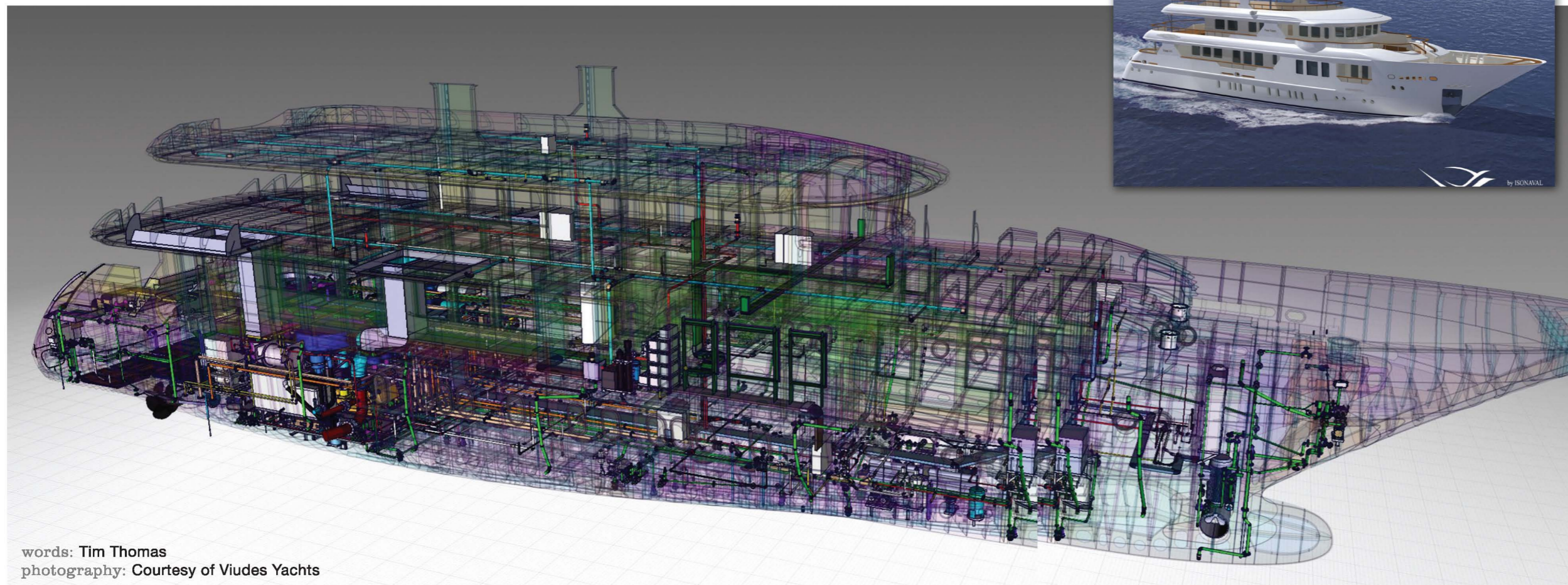


Room with a Viudes

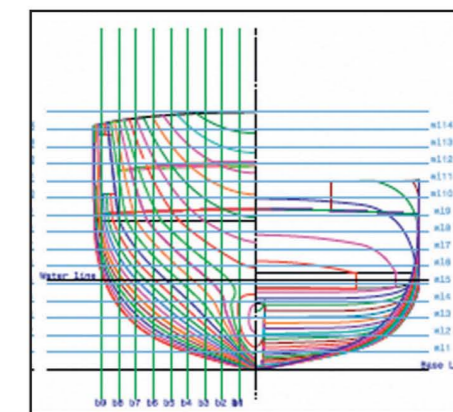


words: Tim Thomas
photography: Courtesy of Viudes Yachts

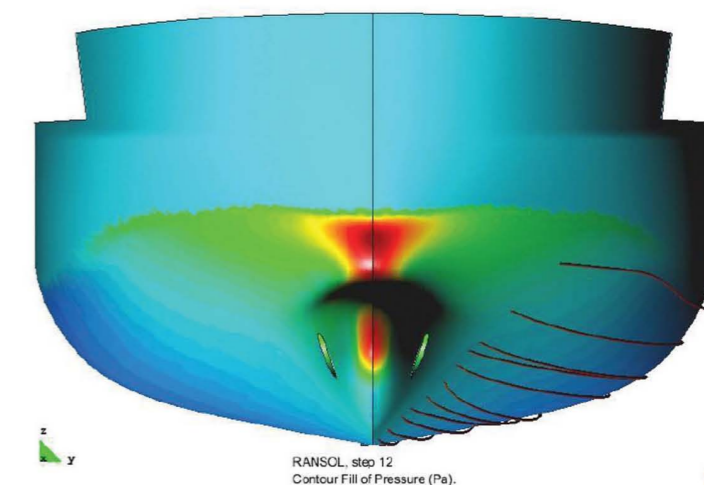


Striking a balance

The Viudes 45 is notable for its vast volume – which lies right on the cusp of the 500GT limit – and naval architects ISONAVAL undertook several elements of testing to optimise the hull. ‘Once we have the basic hull skin as a 3D concept,’ explains William Pegram, ‘we use that to generate a true hull. It is pretty close to the final version, but we don’t have the exact hull form until the Computational Fluid Dynamics (CFD) testing is done. We tank tested an unoptimised version of the hull, but the design was optimised for the CFD analysis and most of the work was done in that environment.’



What the testing did reveal, however, was a rather unusual problem. ‘The yacht has a very generous beam,’ Pegram continues, ‘which means a very good stability form. But we’re also looking for comfort. If the yacht is over-stable, it returns to a neutral, upright position from a roll with over-acceleration.’ As a result, it was decided to build the first level of the superstructure in steel rather than the originally proposed aluminium to create a higher centre of gravity, which leads to a different righting moment which in turn reduces acceleration out of the roll. ‘We then combined this with Quantum QC 1800 zero speed stabilisers,’ says Pegram, ‘which are large for the length of the yacht, but not the beam, and this solved the problem.’



VIUDES YACHTS MAY BE A NEWCOMER TO SUPERYACHT CONSTRUCTION, BUT ITS FIRST BUILD SHOWS A REMARKABLY MATURE APPROACH

‘To start from scratch building a 45 metre yacht,’ says Pedro Millet Jr, ‘is a bit like jumping into a university degree!’ Millet Jr, who runs the Port Vell-based Yacht Marine brokerage house with his father and who is representing Viudes Yachts, is talking over lunch on a sun-blessed December day in Barcelona. Just a five minute drive away, the first Viudes 45 metre yacht is well under way. Her engines have just been fitted, and the welders are less than a month from finishing the main hull work. Bulkheads are being put in, the wiring and piping is nearing

completion, insulation is advanced, and a classically styled interior will shortly be on its way from the subcontractors in Italy.

