

YACHTS YAGHTS





The bow was completely remodelled to achieve this elegant entry point, with integrated custom anchor system.

ven when taking into account the astonishing pace of development in the UAE, the meteoric rise of Abu Dhabi MAR since its sudden entry into the megayacht scene just four years ago is nothing short of remarkable. Founded in 2007, Abu Dhabi MAR is a joint venture between the Al Ain International Group (51 percent) and Privinvest (49 percent). Cementing its position amongst the world's leading shipbuilding groups, Privinvest owns Nobiskrug and ADM Kiel in Germany, Hellenic Shipyards in Greece, CMN in France and Abu Dhabi MAR.

Splashed in early November, the Project codenamed Swift141 and now named M/Y Yas, immediately positioned itself as the sixth longest yacht in the world. While her extraordinary styling, courtesy of the Pierrejean Design Studio in Paris, makes her instantly recognisable, arguably the most astonishing factor is such a large project was undertaken by a brand new yard outside the traditional megayacht building countries. "It was an exciting start," confirms Johan Valentijn, General Manager at Abu Dhabi MAR. "We had nothing, so we had to build a yard to build the yacht."

In many aspects the building of Yas is a microcosm of how the UAE has been built as a country. Visionary UAE nationals demonstrate the courage to invest in ambitious projects, and then bring in internationally recognised experts to execute their plans. Johan Valentijn is a prime example. Having been brought up in the family shipyard in Holland, Valentijn then studied naval architecture, marine engineering, and business management before embarking on his illustrious career. With a CV that includes 30 years of production and custom yacht design at companies including Dufour and Burger Boat Co., his involvement in four major America's Cup Campaigns demonstrates his ability to work under extreme pressure at the cutting edge.













DECEMBER-07

Extended to 141m, the stern of MY Yas now incorporates a lowering bathing platform, behind which sits the inifinity pool.







Fitted with the largest ever-dual hub-less bow thrusters, and stern thrusters, MY Yas features a Dynamic Positioning System, she can hold position and heading without anchor or main engines. Recounting the story of how he's adapted the hull of a UAE Navy frigate as the basis of a 141-metre yacht, Valentijn is justifiably proud of accomplishing his biggest challenge to date. "It all started in Jebel Ali, Dubai, where the frigate was stripped of its weapons systems and superstructure," he explains. "At that time we were looking at several options for a suitable yard to continue the work, but none were feasible, so we moved the hull to the Port in Abu Dhabi and started work. From January 2008 to April 2009 we worked in the port, before we were offered this site in Port Zayed, Abu Dhabi, and we built the yard nearly from scratch."

When asked about the advantages and challenges of creating a yard and project in a country outside of traditional shipbuilding countries, Valentijn nods. "One great advantage when building for the country's VIP's is there's not the huge amount of 'red tape' you'd experience in Europe. On the other hand, the infrastructure and support that other yards enjoy was absent, so my first six months

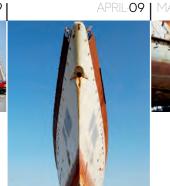
was spent assembling the leading sub-contractors from all over the world. We really wanted to build a yacht that would compare with the best being built in Germany or Holland, so we brought the right people in. Without the union issues they have in Europe, we were then able to train our own craftsmen under expert guidance, pass on experience and this has been a major benefit in expanding the local talent pool in terms of welders, electricians, carpenters and the like."

Creating the yard and launching a 141-metre yacht in a little under three years took huge amounts of manpower. From the initial workforce of just ten personnel in January 2008, this grew to 1,200 during peak production in November 2009 and July 2010, averaging out at around 1,000 people on site for the final two years of the build. "Communication was surprisingly not an issue despite such an eclectic mix of nationalities working together," Valentijn laughs. "It may have been like the League of Nations, but someone always knew enough of another's lan-











NOVEMBER-08

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guage to communicate."The workforce certainly translated Pierrejean's design into one of the world's most recognisable silhouettes, but what was the thinking behind such radical lines? "Five different concepts were initially presented to the owner, ranging from very conservative to the design we've built. His Excellency started at the conservative end and said 'No, no, no, no... yes!', so he picked the most extreme and spectacular design, one that would truly make a statement. I was really pleased, as so many of the world's largest yachts have the same basic profile, apart from Philippe Stark's A, it is basically only the scale and details that change. Of course the challenge was then in building the yacht, but if we don't take these advanced steps we won't progress. We'd have never got to the Moon if we'd simply stuck with flying airplanes." So where does Valentijn believe Yas advances megayacht building? "It was phenomenally difficult to figure out how to build the glass structure, the hardest part of the project, but Pierrejean is extremely competent and challenged us without setting an impossible task. He called after we sent over the photographs from the launch and was impressed we'd completed the original concept with hardly any changes—then he flew over to see for himself! There are 538 pieces making up the glass wraparound; it's a huge mosaic with many curves and planes. With

such a large glass feature set into a composite moulding we had to account for flexing and the expansion and contraction of the steel hull. We

"Progress: we'd have never got to the moon if we'd only flown airplanes..."

built a sliding joint into the superstructure; it's like a skyscraper or a bridge, its designed to flex. The superstructure, the largest composite superstructure ever built, caused so many headaches and stress that it literally cost one engineer a nervous breakdown. But we achieved the goals we set out." So why was the superstructure built in composite? "To save weight for performance and, as she



has such a slender beam, it also lowers the centre of gravity and enhances stability." Valentijn explains. "We considered aluminium, but it would have been a difficult task and while making moulds was labour intensive, we saved the time on fairing at the other end. The whole superstructure was built in 35m by 8m modules in the USA, before being assembled in the Abu Dhabi. Even the intricate mullions were included in the mould, so the glass fits perfectly. It's a very light and strong construction."

