SOUTHERN Wind

SOUTHERN WIND OVERVIEW

Our aim

'Our vision is to build yachts of superior quality that will perform beautifully in all weather conditions. Our yachts are expertly crafted to excel in all facets of life at sea, from navigating ocean passages to intrepid exploration, competing in regattas and cruising in remote locations all over the world.'

Willy Persico, Founder of Southern Wind Shipyard

SMART-CUSTOM VERSATILITY
BLUEWATER RELIABILITY
SAILING EXHILARATION

Founded in 1991, Southern Wind Shipyard specializes in the construction of high-performance luxury sailing yachts from 25 to 40m, embodying the ethos of cruising comfort in a reliable versatile platform. Yachts that are expertly crafted to cross oceans in comfort and style and to deliver an exhilarating experience for passionate sailors.

A global company with European shareholders, a loyal international management and a shipyard located in Cape Town, South Africa, Southern Wind is a crossroad of different cultures. Open minds and flexibility are the basis of this company's 30-year history and staying true to their corporate values is the main driver of the shipyard's growth. With a production rate of two yachts per year, Southern Wind boasts a leading position in the market of performance carbon sailing yachts, with more than 60 yachts delivered among which 36 are 27m+.

THE SHIPYARD

- Founded in 1991, by the Italian entrepreneur Guglielmo ‘Willy’ Persico
- Based in Cape Town, South Africa (easily connected to Europe thanks to at least seven direct flights to Cape Town each day)
- Specialists in the production of high-performance carbon composite sailing yachts from 25 to 40 metres
- 360° in-house production
- Production of two yachts per year
- 20 months average production time
- Two yachts under construction as of July 2023

FACILITIES

19,800 m^2 with 16,000 m^2 covered production sheds, subdivided in:

- Hull and deck lamination (housing hulls up to 140’)
- Machinery
- Furniture construction and veneer
- Outfitting
- Composite prefabrication
- Systems and mechanics
- Solid wood machinery
- Warehouse and storage

THE TEAM

- Over 290, in between the yard in Cape Town and the Branch in Italy
- Experienced international management with excellent reputation in the yacht building industry
- Drawing office composed of 2 naval architects, 1 structural engineer, 2 mechanical engineers, 3 interior designers, 3 draftsmen
- Three main subcontractors (fairing and painting of hull and deck, electrical systems, joinery constructions)
- Workforce cultural diversity

Figure 2: Top yards, 2006-2021

Yards	Delivered
Southern Wind Shipyard	28
Perini Navi	23
Royal Huisman	16
Vitters	15
Baltic Yachts	14
Nautor's Swan	13
Wally	12
Alloy Yachts*	8
Pendennis	7
Neta Marine	7
Mengi Yay	7
Fitzroy*	7
Top 12 in total	**157**

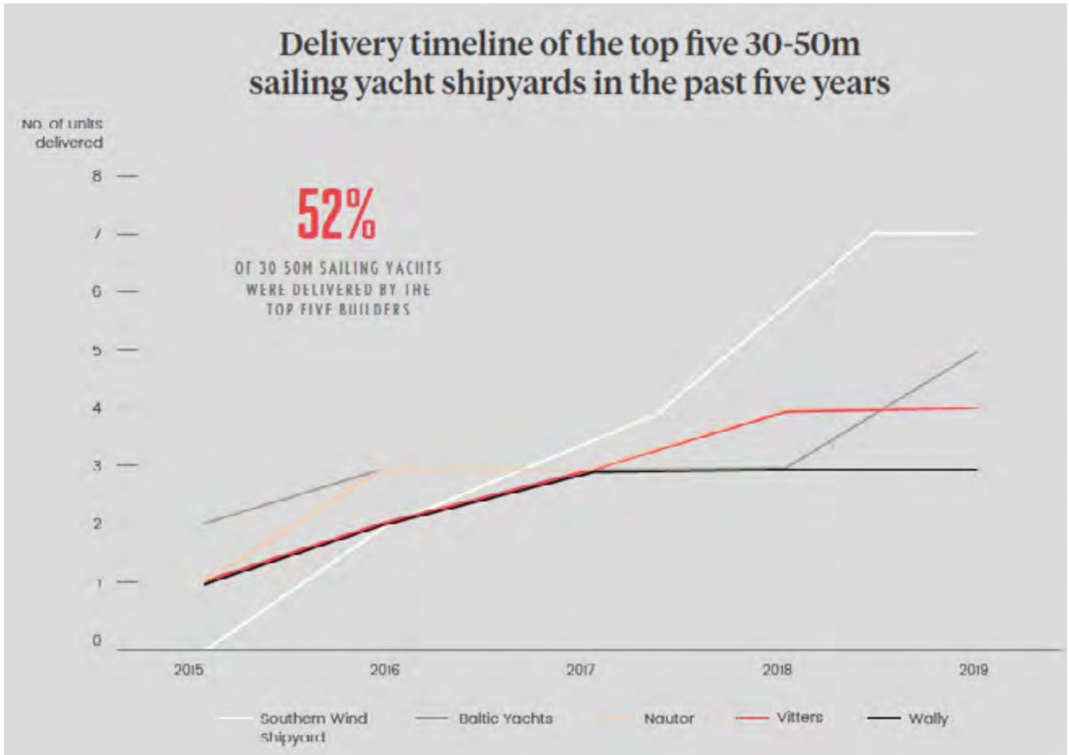
**Shipyard no longer operational*

credits
"The Superyacht Sailing Report", TSR , April 2022

- 40% of the world market held by 10 Top Yards; 17% SW market share (28 Yachts delivered in 30+m range in the last 15 years)

- In recognition as a leader in the yacht design industry, SWS collected a number of prestigious accolades and awards:

SW94 Kiboko *winner of "ADI Compasso d'oro" (2014)*
SW102 Farfalla *winner of "World Superyachts Award" (2015)*
SW96 Seatius *winner of "Design and Innovation Award" (2018)*
SW96 Seatius *winner of "International Superyacht Society Award" (2019)*
SW105 Taniwha *winner of "Design and Innovation Award" (2022)*
SW105 Sørvind *"Best Sailing Yacht" in the Sailing Yacht below 50m category of the World Superyacht Awards (2023)*



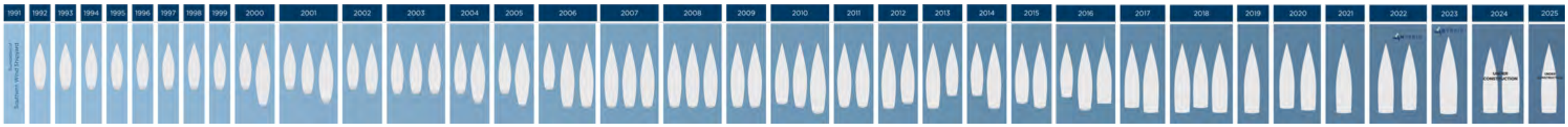
credits
"The Superyacht Sailing Report", TSR, December 2020

SOUTHERN WIND LEADERSHIP IN THE RANGE OF 30M SAILING SUPERYACHTS

60 yachts launched since 1991

With a production rate of 2-3 yachts per year, Southern Wind boasts a recognized positioning in the market of semi-custom high tech composite performance cruisers/racer cruisers, from 22 to 40m, with medium light displacement. The number of yachts delivered in the 30m range from 2006 to 2015, enhances a significant gap with SW main competitors (see above chart). Southern Wind yachts are known for their seaworthiness, reliability and durability without compromising on the comfort expected of a luxury cruiser.

3 yachts currently under construction:
SW96#05 (DELIVERY 2024)
SW108#02 (DELIVERY 2024)
SW100*X* (DELIVERY 2025)



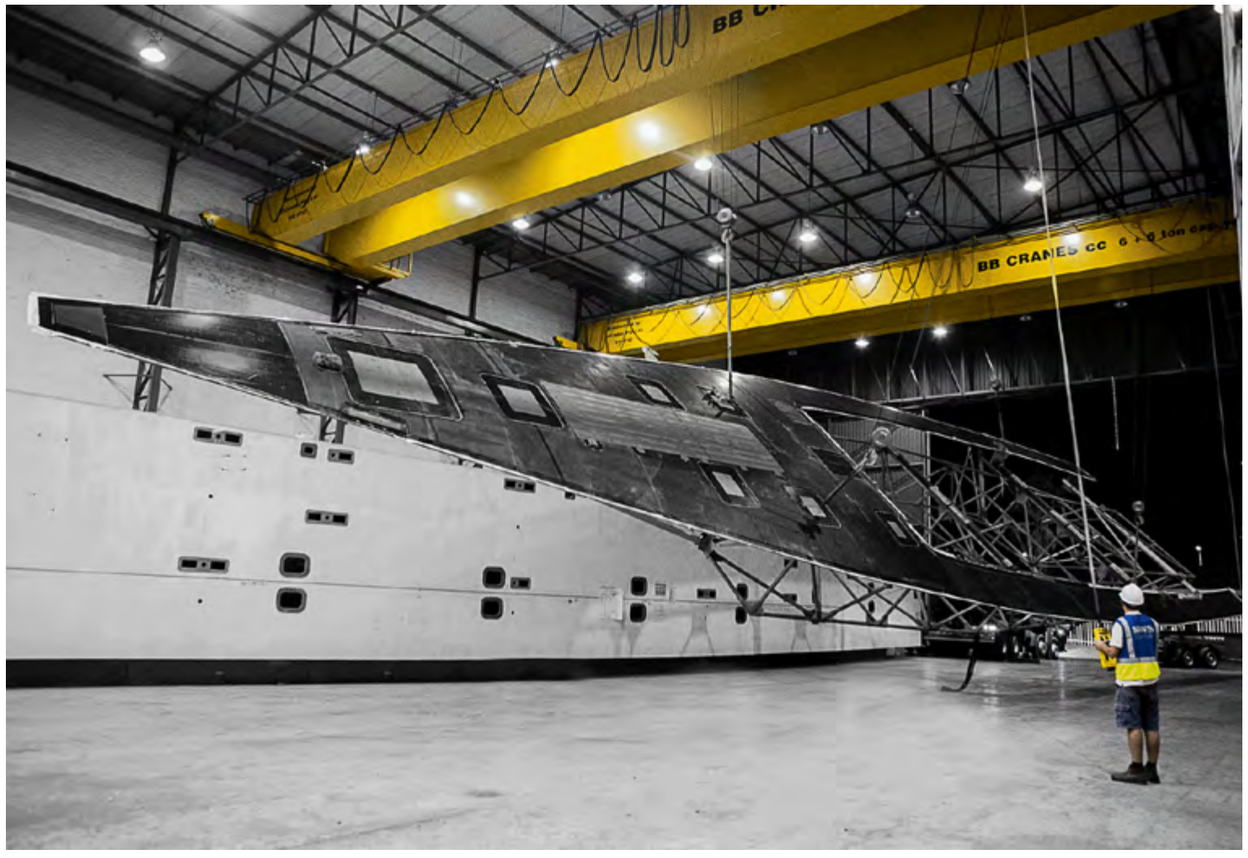
ABOUT US
OPTIMIZED CUSTOMIZATION

SW “SMART CUSTOM” PHILOSOPHY

In the last 6 years, Southern Wind has made a great leap forward in “customisation” offering much more than semi-custom yachts. A new phase was coined: not semi-custom but smart-custom, where the initial platforms have been purpose created so that owners can adapt them to their needs while still leaving the reliable, tested base structures untouched.

The smart custom approach blends innovation with well tested technology.