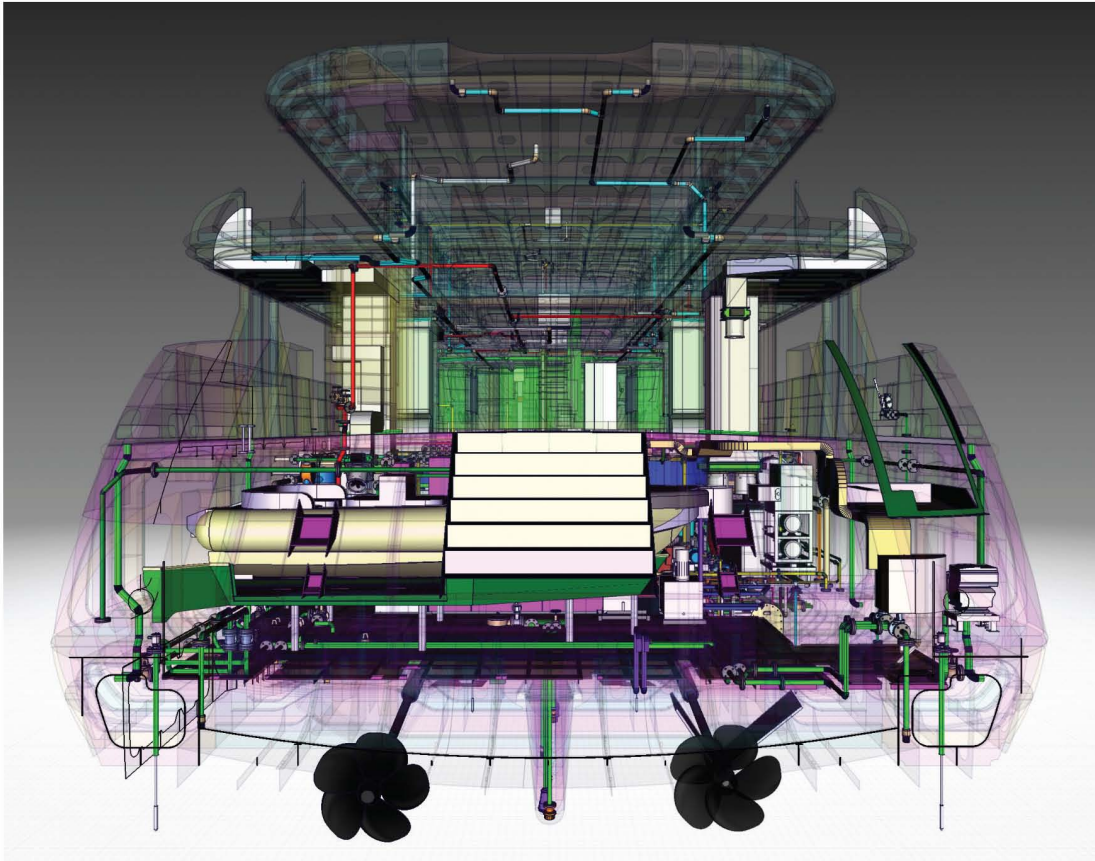
It may seem an ambitious start for a new yard to launch into building a 45 metre yacht on spec, but with keen interest already shown by a number of potential clients, it looks like the gambit may have paid off. In some ways, it is hardly surprising, as the yacht – while appearing fairly conventional in terms of styling and lines – carries an abundance of features that will appeal to a broad client base. Most impressive is the proposed

volume of the vessel which, with its 9.5 metre beam, just squeaks in below the 500GT threshold. Combine this with generous interior headroom – 2.15 metres – and a wealth of other minor innovations, and the appeal is easy to see. Indeed, the expansive headroom has been combined with windows that, in the main saloon for instance, feature frame tops at 1.9 metres, high enough for tall guests to see out without having to stoop.

The yard was born from a series of fortuitous events. Firstly, Millet Jr’s brokerage business sold a 32 metre yacht to a client who then expressed interest in entering the superyacht build market. ‘I knew the North Wind yard, situated at the end of the outer mole of Port Vell, was out of work,’ explains Millet Jr, ‘so we decided to set up a yard.’ Signing a contract for



A year in the life of a 45m build: from initial CAD designs, 4,000 parts are cut ready for assembly to begin at the yard. Over the course of 12 months, the Viudes 45m starts to take shape. Far right: CFD work ensures an optimised hull



Wind yard. 'The build process has been very artisanal,' Millet Jr continues. 'For example, the piping is done like it is done on ships, with big flanges etc. There's a lot of big ship mentality, and in a way this yacht is being built like a proper small ship.' Indeed, in order to ensure the build reaches the highest possible standards, Viudes has brought in supervisory expert Antonio Pozzi, who has overseen work in some of the Dutch yards. The yacht will be finished to Lloyd's and MCA classification.

For the interiors, Millet Jr and the yard owner decided to subcontract for the first yacht. 'It's a spec boat, but of course we had to decide whether to go modern or classic, so the yard owner gave the direction on style,' Millet Jr continues. 'We decided it would be faster to build the interiors outside, and for the first yacht we wanted to get an assured level of quality.'

