ton keel, which can be lifted in two stages to reduce draft by more than 2.4m/8ft, two fold-out topsides 'balconies', Baltic Yachts' Force Feedback Steering System and stunning accommodation for 10 guests in six cabins, Pink Gin will set new benchmarks in super-sailing.

### HULL AND DECK - THREE INTO ONE WILL GO

The yacht's carbon fibre/Corecell hull was built in three parts for better access during construction, greater accuracy and a quicker build time. Each part was scanned to create a 3D image, which allowed the build team to assemble the hull with millimetre accuracy.

Together with the deck moulding, the carbon shell weighs just 18-tons, a fraction of the yacht's overall displacement of 250 tons

Continuous weight monitoring on eight sets of scales established the hull's precise centre of gravity and buoyancy and every component was checked for its own centre of gravity so that accurate weight distribution could be achieved.

The pre-preg epoxy carbon/Corecell structure with E Glass and Kevlar laid into the outer skin for impact resistance, is so stiff it deflects through just 76mm over its length helping to maintain constant rig loads and enhance performance under sail.





### INNOVATION ON A LARGE SCALE

Car power steering technology has been developed by Baltic Yachts' engineers and Peter Kägi of Esoro, a Swiss specialist engineering company, to provide the helmsman with a better sensation of 'feel' enabling him to experience more effectively how the yacht is responding.

The electronic Force Feedback System mimics loads and movement caused by side forces on the rudder and relays them to the wheel, providing the helmsman with a more realistic sensation of the yacht's behaviour.

The mechanism requires no physical link between the electric rams which move the rudder quadrant and the wheel as the control sensor at the helm position 'talks' to the electric rams wirelessly.

### MAST TALLER THAN A J-CLASS RIG

Baltic 175 Pink Gin's towering, 67.9m carbonfibre mast and in-boom furling system are by Rondal. The mast is designed with five sets of spreaders supported by carbonfibre standing rigging by Carbolink. Upwind sail area measures 1,322m2 and her asymmetric, weighing almost a quarter of a ton, is stowed on a 2.00m diameter underdeck storage drum.

### 79-TON LIFT KEEL

Three hydraulic cylinders are used to lift the 79-ton fin and bulb keel to reduce draught from 7.00m in sailing mode to just under 4.50m enabling the yacht to reach relatively shallow water anchorages.



# A WALK THROUGH PINK GIN'S STUNNING ACCOMMODATION

Stepping aboard Pink Gin is no ordinary experience. She receives her guests via a fold-out platform or balcony opening from an aperture in her silver grey hull topsides.

Once through the sliding glass safety doors, turn left - or forward - to a full width saloon area with a lower dining area to port and relaxation and TV viewing area opposite.

Aft and up to another level, but in the same, vast saloon area, is an upper dining saloon providing a panoramic outboard view. And to port is a baby grand piano positioned carefully to over-look the lower saloon. Further aft it's a small step down to an enormous, double VIP suite.

Carrying on forward past twin guest cabins brings you to the owner's suite. A study, dressing room and full beam head compartment, lined in Baltic Yachts' superlightweight composite white 'bathroom' tiles, flank the main sleeping accommodation where the dominant feature is another topsides balcony.









### ULTIMATE PICTURE WINDOW - TOPSIDES HULL OPENINGS

Living al fresco is no longer restricted to being on deck. At the touch of a button Baltic 175 Pink Gin's owner can access the fresh air and sea as a panel in the topsides is hydraulically opened to create the ultimate picture window and a personal bathing platform, literally adding a new dimension to the owner's suite. A similar arrangement exists on the port side of the main saloon, providing a stunning entry to the yacht's large lobby.

Each door becomes parts of the yacht's load bearing structure through their locking pins and hinges. Finite element analysis was used to ensure class approved engineering.