ABOUT US
CRAFTMANSHIP



Built by Southern Wind

At the heart of every Southern Wind yacht is a passion for craftsmanship coupled with a tireless striving for technical innovation. Investments in research, product development and the latest construction techniques are of paramount importance and have been the linchpin of SWS's success for the past 32 years.
As a result, the shipyard is entirely self-sufficient in all phases of yacht manufacturing, from lamination and steelwork to carpentry and interiors assembly.

ABOUT US
PERFORMANCE AND COMFORT

The ultimate experience

SWS are world renowned for their ocean-going performance attitude. Light-to-medium displacement yachts are designed to excel in all conditions. Research and development play crucial roles in the construction of SW yachts. Over the past 19 years, the shipyard has gained exceptional experience in the lamination of infused carbon composite sandwich (carbon fibre, epoxy resin and Corecell/Klegecell) in the structural components of its yachts. This composite material results in the best fibre/resin ratio, reducing the weight of the yacht and improving overall quality and strength, if compared to Prepreg.

When Nomex core is required for deck constructions, Prepreg is used.
When it comes to furnishings, many of the yacht panels use a lightweight sandwich made up of wood veneer with a honeycomb structure or foam core.
Particular care is taken throughout the whole production process to avoid unnecessary weight: the weight control in the lamination department is extremely accurate as each single piece laminated is weighted separately and recorded.
Actual weight is compared with weight calculation in real time.

ABOUT US
ITALIAN STYLE AND ELEGANCE

Timeless yachts

International culture and a passion for sailing are the driving forces behind every SW yacht. Every yacht built demonstrates both understated luxury and superlative sporting style, where design is conceived to serve functionality and comfort.

These qualities are strengthened by a 25-years partnership with the Italian studio Nauta Design, experts in contemporary yacht design and other reputable designers in the sailing industry.

ABOUT US
TRUSTING RELATIONSHIPS

Belonging to a Family

A collaboration with Southern Wind Shipyard is always the beginning of a shared adventure: a marriage of the shipyard's heritage and philosophy with the client's ambitions and desires. The process of designing and creating something as special as a yacht is an activity that creates a strong bond between people. This creates relationships built on mutual trust and respect, something that is at the heart of the company's day-to-day work. SWS clients feel that they are part of an extended family, with 20 per cent entrusting the shipyard with the construction of their second or even third yacht.

ABOUT US
AFTER-SALES SERVICE

You sail, we care

The SW Customer Care team is located in Genoa, Italy, to offer a seamless point of contact in one of the Mediterranean's busiest yachting hub.
With unique access to the original plans and records of every SW yachts built so far, the Customer Care team offers a high quality service backed by SW technical knowledge. Our Customer Care division looks after warranty works and after-sale assistance worldwide.

Once Southern Wind yachts arrive from Cape Town, the Customer Care team welcomes their crews in the Med and supports them by supervising all warranty works necessary after a 7,000 mile maiden voyage.
The Customer Care team tracks Southern Wind yachts as they sail around the world, helping crews with maintenance issues, supplying spare parts when necessary and giving timely and precise assistance wherever the yacht may be.

Genoa is always the headquarter of Pergaso S.r.L., a sister company of Southern Wind offering a wide range of shore-based services for our Owners, like Charter and Yacht Management.

THE CONSTRUCTION PROCESS

THE CONSTRUCTION PROCESS

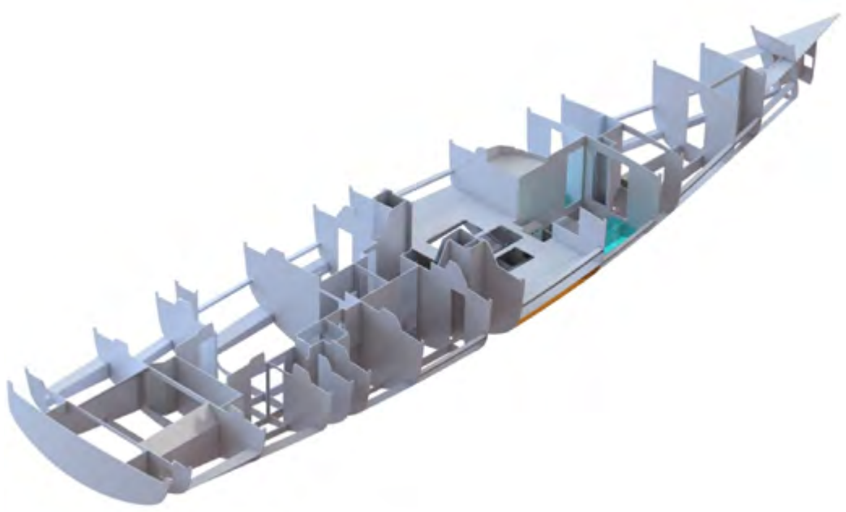
SUSTAINABILITY AND ENVIRONMENTAL AWARENESS

Southern Wind yachts are built to achieve a high level of quality, autonomy and reliability but alongside these priorities, the yard takes responsibility to prioritize the sustainability and minimize the environmental impact from the construction of the yacht wherever practical and possible.
This philosophy is mirrored throughout the SW organization and implemented in each department from the production team in the sheds to the customer care team managing refits around the world.
These initiatives include but are not limited to selection of teak decking from certified forests, use of reusable tooling, control of emissions, implementation of bio resin and a careful focus on waste management and reduction.