Of note, too, is the beach deck arrangement on the stern. A large transom section drops down to create an expansive swimming platform, but the hidden transom is solid with broad stairs to the aft deck. This means guests are not exposed to the workings of the stern garage, which has separate tender-launching access through a port shell door, while a transom door to starboard gives guest access to a day head and sauna.

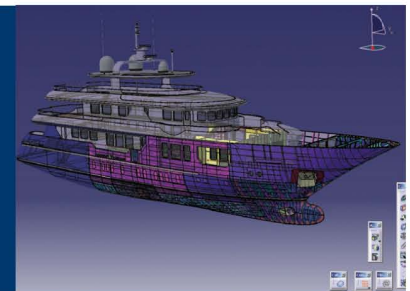
The first 45 metre will feature conventional, twin diesel propulsion, and

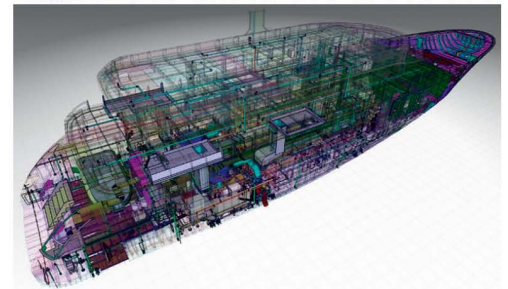
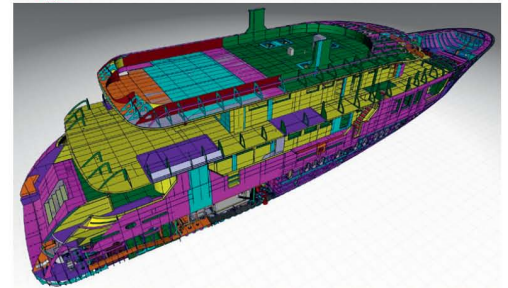
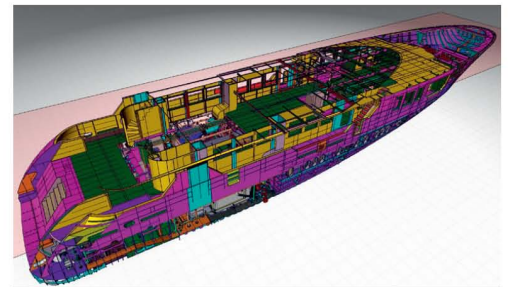
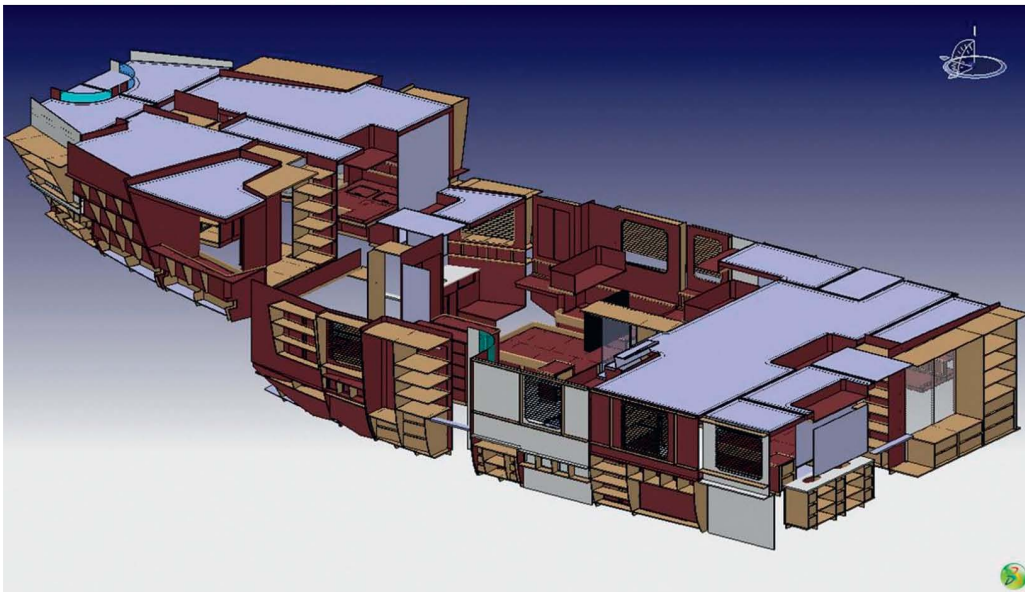
projected figures show a cruising speed of 14.5 knots giving a 3,000 mile range, while a speed of 12 knots will give an impressive 5,000 mile range from 79,000 litres of on-board fuel. Top speed is predicted to be 15 knots. 'Our mentality is focused on displacement,' says Millet Jr. 'We have looked at hybrid technology, but it easily adds 15 percent to the price and it is very new technology. We've done a study on a hybrid version of the 45 if someone wants to do it, but it is likely to be someone who knows the tech and knows the higher initial cost.'

