

THE YACHT

report

The leading magazine for the design, construction,
management, ownership & operation of luxury yachts

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The Yacht Designer

For this issue – our yacht design issue – we have canvassed all superyacht designers for their comments and thoughts on this area of the industry where passion, creativity and engineering meet or clash. The response was enormous and the complete version is available as a Synfo extra. Here we show a selection of the comments with some also shortened to keep this issue under the page count of a dictionary!

Q In your opinion, what makes a good design in today's market and, converse to that, what makes bad design?

Good design – clean, simple, aerodynamic, light weight, fuel efficient, low wake, beautiful lines. Bad design – complicated, heavy, high drag, inefficient, large wake, poor styling.

Orion Shuttleworth
John Shuttleworth Yacht Designs Ltd

As in the past, timeless originality will always stand above all else.

Tim Heywood
Tim Heywood Designs Limited

Sailing or powering ability, comfortable ride, safety and reliability.

Bruce Johnson
President & Chief Designer
Sparkman & Stephens, Inc.

In any market, a good design is the result of technical innovation and beauty. In today's marine market we have included a third element: environment.

In any bad design, there is an imbalance among such elements, a lack of one or all of them.

Horacio Bozzo
Axis Group Yacht Design

The criteria for good design haven't really changed over the years: man-made objects with one or more functions are given an emotionally appealing (or should we say beautiful?) form...

Conversely the rules for bad design might be as follows: put as much on it as possible, do things that nobody has done before (and don't ask yourself why), copy all the latest features from the new designs from the internet and avoid at all cost to make it look like a ship.

Walter Penndorf
WP Associates Automotive and Yacht Designers

A good design – and that's a basic rule for all sorts of design and architecture – fulfils the requirements and demands perfectly, but in addition it adds emotional value through its use. Since those emotions differ individually, good design often polarises and is either loved or hated. Bad design in this regard would be mediocre, without identity, not touching our emotions.

David Münscher
Atomare yacht design

Good is the design that sells. Bad is the design that does not. Either in charter or in purchase the client is

Good or bad design...

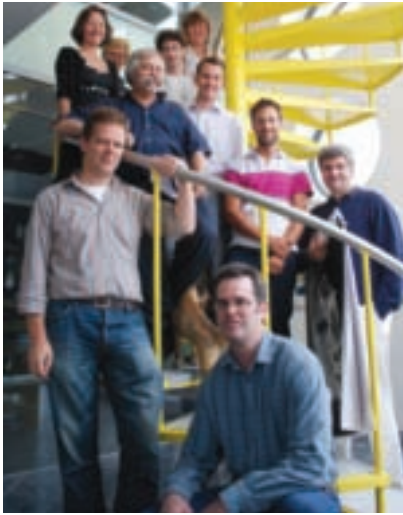


“Any yacht designed by me (is good) and, converse to that, what makes bad design? Any yacht that is not designed by me.”

Donald Starkey
Donald Starkey Designs

INSIDE ANGLE

New materials...



“LED technology has finally come of age, to be soon followed by improved lithium ion and lithium polymer batteries. There is a slow take-up of new composite technology and glass technology. Some less conventional naval architects are exploring the merits of designs which maximise waterline length for best efficiency and speed; Azipods are allowing better manoeuvrability and control.”

Kenneth Freivokh (centre left)
Kenneth Freivokh Design



“A simple and fantastic development is that a new paint is being developed by Akzo Nobel, parent company of International and AwlGrip paints. It is low energy absorption paint. We are using it on a new 39-metre project, which is to be painted dark blue. In reviewing two samples we had ‘normal’ dark blue painted on aluminium and the new LSA on another sample. We were barely able to touch the normal paint while the new LSA was cool to the touch. As a result air conditioning demand is much, much less.”

Bruce Johnson, President & Chief Designer
Sparkman & Stephens, Inc

unreasonable and unwarranted legislation.

Kenneth Freivokh
Kenneth Freivokh Design

Application of the MLC regulations raises some interesting questions. If the yacht in question is in excess of 3,000gt and carries more than 12 passengers it will be categorised as a passenger vessel (or presumably a passenger yacht in terms of the PYC regulations) and it will be acceptable to have mainly twin berth cabins for crew members as is usual for such vessels. However, if the yacht is in excess of 3,000gt but has only 12 passengers it will be classified as a cargo vessel and all crew cabins must be single occupancy, which will of course significantly increase the internal area required for crew accommodation and change the character of the yacht. The solution could be to classify the yacht as a passenger ship regardless of passenger numbers, but this would involve additional costs in meeting full passenger ship regulations including more rigorous damage stability requirements etc compared with the cargo ship regulations.