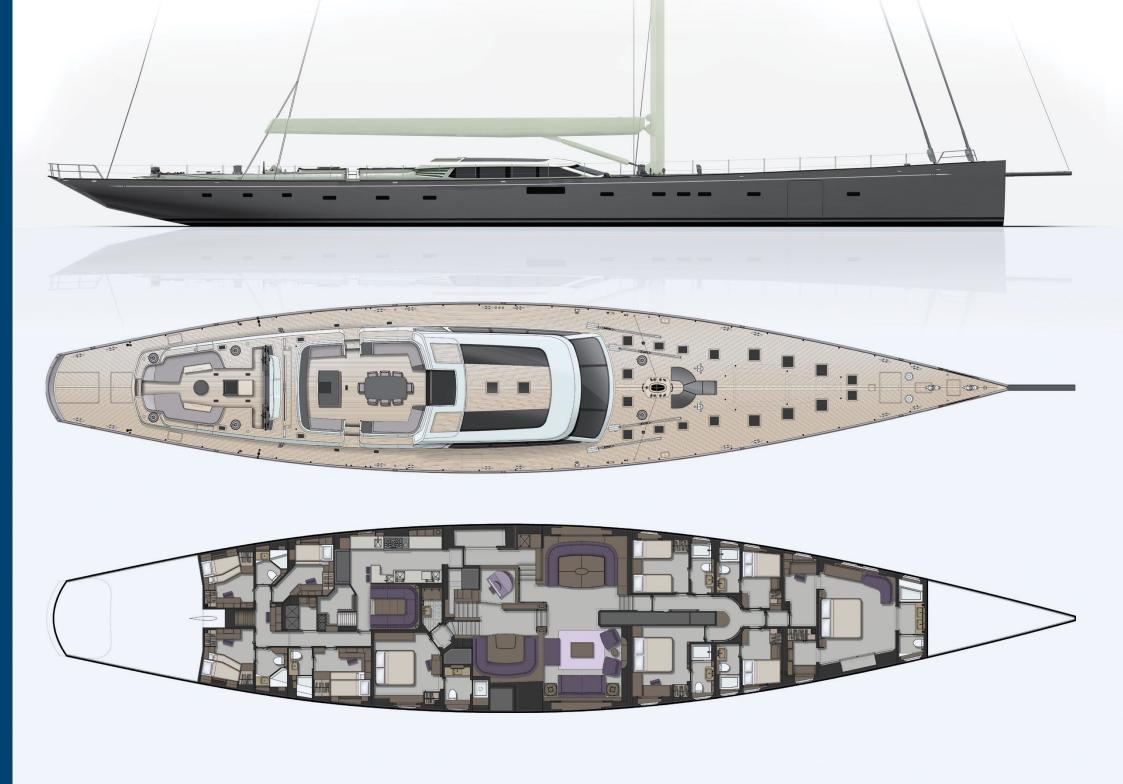
### TAKING DESIGN TO NEW LEVELS

The accommodation's focal point is the deck saloon leading to the owner's suite forward. There's additional sleeping accommodation for 10 guests. Accommodation is designed to meet MLC (Maritime Labour Convention) LY3 standards, which call for high minimum requirements for the 8-man crew.

Design Unlimited's extraordinary treatment above and below decks sets Baltic 175 Pink Gin apart. For Mark Tucker and his team at Design Unlimited the yacht presented an exciting challenge. This is how he describes her:

"Throughout the yacht, surface finishes and textures play an important role with materials used in unusual ways to create a tactile look. An eclectic mixture of stained oak joinery, metallic finishes and sumptuous velvets and leathers create a warm, inclusive ambience, despite the yacht's size. The main feature of the interior is really the attention to detail in everything from the velvet-lined drawers, bespoke carpet and monogrammed clothes hangers, to the subtle differences in each of the bathrooms with their sand cast hand-finished hardware. Everywhere one looks, a new detail is certain to catch the eye.

"Working on Pink Gin has been a great and exciting challenge. The new yacht is not so much an evolution of the previous Pink Gin, but a revolution in design; a superyacht that reflects the personality and passions of the owner," said Mark.



## DIMENSION



L.O.A.	53.90 m
L.W.L.	45.27 m
BEAM	9.55 m
DRAFT	4.50/5.56/7.00 m
LIGHT DISPLACEMENT	250 tons
BALLAST	Approx. 79 tons
I	61.32 m
J	17.55 m
Р	60.515 m
Е	20.455 m

### DESIGN

NAVAL ARCHITECT	judel/vrolijk & co
EXTERIOR DESIGN & STYLING	judel/vroljik & co and Design Unlimited
INTERIOR DESIGN	Design Unlimited
STRUCTURAL ENGINEERING	Gurit
NUMBER OF CABINS	Owner's cabin, 5 guest cabins and 4 crew cabins
CLASSIFICATION	GL + LY3
DELIVERY YEAR	2017

## CONSTRUCTION



HULL	The hull was built in a three-piece female mould with a waterline split. It is laminated in epoxy carbon Sprint/prepreg for the inner skin and E-glass and aramid for the outer skin. A layer of Kevlar woven fibre was used in the forefoot of the hull laminate for added impact resistance. The sandwich material is Corcell foam.
KEEL	Lifting keel with three draft positions, motoring 4.5m / harbour 5.56m / sailing 7.0m.  Stainless steel keel shaft and lead bulb. Keel trunk in carbon.  • Lead bulb: 56 tons  • Stainless steel fin: 17 tons  • Hydraulic cylinders: 1.7 tons  • Locking mechanism: 2 tons  • Keel box: 2.5 tons Total – 79.2 tons
DECK	The deck is laminated in epoxy carbon Sprint with a Corecell foam sandwich.
INTERIOR	Main structural bulkheads of carbon sandwich construction.

## EQUIPMENT



WINCHES	Rondal
ANCHORING SYSTEM	Single Manson HHP drop anchor
MAIN ENGINE	MAN V12 1400hp
PROPELLER	Hundested 4-bladed VP 10 HP/HP propeller
GEARBOX	Hundested CP marine gear type CPG50
FUEL TANKS	19,000 L
WATER TANKS	Fresh water 4,800 L. Black/grey water 2,100 L. Sludge tank 700 L.
WATERMAKER	Idromar MC 15S Duplex
BOW & STERN THRUSTER	Hundested retractable bow thruster FT4RL, 175 HP. Hundested retractable stern thruster FT3R, 100HP.
GENERATOR	Northern Light 2x M1064H
HEATING/AC	Marine Air
AC SYSTEM	Marine Air
ELECTRONICS	Furuno, B&G, Sailor
MAST AND RIGGING	Rondal mast (67.9m) and boom, Carbolink standing rigging
SAILS AREAS SQ M	Main 755, blade jib 567, working jib 365, asymmetric 1838
STEERING	Baltic Yachts' Force Feedback System - electric steering with feedback. Rudder depth 4.40m.
HULL DOORS	Two, hydraulically opened. Forward opening measures 1.86m high x 1.93m wide and the after saloon/lobby aperture 1.89m x 2.64m.