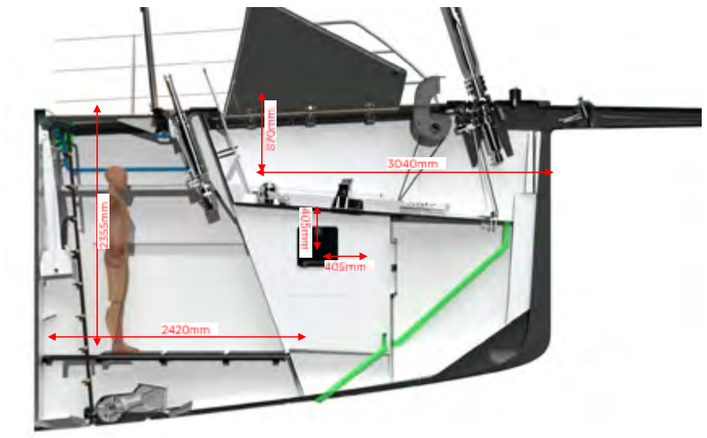
THE CONSTRUCTION PROCESS

DESIGN

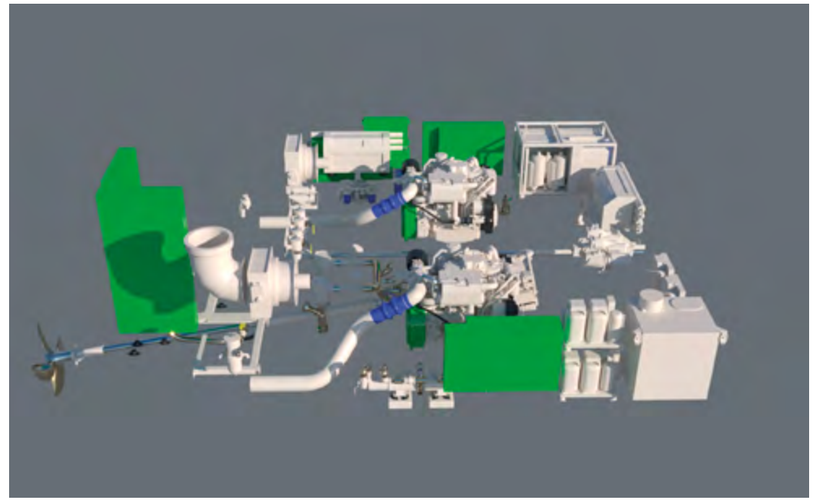
Solid Works, SW105 structures layout

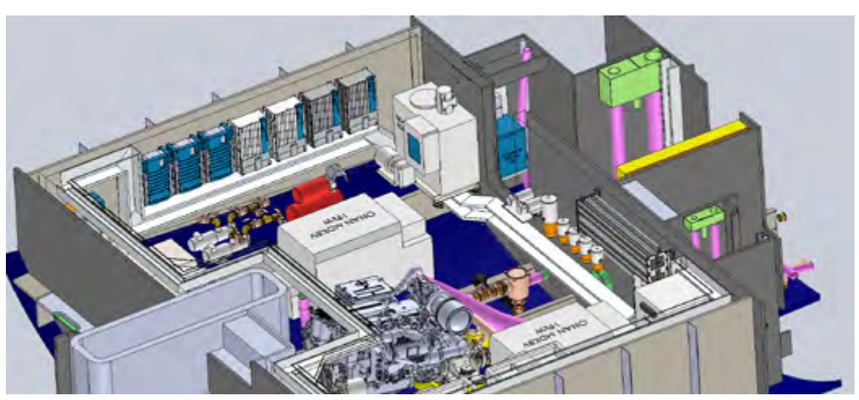


Solid Works, SW96#04 fixed bowsprit with pivoting anchor arm



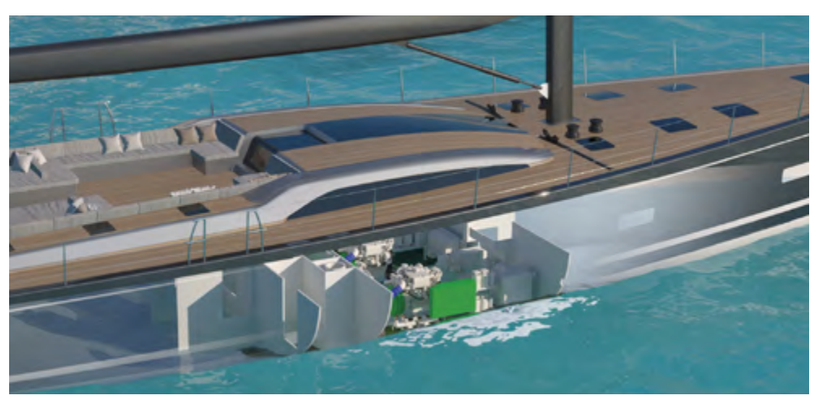
SW108 Hybrid engine room





Solid Works, SW105#03 Engine Room layout

SW96#04 Tender garage| Lazarette



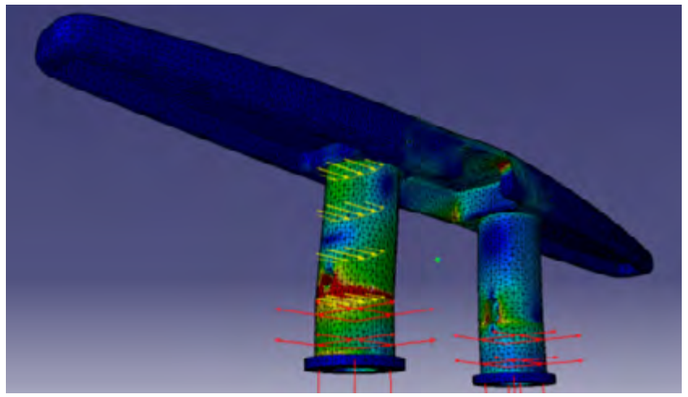
Softwares

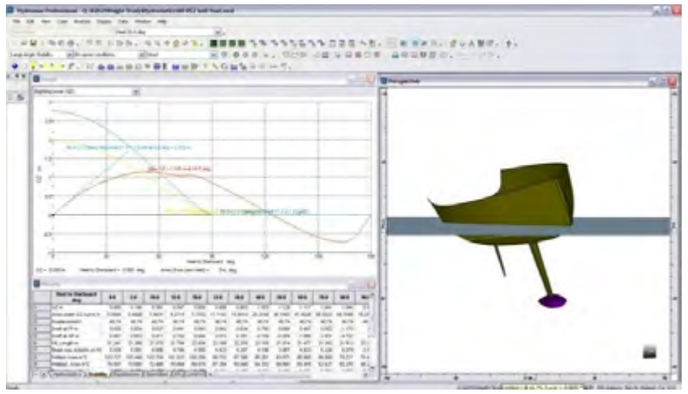
2D DRAFTING SOFTWARE
Autocad to generate construction drawings using the study models as guidance.