Chris Earl and Stuart King
Burness Corlett Three Quays

As we have always treated crew areas well, this is not giving us a real hard time. Smaller sailing yachts will be hugely challenged though.

Marnix Hoekstra
Vripack

Q Are there any new materials, finishes and solutions that you feel the market needs to look at or will start to integrate into future projects, based on efficient construction, environmental considerations or just pure innovation?

Yes, bio-composites are now becoming feasible. We are looking to utilise these on one of our smaller projects under 60ft. I'm sure we will see them used for larger yachts in the near future.

Orion Shuttleworth
John Shuttleworth Yacht Designs Ltd

We are involved in a research and development project with Ultra High Performance Concrete (UHPC). If such material will never become the basic construction material for yachts, such material is of interest for specific areas, where fire insulation, sound insulation and mechanical requirements offer UHPC to be competitive in terms of space, weight and cost compared with steel.

Thibaut Tincelin
Stirling Design International

Sure – notably some of the synthetic decking products, although the best of these (MarineDeck from Stazo in Holland) has been around for 30 years. Only now is it becoming a ‘popular’ subject as manufacturers jump on the ‘green’ bandwagon.

Michael Schutte
Brilliant Boats

For environmental and political reasons teak will slowly be replaced by alternative materials more often. When composites become ‘greener’ they may replace aluminium, but until now they are difficult to recycle.

René van der Velden
René van der Velden Yacht Design

All green technical solutions, and those that are environmental friendly have to be investigated and introduced in the yacht market: solar power, fuel cells, bio-diesel and bio-mass fuel as first. Also, paint solutions and painting technologies are under continuous innovation and progress; also the possibility to reduce the filler for fairing should be considered: to this purpose we are approaching our designs by limiting the use of aluminium (too soft and a greater amount of filler needed) for the superstructure design, and are pushing on with the use of high tensile steel for the entire vessel structure.

Andrea Splinakis
Naval Architect
ZerotoNineDesign TM

As ‘stylists’ we are invited to work with the material portfolio offered by the yards. Yards with high labour costs are constantly seeking ways to reduce this through faster/simpler/

INSIDE ANGLE

more mechanised solutions within the current framework of materials and construction techniques. The yards with lower labour costs are always trying to reduce their material costs to the cheapest materials around. I see innovation coming on hull design, power plant solutions and sensible environmental solutions that are cost effective.

Jonny Horsfield
H2 Yacht design [part of H2 design group]

As everybody can observe there is a global trend towards energy efficiency and sustainability, I think we will see more composite superstructures in order to reduce vessel mass overall, lower the centre of gravity, and gain more freedom in design.

Walter Penndorf
WP Associates Automotive and Yacht Designers

We believe that the time to market (length of time it takes from a product being conceived until its being available for sailing) is an important aspect. Efficient construction implies delivering a yacht within a shorter span of time. To establish that, we need to make sure that our information management is quick, in order to supply the required data at an early stage. We find it very important to focus on innovative structural engineering so that the yards can produce more efficiently. New solutions make the multidisciplinary manufacturing easier for the yard. Modular structural sections are prepared and equipped with piping, insulation and machinery, and are being assembled. Special features such as sea balconies are manufactured, conserved and delivered to the yard as one unit and just need to be integrated into the hull. Integration of large interior parts is the next step. Based on environmental considerations we started to research the use of bio-resins and fibres in non-structural and structural parts for yachts.

Sea Level Yacht Design & Engineering

Lighting – as an integral design approach! With focus not only on new, energy-efficient lamp sources such as LEDs, but also the way the lighting is being used, installed and integrated. Also, the shipyard needs to realise that the LED technology is rapidly changing and that in five years the same product will not be available anymore.

Beatrice Witzgall
I3D, Inc.

Q Is the cost of design and the budget for the yacht as a whole becoming more closely scrutinised by clients in the current economic climate, which could lead to downsizing or more conservative projects in the future?

Damn right it is.
Kevin M. Kerwin, P.E.
Kerwin Naval Architects, Inc.

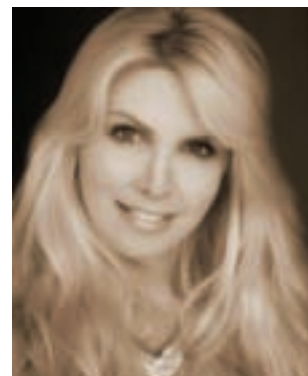
The budget for each of my projects has always been a prime consideration, the designer who does not consider the cost will quickly antagonise his client and the project will hit the rocks. This has always been true and nothing has changed. A costly solution to a design question still has its place, but, as always, needs to be carefully explained to the client writing the cheque.

