

Report of the 2023 Monaco Yacht Show roundtables

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Report in partnership with SuperYacht Times – October 2023

Everything you may have missed from the Design & Innovation Hub roundtables in partnership with SuperYacht Times.

A key highlight at this year's Monaco Yacht Show was the Design & Innovation Hub, located at Quai Chiron inside the Dockside area. The Design and Innovation Hub is a collaboration between SuperYacht Times and the Monaco Yacht Show, with the main goal to get more designers involved and to showcase the innovative developments in the sector.

This year's event saw a development in the format of the talks, with SuperYacht Times hosting a series of round tables with industry experts, on various sectors of design and sustainability within yachting.

SuperYacht Times takes a look at everything you may have missed from this year's talks, to keep you up-to-date on all the latest industry news and trends.

How to design and build fast yachts with smaller engines and fewer emissions Led by Justin Ratcliffe alongside Bas Mulder of Mulder Design, Perry Van Oossanen of Van Oossanen Naval Architects, and Eugenio Voltolina, project manager of the Bolide 80 at Victory Design, the panel convened to explore the seemingly paradoxical realm of fast yachts with smaller engineering and fewer emissions.

In addressing the question, Eugenio emphasised that recent engineering advancements in engines, coupled with the utilisation of lightweight materials, have facilitated the creation of super-fast yachts that closely rival the performance of sports cars, all the while significantly reducing emission output. Furthermore, the downsizing of engines has translated into increased interior space within these yachts.

Eugenio explored how working with naval architects and research into propulsion can have a significant impact on the efficiency of a yacht. Similar research was placed in their most recent launch, the 24.9-metre motor yacht, Bolide 80. The impressive "hyper-muscle boat" is the first hull in its high-performance series and is able to reach impressive top speeds of 76 knots.

Mulder delved into the discussion by highlighting the intricacies of optimising yachts and their speed performance. He underscored the significance of adjusting variables such as the centre of gravity (COG) and range to enhance the overall performance of these yachts, ultimately enabling them to attain higher speeds. A key example of this was 43.58-metre motor yacht Octopussy, launched in 1988 and gaining the title as the fastest yacht in the world at the time, with an official handover speed of 53.17 knots.

Perry Van Oossanen acknowledged that while the current industry discourse has primarily revolved around alternative propulsion systems, he underscored the pivotal role of engineering and hull forms in achieving the dual objectives of emission reduction and speed maintenance. As hull designers, they are all too familiar with the challenges of designing traditional hull forms that operate efficiently and provide comfort at all speeds.

Their patented Fast Displacement Hull Form (FDHF), is suitable for virtually any type of boat, ship or yacht, and a wide range of applications and propulsion systems. Tests have shown that their FDHF outperforms conventional displacement and semi-displacement hull forms at low, cruising and maximum speeds – and even when planning. The FDHF's resistance values are typically 20% lower than a well-designed hard chine hull form at semi-displacement speeds.

Overall, the panel discussed how each of these factors can affect the speed and sustainability of a yacht design, with each playing a pivotal role in overall performance. Sustainability is a 360-degree approach and should be looked at from every angle of the initial design. As a whole collective we can push forward to optimise and make better the propulsion and materials we use for yachts to create the most “lean and efficient machine.”

How are trends impacting the future of yacht design

SuperYacht Times Editor-in-Chief Francesca Webster took to the stage alongside Espen Øino of Espen Øino International, James Roy of Lateral Naval Architects and Paul Costerus and Zlatko Imamovic of Sinot Yacht Architecture and Design to delve into the complex topic of trends in yacht design. With the concept of trends being transient in their nature, the utilisation of trends in yacht design can lead to outdated designs and the construction of yachts that require a refit shortly after launch.

In order to avoid this situation, the designers explained how they guide their clients through the design process, looking for motifs that they believe will last the test of time. Paul Costerus commented that the trends of today, particularly in materials and interiors, involves the stripping back of many of the elements that have previously been considered fashionable. The result is that yacht interiors are becoming increasingly simplistic, organic and flowing, with natural elements and a careful selection of materials that work together in a cohesive manner. James Roy agreed that the team at Lateral are seeing a similar trend and commented that the overall instigator behind this latest development in design is that the way people spend their time aboard has changed over recent years.

With the advent of the Covid19 pandemic, there has been a major change in how much time owners spend on their yachts, with owners opting to spend much longer periods onboard and running businesses from their yachts. This has led to a reconsideration of the use of superyachts and according to Espen, has led to the biggest change in the sector.