3D MODELING SOFTWARE
SolidWorks for technical and engineering modeling of hull, deck structures and systems.

THE CONSTRUCTION PROCESS
DESIGN

FEA, mooring cleat





Hydromax, stability calculation

Rhinoceros, 3D model SW105 Owner head

3DS Max, SW108#01 Owner head

Softwares

3D MODELING SOFTWARE
Finite Elements Analysis for refining metallic components. SWS uses this to optimize weight for required strength and space constraints.
Hydromax for hydrostatics and stability calculations. Great attention is given to weight study and weight control throughout the design and production of each yacht to make sure that the target displacement and position of the center of gravity are met. In this process, SWS is in constant interaction with the naval architect.
Rhinoceros 3D for interior styling.3D model is not for construction but for purely studying the volumes, proportions, colors and materials balance.
3DS Max and **V-Ray** for final renderings upon final confirmation.

THE CONSTRUCTION PROCESS
DESIGN

V-Ray, high quality rendering

THE CONSTRUCTION PROCESS
DESIGN

Design Process

MOULDS
All the SWS moulds are designed in 3D and CNC cut.

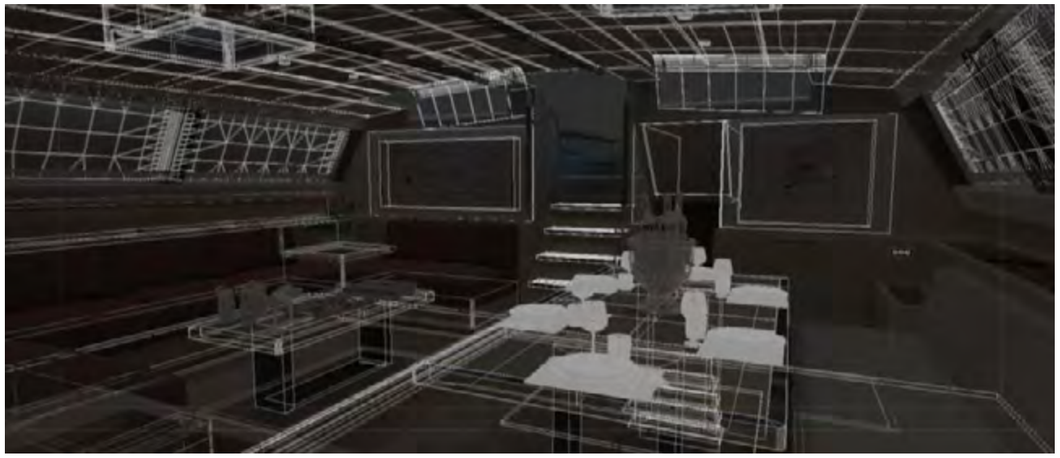
STRUCTURES
SWS design team works closely with the structural engineers at a very early stage in order to optimize the integration of structure, interior and systems. The systems run are all drawn in 3D in order to anticipate all the potential interference with structure and furniture. This allows us to plan most of the structural penetrations at the engineering stage. The result is an optimized structural weight.

MECHANICAL SYSTEMS
Are also designed in 3D (anchor arm, transom door, companionways, etc.). This allows to simulate the movement and interaction of different components.

SYSTEMS
SWS designs and specifies the systems of its Yachts entirely in-house. The systems are modeled in 3D and all the main runs are defined in this environment. At this stage all the possible interferences between systems, structures and interiors are identified, analyzed and rectified. Particular attention is given to the ergonomic to facilitate the maintenance of all the systems. At a very early stage, the skipper is implicated in design consideration in order to optimize the systems to the way the boat will be operated.

DECK HARDWARE
SWS team analyses all the line run and hardware alignment in order to optimize the position of every block, winch and fairlead.

INTERIORS
Based on the interior design received, we develop in–house all the construction drawings and final renderings.