As the photographs show, little of the original frigate remains except for the steel hull. "We did make some modifications the hull," Valentijn continues. "After we removed the sonar dome beneath the bow, I looked at the list of largest yachts and realised that if we extended the 135-metre hull a bit, we'd not only make the design look a little more balanced, but also jump from outside

the top ten to the sixth longest yacht in the world. So that made sense. I then took a look at the original bow with a young man (just 23-years old) called Colin from Australia with his Asian team, and decided somehow we'd make it less steep. Cutting a series of templates we worked it up with some very good metalworkers and ended up with this fine flared bow we have now."

Further modifications to the hull include port and starboard gangways for guest embarkation, and a large lateral opening for the garage/beach club and fitted a carbon-fibre door. The stern was also extended and remodelled to fully appreciate the glass fronted split-level infinity pool. The transom door not only drops, but also lowers into the water, allowing divers and swimmers access to the sea whatever the waterline height dictated by the fuel load. This has the dual advantage of allowing easy launching of the rescue boats during offshore passages, located in the stern rather than high up on the foredeck, far more practical when required in an emergency.

In terms of the propulsion system, the 56,000-hp gas turbine engines were stripped out and replaced by MTU diesels. "While the frigate would do 32 knots at top speed with the turbines, the range, noise and vibration they produced would not have been compatible with a luxury yacht," explains Valentijn. "Now we have 11200 hp each from the MTUs and a 141m yacht with a very slender 14.5-metre beam, so thanks to hydrodynamic efficiency she'll still produce 26 knots at the top end with a 20-knot cruising speed. We've also retained the original variable-pitch propellers and straight shaft drives and added a four-fin zero speed stabilisation system." With completely new

Yas's slender beam dictates tenders will be stowed on the exterior behind the pilothouse. Note how their launch and retrieval system appears like wings.













MAY-10





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At night the glass of MY Yas will glow thanks to an LED system incorporated into intricate mosaic. The sundeck features electrically actuated guardrails that lower when the helipad is in use.



power, electric, cooling and plumbing systems throughout, Valentijn estimates over 400 km of cable was used in the wiring of Yas.

The interior, which contains accommodation for 60 guests, was still off-limits during our visit, but from clues picked up on our tour of the yard it was obvious renowned brands like Metrica, Struik & Hamerslag, and Greenline are involved in her fit out. It was hinted that Yas features all the facilities traditionally associated with a vacht of her size: helipad, hot tubs, libraries, a cinema, hair salon, medical and dentistry facilities, etc. The photographs we've included provide some indication of the spectacular glass walls the pilothouse and owner's staterooms enjoy. "The bridge," Valentijn confides, "will be one of the most spectacular you've ever seen. Space-age black glass consoles, sole to ceiling wraparound screen, and up behind the main helm is a vantage point for the owner. On his dhow he enjoys time at the helm, so we've built in a whole console linked in with repeaters from the main bridge, this way the crew sail the yacht, but he can observe all the onboard systems including nav, comms, cameras and everything else." While on the subject of crew, there's accommodation for up to 60, 24 ship's crew and the remainder for guest catering.

Not only does Yas break ground in terms of size and construction, the project was also the foundation upon which the UAE Large Yacht Code was built. "We realised

due to the size of the vessel, we may have to build to SOLAS certification and all that that entails," smiles Valentijn, "so instead we sat with Det Norske Veritas (DNV) and drew up the classification which now constitutes the UAE Large Yacht Code for private vessels. While maintaining high standards with regards to safety and quality, it is more flexible than existing classifications. We then handed this onto the National Transport Authority and hopefully in the future they will pursue this opportunity more aggressively. It is a fantastic chance to develop a UAE flag registration, which would offer benefits to the country, the industry and yacht owners."

And the future for ADM Shipyards? "We of course have the second 'Swift' hull here in the yard, completely stripped, but of course the whole world's economy has changed, so we're working on other projects for now. We have a large dhow in build, a fast wave-piercing craft in prototype, we're also building fast patrol boats and have two large catamarans to convert into helicopter carriers. There's plenty to keep us busy." Looking to build on the cross-flow of knowledge and expertise between the different yards within the Privinvest family, it appears there is an exciting future ahead for the company's shipyard in Abu Dhabi. But before we close the book on Yas, there is of course the story of the interior to tell. Should the opportunity arise we've once again been promised an exclusive first look... so be sure to keep checking back with Yachts magazine.



LOA: 141m **Beam:** 14.5m **Draft:** 4.30m

Engines: Twin 11,200hp MAN Max speed: 26-knots Cruising speed: 20-knots Range: 5,000nM Guest Capacity: 60 Crew Capacity: 60

Construction: Steel hull/Composite superstructure

Class: UAE Large Yacht Code (in co-operation with DNV)

Exterior and Interior design: Pierrejean Design Studio (Paris, France) **Naval Architecture:** Koninklijke Schelde Groep BV (KSG) AITAC

Builders: Abu Dhabi MAR

The absence of open lateral passageways exaggerate the yacht's bullet-like appearance... though the cleaning crew may not be so appreciative.















MAY-11

SEPTEMBER-11

NOVV