The conversation then turned to the circularity of yacht design and Espen Øino pointed out that the yachts of the future may well resemble the yachts of the past. Noting that his team are looking to the classic gentleman's yachts of the 1920s and 30s, with more streamlined hulls and larger overhangs. Not only do these features impact the design of yachts, but they also have an impact on the efficiency and sustainability of the vessels, as noted by James Roy.

All panellists agree that sustainability, which transcends a trend, is already having the biggest impact on yacht design and will be the number one consideration when undergoing future design projects. From the amount of glass used onboard, to the interior configuration, hull form and materials, each of the companies are focusing part of their studio's energies on sustainable innovation.

Among the questions, the designers were asked if there were any trends, they are glad to have seen disappear. For Zlatko Imamovic of Sinot it was an easy answer; gold swan taps.

Unveiling the Designer's Protocol with Water Revolution Foundation

At 15:00 on Thursday 29th, Francesca Webster returned to the stage alongside a team of designers and the Water Revolution Foundation to unveil the Designers Protocol and to discuss the future of sustainable yacht design. In 2021, Water Revolution Foundation founder Robert van Tol came to the stage of the Design & Innovation Hub to unveil the Designers Taskforce, a group of imminent yacht designers who had been working together to set a standard for sustainable design.

This year, the team took to the stage to reveal the practical documentation for designers to follow. An initiative conceived by Dickie Bannenberg, the protocol is a practical document with a series of viable paths and questions for designers to present to shipyards and owners when undertaking a new-build or refit project. Following Dickie's detailed introduction, a roundtable discussion between top yacht designers and naval architects took place to share insights on the protocol and emphasise the importance of industry collaboration for achieving a sustainable future. Representatives on the panel included founder of Bannenberg & Rowell, Dickie Bannenberg; Philippe Briand, founder of Vitruvius Yachts; owner of Espen Øino International, Espen Øino; and Robert van Tol, Executive Director of Water Revolution Foundation.

"Yacht- designers and naval architects are, in many cases, the initial point of contact with clients wishing to build or refit a yacht. As such, they have considerable influence on steering their clients towards responsible decisions. The INFLUENCES protocol sets this section of our industry on a clearer path to informing and guiding," shared Bannenberg when asked about the importance of such a document for the industry.

Philippe Briand explained how designers stand at the forefront of future superyachts and that it is therefore their responsibility to guide owners, brokers and shipyards toward making more sustainable and informed decisions. As Espen added, very few owners are presented with the full spectrum of possibilities when it comes to sustainable design and that this new protocol, which relies on collaboration in the sector, is the first step.

Robert van Tol also explained that while this new protocol is the first of its kind in the superyacht sector, the practice that it outlines should be the first of many and that its messaging can be applied to every sector, from brokerage to construction and that every sector has a responsibility when it comes to the issue of sustainability.

How can we reduce onboard energy use today?

Looking at the other side of the energy conundrum – not just about how we produce energy, but how we actually use energy onboard, Charlotte Thomas was joined on stage

by Dr. Daniel Chatterjee of MTU Rolls Royce, Andrea Franchini of Siemens Energy and Giuseppe Zagaria of RINA.

Opening the discussion, Dr Daniel Chatterjee explained that while many consider the advent of clean energy to be the finalisation of the energy topic, the exact opposite is in fact the case. With new propulsion sources, we need to be more aware of the energy used onboard the yachts, particularly as the first fuel sources to be used; HVO and green methanol, are both limited in supply and expensive to source. It is therefore vital that owners and shipyards continue to research ways of reducing the onboard energy consumption.

Andrea Franchini added that when speaking about efficiency, the industry must consider the entire lifecycle of a product, from production to application and it is vital that there is no energy wasted in this process. In order to reach this target, Andrea stressed the importance of collaboration so that companies throughout the process are conscious of the efficiency of their production processes. He also added that the existing hybrid propulsion systems already applied within the sector is the first step, already reducing the overall consumption by as much as 20%, but that there is still some way to go.

With the hotel load being the most consistent and largest consumer of energy onboard, many companies are looking for new solutions to reduce the impact and fuel cells are being constructed in order to manage this load. Giuseppe Zagaria explained that the regulatory bodies such as RINA have a responsibility to help shipyards and owners to optimise the design of their yachts to focus on the hotel load during anchorage periods.