As for the build of the first 45, Viudes is hoping to have the yacht ready for Monaco 2010, but, says Millet Jr, they will not rush the project just to get it there. 'We have just been going for a year,' concludes Millet Jr, 'but we are learning a lot, and the product will be sensational. We are now at the point in construction of the first hull that we could start on number two.' The yard may not have to wait too long – when *Boat International* visited, the full-size interior mock-up had been altered for a client who wanted a larger galley on the main deck, and was interested in building hull number two. If starting from scratch has been like jumping into a university degree, Viudes Yachts could be about to pass with honours.



Top: the design has a drop-down beach which reveals a generous stairway to the aft deck so guests can enjoy the water without being exposed to the stern garage. The tenders are launched via a port-side shell door in the hull





the sole use of the North Wind facilities, and taking the name of the former Astilleros Viudes, Viudes Yachts was born and, before long, a 40 metre project was on the boards. 'An engineering company had worked up the 40 metre for a client,' continues Millet Jr, 'and they tried to sell it on to us, but in the end we modified it so much it had to be completely redesigned – we couldn't even use the piping or engineering systems. We had a clear idea that if we were to set up a yard, we had to have a boat – clients want to see a real yacht. So we looked at the market and decided that just over 40 metres was a good size. It is big enough to be comfortable, but small enough still to be able to go everywhere. We wanted to produce a 45 metre yacht with a difference, with balconies, a big VIP cabin and the like.' It was at this point that the Barcelona-based naval architects ISONAVAL were brought on board.

'The first sketch was very rough,' says ISONAVAL's managing director, William Pegram. 'But within a couple of weeks we had gone from a 43 metre yacht to a 45 metre design – the development of the interior necessitated longitudinal stretching. Part of the revised length went into the bow flare to give a more generous foredeck and a much nicer profile, while the rest was given to the engine room.'

This need for extra space for the technical areas was due in part to the fundamental design requirements of the yard owner. 'As a rule, we have to pinpoint the basic spec given by an owner regarding fuel and fresh water,' Pegram continues, 'which will give us a usable interior volume. Of course, we have to include the engine room, so that, combined with tankage, gives us a designated volume for the "noble" spaces.' With such a high volume interior desired for the design, and with the yard owner insisting on decent headroom throughout, the final design was something of a challenge for ISONAVAL. 'The 2.15 metres headroom has been achieved by having practically no unused technical areas,' continues Pegram. 'The biggest challenge has been to optimise all the technical space on the boat while keeping the volume within the 500GT limit.'

For a fledgling yard, progress has been swift. The design work was started in May 2008 with the first drawings of the original 40 metre yacht, and by October 2008 the 44.8 metre design was finalised. 'We were spending ten hours a day at the naval architect's office, then another five hours in a restaurant discussing it further,' says Millet Jr. 'It is a long journey, but when you get the end result it's very satisfying.' The project has been helped too by the skill base that already existed in the North



While work continues on the main hull and superstructure build, a full-size mock-up of the interior allows for refinements to be made, as well as giving the owner a chance to make modifications to the general arrangement