



# Design

BY GEORGIA BOSCAWEN

For designers, the superyacht market is notoriously difficult to break into. And, once you're in, making tangible headway among this exclusive club presents a whole new dilemma for start-ups. A common complaint is that it is all about the 'big names on campus' in our market, meaning that it's tough for anyone else to get a look in.

It's tough – but it always has been, and I do think that, just for a moment, acknowledging that the big names are big names for a reason is vital in understanding just what it takes to be successful in the superyacht industry. Those at the top have a common ground

of having worked to the bone at any cost in order to gain recognition as a globally respected superyacht designer.

The most enjoyable means of delving into the resumés of these titans of industry has been my series of pub sessions with various established designers in the market. We've had Steve Gresham sleeping rough outside a shipyard to land a job there and now to Dickie Bannenberg who, in this issue, shares his incredible journey through the world of yacht design.

Moving away from the pub, Mediterranean editor Bryony McCabe also puts her finger on the pulse of the

latest trend and delves into the world of on-board health and fitness. Here, she assesses how designers are keeping things fresh in on-board gyms as more and more superyachts are integrating them into the general arrangement.

Also, in this issue, we take a look into cross-industry innovation and discover how the secrets to success may lie in a different industry altogether. It is certainly an exciting subject and one that we'll be seeing some more of at The Superyacht Design Forum in June, where we are focusing on different perspectives from those within our own superyacht bubble.

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# The intricacies of outfitting

Kai Dittmar, CEO of metrica, outlines the role of the subcontractor, the value they add, the challenges faced in a new-build interior project and how the process can be optimised.

## ABOUT KAI DITTMAR

### OVER 10 YEARS

HEAD AND CEO OF METRICA,  
GLOBAL EXPERT IN TOP-QUALITY  
INTERIOR DESIGN FOR SUPERYACHTS  
AND LUXURY RESIDENCES

### EXTENSIVE

INTERDISCIPLINARY KNOWLEDGE  
IN VARIOUS SECTORS, FROM  
AVIATION AND AUTOMATION TO  
TRADITIONAL CRAFTS AND TRADES

### LEADERSHIP

CLEAR PROCESSES AND  
CUSTOMER FOCUS ARE  
ALWAYS AT THE CENTRE  
OF HIS THINKING

### INTEGRATIVE

PERSPECTIVE ON ALL  
PROCESS LEVELS



Building a superyacht is a complex, integral process. Numerous companies work in parallel to produce the final perfect product. Of course, everybody has their own role within the process and this particularly applies to the different stages on the project phases.

For example, while structural engineers and naval architects are at the forefront at the beginning, those involved in the interior outfit, communication and commissioning play a major role at the end. The role of the interior outfitter is a kind of multi-purpose integrator. They have to address many technical issues and integrate these into the visible living space of the owner.

The airflow of the AC may need special features from lighting specialists, classification requirements, AV integrations or accessibility to technical installation. Coordination and communication are key to a smooth engineering and building process. A vast amount of information needs to be processed and supported more and more by web-based solutions to avoid missing details that may be lost in emails or verbal communication.

The earlier the interior outfitter is involved by the shipyard, the sooner the technical ping-pong can begin. The outfitter can bring additional value at an early stage of a shipyard's engineering process. While space allocations for installations is the easy bit, specialist knowledge of technical interior installations or systems can make a big difference in the overall space process. This will avoid clashes in the later engineering phases.

Meanwhile, in the parallel engineering process, which includes various trades

in the same construction, a clear understanding and commitment at the beginning is advisable for a smooth project. Also, because many outfitters are working at different shipyards, external experience and knowledge can also be shared and be a huge benefit to the final product.

Another challenge is a misaligned engineering process affecting rooms and systems at the beginning of the project. An early understanding will overcome the conflicting approach of 'engineering systems' versus 'rooms' within the engineering process.

The interior outfitter's priority is on 'rooms' and their main goal is to produce workshop drawings for one room to go into production. Engineering at the shipyard is focused on systems such as main cable routes over all decks. While the shipyard is defining the major cable routes, the outfitter may be already asking for the number of switches and sockets to be put in precise positions in a room. A common understanding on both sides will help to deal with additional issues that may crop up.

The challenge is that a lot of information is needed in the early stages of the engineering process, but that data might not yet be available from the design side. This so-called Net-Space-Design co-ordination, which includes both technical and design input, is the most critical phase in a project. Once this has been dealt with in the first third of the project, changes can be kept to a minimum and the process will run smoothly.

Keeping changes and disruption to a minimum is ongoing. Therefore,

the management of expectation and changes plays a big role here. Because the process of building a perfect superyacht is so complex, any late request to change approved data, however small, might have a fundamental impact in the overall engineering and ongoing building process. For example, a raise of only 25mm in the height of a room might lead to a rearrangement of pipes, cable trays, AC ducts, a complete rebuild of interior parts or a redrawing of the room because of linked ceiling and wall dimensions.

Another important thing to consider in the design process is the type of materials used. While, on the one hand, appearance, colour, pattern and feel play a big role, weight, availability, certification and price are also important. The physical impact of being afloat should not be underestimated, which means there have to be fundamental mathematical models of dynamics for certain interior installations.

It is very often the role of the outfitter, in combination with specialised suppliers, to undertake technical studies, research and development projects or internal testing for treatments. All this has to be included in the ongoing building process. Dealing with centre-of-gravity issues, Campbell diagrams, fire-load calculation, steel structures, etc. is our business on a daily basis.

However, the industry should be thankful to be approached by highly sophisticated owners who are pushing the boundaries of technology and state-of-the-art design and technology. It is our goal to move forward and keep one step ahead. **KD**