When it comes to the future, the data and digitalisation of information is going to be hugely important to monitor the energy usage of vessels and enable captains and crew to eliminate waste. Classification societies are there to set standards for the new systems and certify the suitability and capability of new systems being established by key industry innovators like Siemens and MTU Rolls Royce.

Sustainable refit - how can we make the end-of-life process cleaner and future proof the fleet?

Justin Ratcliffe returned to the Design & Innovation Hub on Saturday to discuss sustainable refit, joined by Rado Antolovic CEO of Dubai Drydocks World and Chairman of Adriatic42, Txema Rubio Commercial Director of the MB92 Group, Wim Verhoeff Project Manager and Fleet Support at Oceanco and Paolo Balzano, CEO of Palumbo Shipyards Napoli.

The panel explored how we can make the end-of-life process cleaner through refit in order to future proof vessels and prevent waste. Sustainability is an omnipresent word in the industry right now but it is mostly associated with the building of new superyachts and their operation, not so much with refitting or maintaining them. The European Boating Industry has launched a roadmap to address end-of-life boat recycling that sets targets up to 2030. However, that deals mainly with small fibreglass boats, so what about superyachts?

Rado Antolovic expressed that refit often presents opportunities for upgrading or installing the latest technology to improve the value of superyachts. He also explored how we can reduce operating costs and their environmental impact.

As Commercial Director of the MB92 Group, Txema Rubio has a great understanding on the refit process of superyachts. MB92 recently launched an initiative called Refit for the Future, which includes a 360-degree sustainability study of the yacht and its operation. Txema explained how the service programme is tailored to the needs of owners to guarantee practical benefits now and into the future. The Group is also working with organisations such as the Water Revolution Foundation and SEAIndex, as well as education institutions, sustainability consultancy services and leading voices in sustainability to continue advancing research and innovation in design, technology, and engineering.

Oceanco has recently completed the remarkable rebuild of 105-metre H3, which began life as Al Mirqab in 2000. The project started as a refit and ended up as a re-build, and Wim explained how her rebuild challenges the entire industry to reconsider the potential

of an existing superyacht to evolve and take on new shapes. The yacht was completely re-engineered and redesigned to Oceanco standards, as with any new construction, and she now carries a full 2023 certificate. H3 began as a yacht of yesterday; now she's a yacht of tomorrow.

The Palumbo Group is quite unusual insofar as it has its new-build facility in Ancona but also multiple dedicated refit yards (for both yachts and commercial ships) dotted around the Med from Malta to Marseilles. Justin delved into this further with Paolo Balzano who discussed Palumbo Shipyards' 50-year history in the refit and repair business. Over time, Palumbo SY Refit shipyards work practices have evolved and improved from a sustainability perspective to become the leading refit and repair network in the Mediterranean.

The path set by Palumbo SY Refit in the last years has also involved increasing efforts to actively support yacht owners to take steps towards energy efficiency for their vessels, as well as fostering the development of a skilled workforce in ever growing eco-friendly solutions by acquiring knowledge of new insulation materials, new approaches to materials, design, engineering and knowledge of regulations.

How are developments in material innovation impacting the design and outfitting of superyachts?

Led by SuperYacht Times writer Enrico Chhibber, the panel discussed yacht-specific furnishing companies and centred around the advancements in the use of eco-friendly materials and current sustainability trends. All the panellists unanimously emphasised the ubiquity of sustainability in yacht interior design. During the discussion, Jamie Hunt of Silver Linings Furniture and Karlijn Lindeman of VYVA Fabrics made it clear that they are dedicated to ensuring sustainability in their supply chain through responsible sourcing practices.

Silver Linings Furniture presented a comprehensive case study focusing on a specific type of material they utilise, delving into the meticulous steps taken to ensure the sustainability of its sourcing. Additionally, they highlighted their commitment to

environmental preservation by avoiding the bleaching of certain products, recognising the harm it can inflict on the environment.

Karljin discussed VYVA Fabrics' sustainability initiatives, highlighting the Hemp collection. This collection features new upholstery fabrics with a strong hemp fibre base material. These fabrics undergo a special eco-treatment that is PFOA-free, complies with European REACH legislation for chemical reduction, and is both safe for the skin and environmentally friendly.

Marco Foglizzo of Foglizzo Leather raised an intriguing point regarding the challenges of marketing sustainability. He highlighted that faux leather, often considered a sustainable option, can be counter to sustainability initiatives due to its production involving harmful chemicals and materials. In contrast, genuine leather can be a more sustainable choice as it utilises all parts of the animal and boasts a longer lifespan.