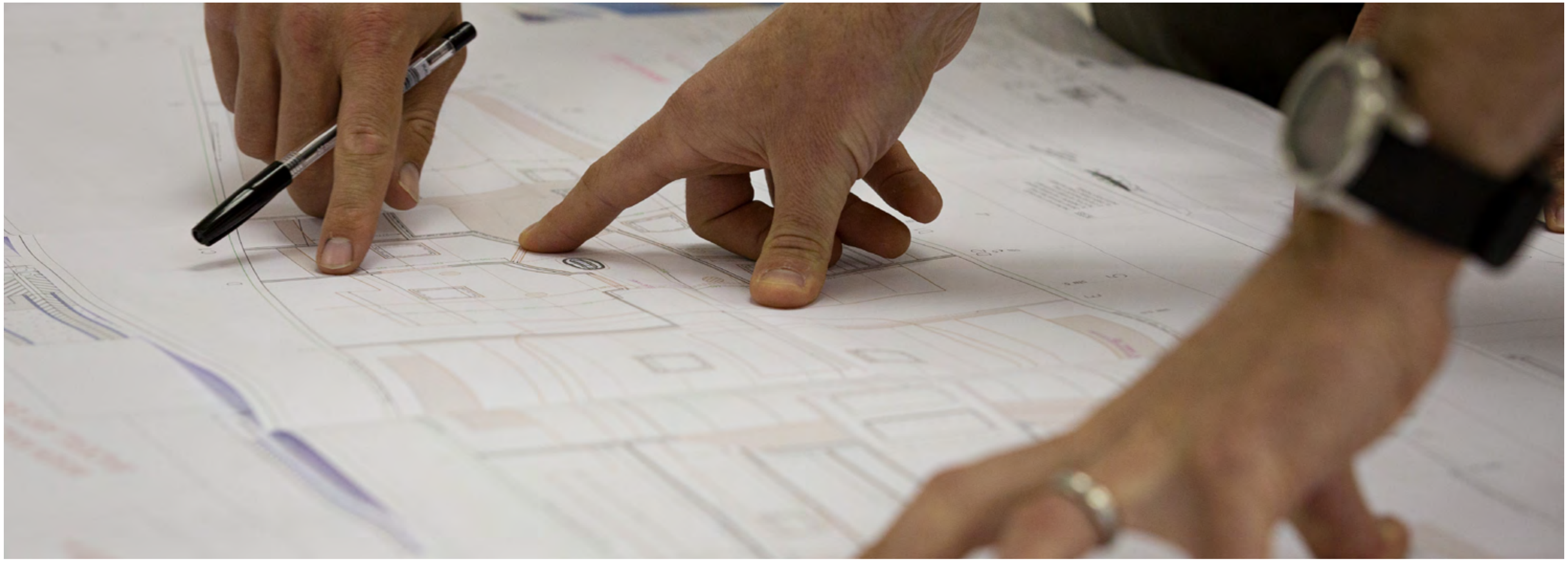
Preliminary design

High quality rendering

As built

THE CONSTRUCTION PROCESS

PROJECT MANAGEMENT



For the customisation of each yacht, a technical project manager is assisted by a team of projects coordinators, each one with a dedicated area of expertise (systems, electronics, deck equipment, interior) and responsible for a specific phase of the yachts construction.
This team is reporting directly to the Technical Manager.

The final goal of the organization is to have more control over the decision-making process and transfer information and know-how more efficiently from one construction to the next one.
The correct communication and flow of information between the shipyard and the client or client representative, is ensured by the prompt circulation of minutes which record the meetings held as well as any significant telephone conversation or electronic mail.
An internal document, called “Decision List”, records all the requests received from the client, and all the issues/concerns raised during the construction.

Southern Wind will be pleased to offer on request a detailed presentation of its decision process supported with its internal normative documentation.

THE CONSTRUCTION PROCESS
MOULDING

At SW, we strongly believe in prefabrication as the key to a clean and tidy product. Not only we have moulded products that are literally collected from the shelf in the store and bonded on board, but also we have a very talented Prefabrication team in the lamination department.
Over 300 items, panels, stiffeners, capping planks, etc. are produced for each Yacht in this department for subsequent bonding on board. Hardly anything gets built on board in the fitout stages. The only resin that finds its way on board is the one necessary to tape structural components to the hull and deck. This helps keep the Yacht tidy, enables fitters and carpenters to start working already before the dry fit of the deck, and altogether maintains efficiency and output high.
Three families of female moulds are used to laminate all our hull and deck beams that get delivered to the structure fitting team already painted where necessary. These are either prepreg or infused structural components.

Five vacuum tables of different sizes allow us to constantly deliver panels and structures to the fitting team.
One table allows us to manufacture sharp cornered structures too, whereas another one enables us to induce some degree of curvature in our panels. The bulkhead tables can be heated up to prepreg curing temperatures Bowsprits, rudderstocks, chain-plates and other small components are cured in a dedicated small oven. Pre manufactured carbon UD banks are press moulded in order to achieve higher than vacuum compacting pressure and are then glued in the correct positions on structural components.
The 140’ long variable camber surface mould allows the construction of all decks sheers and cambers. Generally our coach roof moulds are female and custom built with CNC cut frames and CNC machined blocks for the harder to shape areas. Moulds are designed internally.
All our moulds are heat resistant with virtually no distortion during postcuring up to 85 degrees.

The transom mould is also heat resistant and allows us to build transoms of virtually any curvature, following pretty much the concept of 3DL sails. We can adjust the shape of the mould to the required design and start laying fibers within a few hours.

One department that generally stands out from the rest is the small mouldings. Here we produce all the equipment that other boatyards generally outsource or buy off the shelf from other companies. We have over 120 products in our catalogue that is needed to fit out a yacht, from laminated angle bars, to carbon steering pedestal heads and shafts (these female moulded with the bladder technique). Composite pad-eyes, drain spigots, penetration and limber holes mouldings are all duly listed and captured in this catalogue that gets constantly updated with Pro Engineering software.
Most of the moulds start out as mockups to study and develop the products, until we are ready for the final mould CNC cut.

THE CONSTRUCTION PROCESS
LAMINATION

At SW we employ various lamination techniques ranging from vacuum bagged prepregs to epoxy infusion. Where strength, stiffness or weight saving dictate the choice towards more high-end techniques we follow that route. We always analyze in detail the complexity of the component to be produced and use the most appropriate technique.

Over the past 30 years, we have been using various techniques to produce hulls.

SWS has experience of both male plugs and female moulds construction. We started infusing hulls and decks in 2004 and progressively shifted towards this system in the past 19 years for our SW line. This led us to develop our state of the art 3 parts female mould. It allows for a better infusion process, limiting the effect of gravity.

For more customized yachts, we use carbon prepreg and nomex where necessary. On this type of projects, both male plug and female moulds can be considered for the hull. They both have pros and cons that are affecting cost and planned production sequences.

The deck will be female moulded on our existing variable camber deck mould and on a purpose built cockpit coachroof mould. The two parts will then be assembled while being supported by an alignment “cage”. Female moulding the deck remains favored to male plugging because of the level of details that must be moulded precisely in order to avoid fairing afterwards. This technique has been in use at SWS for the past 30 yachts and lends itself to all ways of lamination, from wet and infusion to prepreg. A futher weight saving on the deck could be the use of Nomex as a core and the bonding thereof by means of glue film adhesives.

At SWS we have a “special components” team that builds, amongst other things, our own rudders, all the way to the bearings and quadrants.

We build the stocks in prepreg and we test bend them on our purpose built jig. We load them to their highest working condition cases to check that the deflection matches the designed values.