Tim Heywood
Tim Heywood Designs Limited

A professional, intelligent design package will save the owner far, far more than it costs...I deliver boats, not projects. The smart customers gets this and are prepared to pay what it costs to do a proper design, so that their boat is delivered faster and cheaper. I hope that nobody will accuse us of being conservative as designers, and in point of fact our creativity is aimed at the whole project, including the engineering and build strategy, not just the profile and arrangement. Good design delivers a cheaper boat, not just a flash one.

Michael Schutte
Brilliant Boats

New materials...



“Green products such as bamboo, cork, leathers, and fabrics made from green fibres, textured and natural stones, metals and glass. Design will be moving towards an organic approach as we move into 2010.”

Karen Lynn Poulos
Karen Lynn Interiors, Inc.



“Light weight to low cost. Strong enough to last a life time. Good price quality ratio.”

Robin ten Hoope
Van Dam Nordia



“Cost impact of materials applied is more and more important. Not only is the cost of the hard material important, but also the time and effort required for installation need more attention.”

Marnix Hoekstra
Vripack

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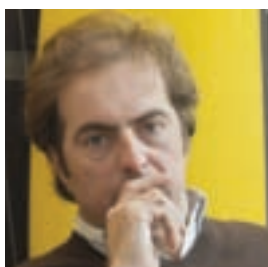
The cost of design...



“Speed’ and ‘unlimited budgets’ are now terms that belong to the past. Still, the demand by sophisticated owners for quality in design and in construction is what has driven the superyacht market so far. I strongly believe that this will not change in the future regardless of the size of the project.”

Horacio Bozzo

Axis Group Yacht Design



“Particularly in the large size yachts owners tend to implement all the design costs into the builder’s costs, in order to have a single package to deal with. It makes sense.”

Lorenzo Argento

Luca Brenta Yacht Design



“We see this effect only in the mid-size range up to 30 metres length. The large projects suffer only in cases where they are commercial (like passenger sailing vessels) because the financing banks are more difficult now.”

Detlev Loell

Detlev Loell and Partners

Yes, sure. However, for the downsizing part I see a new challenge, smaller yachts but still with the items that are found on board larger yachts.

Guido de Groot

Guido de Groot Design

Downsizing may be part of the answer for some clients, but conservatism definitely not. Designers and builders should carefully look if what they have been doing for years is still the best solution or just a habit. Clients can have another look at their requested top speed and sometimes oversized generators and wonder if they want to pay for something they hardly ever use. Intelligent and efficient design and building processes will ultimately lead to a better product.

René van der Velden

René van der Velden Yacht Design

Absolutely they are more sensitive to costs but I am not aware of any downsizing - rather value for money in their projects.

Jonny Horsfield

H2 Yacht design [part of H2 design group]

The first is probably true for most clients in the current economic climate and we will probably see more cost driven designs in the future, which is not necessarily a bad thing - necessity is the mother of invention.

Walter Penndorf

WP Associates Automotive and Yacht Designers

The cost of design is related to budget but not exclusively. Low budget projects are requiring more design time and cost to reach good quality.

Giorgio Vafiadis

Giorgio Vafiadis & Associates

Yes, at least for a while.

Kenneth Freivokh

Kenneth Freivokh Design

It will lead to more repetition and less innovation. It's actually quite sad that some of the most prestigious projects compromise on something as representative as lighting that defines the atmosphere and sculpts a space.

Beatrice Witzgall

I3D, Inc.

Yes, but not only due to the economic climate. In general yachts are too expensive to build and often too complex; this also gives huge hassle in maintenance.

Marnix Hoekstra

Vripack

Q Are you seeing any increase in client enquiries for new builds and if yes, are they from emerging markets, brand new clients or from current clients wishing to capitalise on the financial squeeze that the industry is facing?

Not yet.

Thibaut Tincelin

Stirling Design International

I am pleased to report that we are seeing an increase in the level of enquiries for new designs and new builds. These enquiries come from old and new clients and are in the larger sector of the market. I am sure that this activity will work its way down to the other sectors of the market...

Tim Heywood

Tim Heywood Designs Limited

Funny, but yes. In a market full of doom and gloom we remain busy - in fact busier than ever and growing to cope with the demand. I see two 'new' types of clients out there today. First are the bottom feeders, lurking around to pick up a superyacht bargain from the receivers... The second type (and I like this guy, a lot) is the one who is sitting on top of 500 million accounting units and has realised that the return he is getting on his money today is very poor, and/or fraught with risk. Two years ago, taking 30 million out of his portfolio would have cost him 3 million a year in lost (low risk) income. Today this is categorically not the case - low-risk investments are paying peanuts and the high risk stuff is wobbling than ever. So our man has decided to actually spend some of his money on something that gives him pleasure.

Michael Schutte

Brilliant Boats

We do not see any increase in