Our system has been used lately as the concept to test the latest Volvo Ocean Race rudders. Rudder blades are also built in carbon and they are laid in female CNC moulds in order to minimize the amount of fairing afterwards. Prepreg bowsprits, carbon finish counter tops, steps, table legs, sheave boxes; chainplates all come from this department.

All our chain plates are entirely carbon laminated and have been so for over fifteen years. These are prefabricated to match the hull surface, post cured and bonded to the hull shell after the hull is completed.

The monitoring of what we build is constant. We send samples to the lab to check TGs and cure cycles; shear tests are performed to ensure correct bonding has taken place.

A number of checklists always allow us to track back who built what and when and the weight of such components. Handover checklists will ensure that the composite construction is complete and compliant to the original design specs.

THE CONSTRUCTION PROCESS
CARPENTRY

Owner cabin mock-ups
left: SW100, right: SW-RP90

Southern Wind carpentry department has grown, changed and adapted its working methods to the rigorous standards of weight control used throughout the shipyard. But since every SW yacht launched from Cape Town's Water Front was created for sailing all over the world and in any conditions, durability and seaworthiness are also priorities that are taken into consideration at every step of the build.

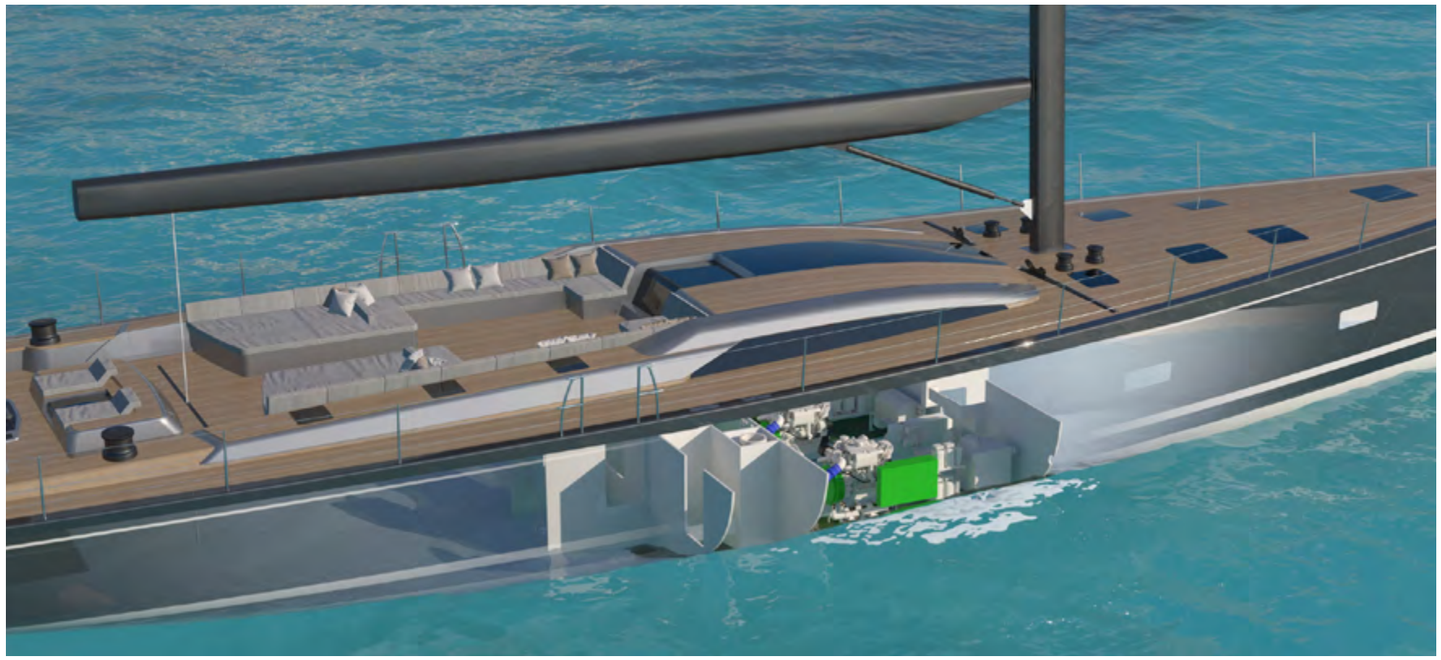
Southern Wind objective to balance weight saving and durability has been fine tuned over the years, been able to reduce the weight of fittings and furnishings by 15%, for an overall savings of a ton and a half in weight on a 100' footer.

The objective is not to make the lightest furniture possible, but the lightest furniture that will also guarantee the bluewater durability that Southern Wind yachts are known for.

Fittings are composed of several elements; keeping in mind the use and wear and tear that piece of furniture will be subjected to. To save on weight, most furnishings have high-tech Nomex Honeycomb cores veneered in house; solid woods are used only where strictly necessary.

Southern Wind Shipyard's carpentry department has skilled craftsmen whose talent and patience is still essential in working with durable materials that give colour, fragrance, warmth and life to the yachts.

THE CONSTRUCTION PROCESS
SYSTEMS



SW108 Hybrid - Render

SW105 Engine room

Southern Wind systems layout is the result of 30 years of yacht construction based on our own team and ex-skipper's experience combined with the input from all the previous captains and the feed backs from our customer care. The development of our systems is a constant evolution instead of re-inventing systems that are already performing and reliable. We often found ourselves being at the cutting edge of new technologies. For example, we were the first one to implement lithium batteries on a yacht of this size.

Once launched, all SW yachts go on through and extensive sea trials in the demanding South African waters. We test every single system on board to make sure that they perform even at high heel angle. All our boats are delivered by sea, often with a yard representative on board. During this delivery, all data are checked, recorded and transmitted to customer care and the client. This insures a constant follow up during the boat's life in order to give the best service to the existing SW fleet.

THE CONSTRUCTION PROCESS
QUALITY MANAGEMENT AND WEIGHT CONTROL

QUALITY MANAGEMENT

The commitment towards quality starts with Quality Assurance (Q/A) from the top management, in collaboration with the General Manager, and it is consistent through Quality Control (Q/C) at operational level.

Q/A has the aim to develop and maintain a system of checklists tailored on each phase of the process and the different departments/subcontractors involved, considering their intra and inter relationships. As a result, checklists are organized per milestones, with special emphasis during handover phases.

Furthermore, a bottom up approach has been implemented to actively involve the workforce and encourage their contribution. The aim is to raise the level of awareness towards quality and obtaining empowerment among the workers. The system is then deployed through Q/C by the Heads of Departments, Supervisors and Team leaders who are responsible to carry out the different checks and sign off the checklists. The aim is to enforce one of our value at Southern Wind Shipyard: accountability. This fosters to accurately track information, which may vary based on the different departments, such as: which job/check is performed, when, by who is manufactured/installed and by who is supervised.

Q/A support, during Q/C, is of relevant importance in order to monitor critical phases of construction through regular routine inspections in order to minimize the potential problems and mistakes with may arise. Moreover, in this way it is possible to promptly close the loop with the drawing office, analyze the feedback from the shop floor and update the drawings, checklists to ensure a learning process and continuous improvement.

SW considers ISO 11347 as reference for yachts measurement and assessment of the visual appearance of coatings, in conjunction with the ICOMIA technical guidelines for the acceptable finish and appearance for superyacht gloss coatings. SW has started 2018 with the ISO 9001 compliance journey: the aim is to make sure we are in line with the best quality management standard in the industry.

WEIGHT CONTROL

The weight calculation is compiled by SWS naval architects based on preliminary weight study supplied by designers.

The weight monitoring performed in the lamination department is extremely accurate as each single piece laminated is weighted separately and recorded. Actual weight is compared with weight calculation in real time.

Following weight controls by means of load cells are always scheduled:

Deck before first dry fit

Hull and structures after first dry-fit of deck

Deck at second dry-fit

Hull weighted before interior fit-out

Deck faired and with partial hardware before deck bond

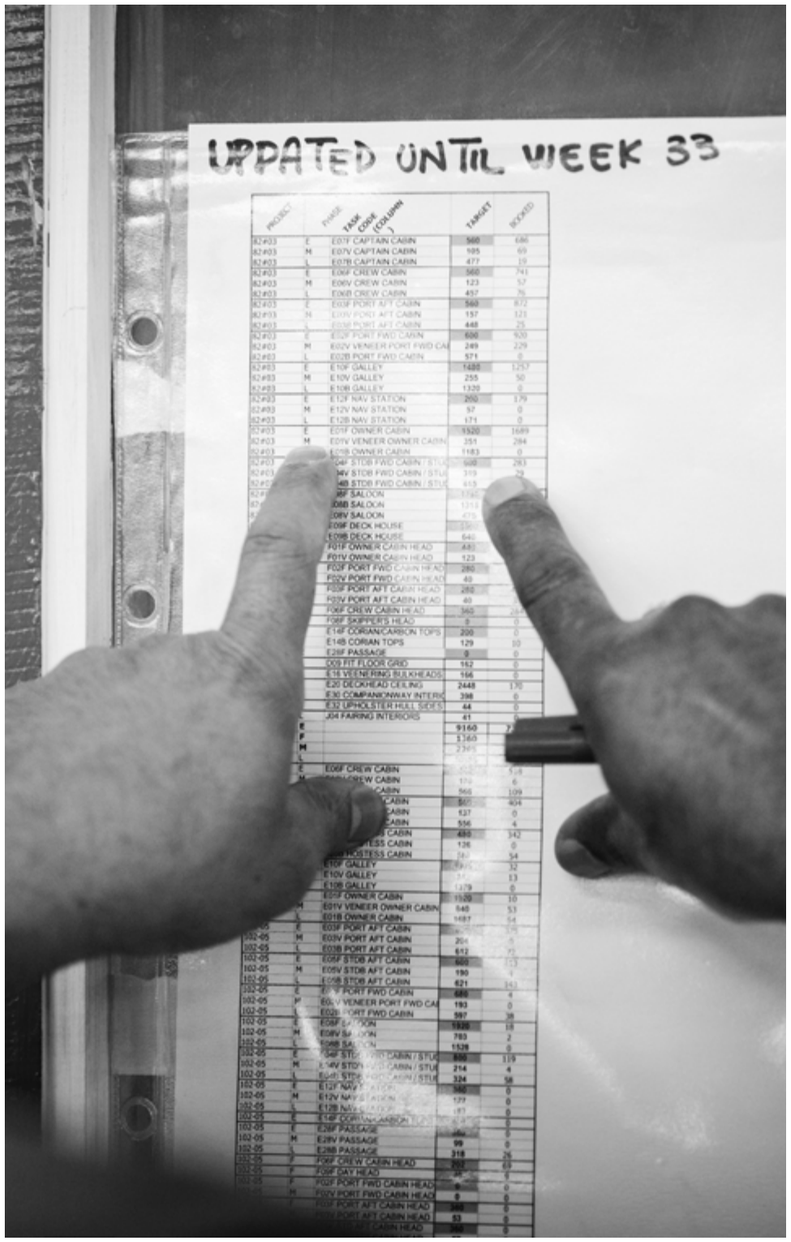
Hull and deck weighted after deck bond

Yacht fitted, without keel, rudder and mast, at roll-out

Yacht with keel at launch without mast

Mast and rigging weighted at stepping

Waterlines are measured right after launch and before handover to assess final lightship displacement



RP-NAUTA100 Morgana

SW96 Ammonite

SW105#04 Taniwha

SW96#04 Hybrid Nyumba^{GT} launched in Cape Town, December 2022

SW108#01 Hybrid Gelliceaux launched in Cape Town, August 2023

SOUTHERN *Wind*

FAIR WINDS