

# BOAT

International

EXCLUSIVE  
On board the  
new Amels 188,  
*Volpini 2*

The future  
of private  
aviation  
*page 163*

# TOP 101

THE WORLD'S BIGGEST BOATS

# BEYOND LUXURY

80 PAGES OF PURE CRAFTSMANSHIP

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The state of the market –  
the 2019 Global Order  
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What we learned from  
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industry's biggest players

Tracking the fall and  
rise of China's  
superyacht scene

# Tiers of joy

*Faced with strict new  
Tier III regulations,  
Amels has embraced the  
future and created a  
clean, green trailblazer,  
as Marilyn Mower  
reports*

COVER BOAT  
VOLPINI 2



Right and below: wide side deck overhangs and the substantial overhang in front of the wheelhouse, both with a built-in "drip-edge", are thoughtful standard design touches that will be appreciated in inclement weather



Below: in profile and from the stern quarter, all of Tim Heywood's exterior lines converge in an arrow shape. It's a youthful style that adds a sense of movement to the vessel, even at anchor. The large swim platform is the site for arrival by tender



**MOST SUPERYACHTS ARE THE OUTCOME OF A DESIGN EXERCISE.**

**THE 57.7 METRE VOLPINI 2, HOWEVER, IS THE RESULT OF AN UNEXPECTED CONVERGENCE OF A BUSINESS PLAN AND AN ENVIRONMENTAL EDICT.**

In 2011 a globally mandated reduction in engine pollution known as IMO Tier II came into force. For large yachts, it required a simple enough switch to low-sulphur diesel fuel and perhaps a few tweaks to combustion. It also laid the groundwork for adopting the next stage in cleaning up maritime diesel emissions, a massive 70 per cent reduction in nitrogen oxide (NOx) gases, the main cause of smog and acid rain. This was slated to come into effect in 2016.

There was a collective gasp in shipping and yacht building. This next stage, Tier III, was not so simple: it would take more than improved fuel quality – the equipment for meeting this regulation did not exist. The response from some quarters and countries was to push for postponement of Tier III to 2021. Some yacht builders began laying extra keels so that the vessels that would eventually attach to them could be exempt (the regulation would apply only to keels laid after the date decided). Some stood on the sidelines unsure of what to do.

At Dutch builder Amels, the business focus in 2012 had turned to developing a new Limited Editions model, one that could fill a market gap between its 180 (at 55 metres and 671 gross tonnes) and the 199 (62.4 metres, with its scimitar bow and hefty 1,131 gross tonne volume). "We wanted to bring the feeling of space, refinement and many of the features of our larger yachts to the segment around 1,000 gross tonnage," says Victor Caminada, Amels' brand and communications manager, adding that initially at least the yard zeroed in on a boat of less than 60

metres, with moderate beam but a noticeable increase in interior space.

But then in 2014, just as yacht and shipbuilders had begun to think that an objection by Russia would effectively postpone Tier III implementation to 2021, a Danish compromise began to win international support, bringing the new NOx standards into play for all vessels over 500 gross tonnes with keels laid after 1 January 2016, but phased in through certain zones at first, notably both coasts – out to 200 nautical miles – of the US and the US Caribbean.

For Amels, it was clear that because of its begin-construction-in-advance business model, both design and technology needed to be worked on at the same time – and the subject would be its nascent 188. "It would make no sense to introduce the first Amels 188 and then on subsequent builds of the design to make drastic engineering changes to comply with the Tier III regulations," says Caminada.

With the support of its giant shipbuilding parent company Damen, Amels set to work to make the new build Tier III compliant. That was easier said



Right: Volpini 2 has a top speed of 15.5 knots and at her standard 13-knot cruising speed has a range of 4,500 nautical miles





The primary wood used is fiddleback sycamore, bleached to almost-white then stained the palest taupe for a consistent look and given a satin finish to match copious leather wall panels by Foglizzo

than done. “We discovered that the solution wasn’t just about engines or fuel or exhaust tubes or catalysis or scrubbers alone but about all of them working in tandem and seamlessly,” says Caminada. Individual OEMs could not introduce one component without knowing what other equipment would be in the system, nor could they design parts without knowing space constraints. “We had to get our arms around them and lead them to a solution together.”

While container ships and 100-metre-plus yachts may have room for huge exhaust catchment devices called scrubbers that capture and incinerate NOx and particulates, Amels chose another path to attain cleaner emissions. This was Selective Catalytic Reduction, an exhaust after-treatment methodology pioneered by the trucking industry.

However, marine fuels, the much larger horsepower at play and the marine environment in general required new kit, says Caminada. The solution would require class approval, but there was no consensus on assessment and approval for that new equipment.

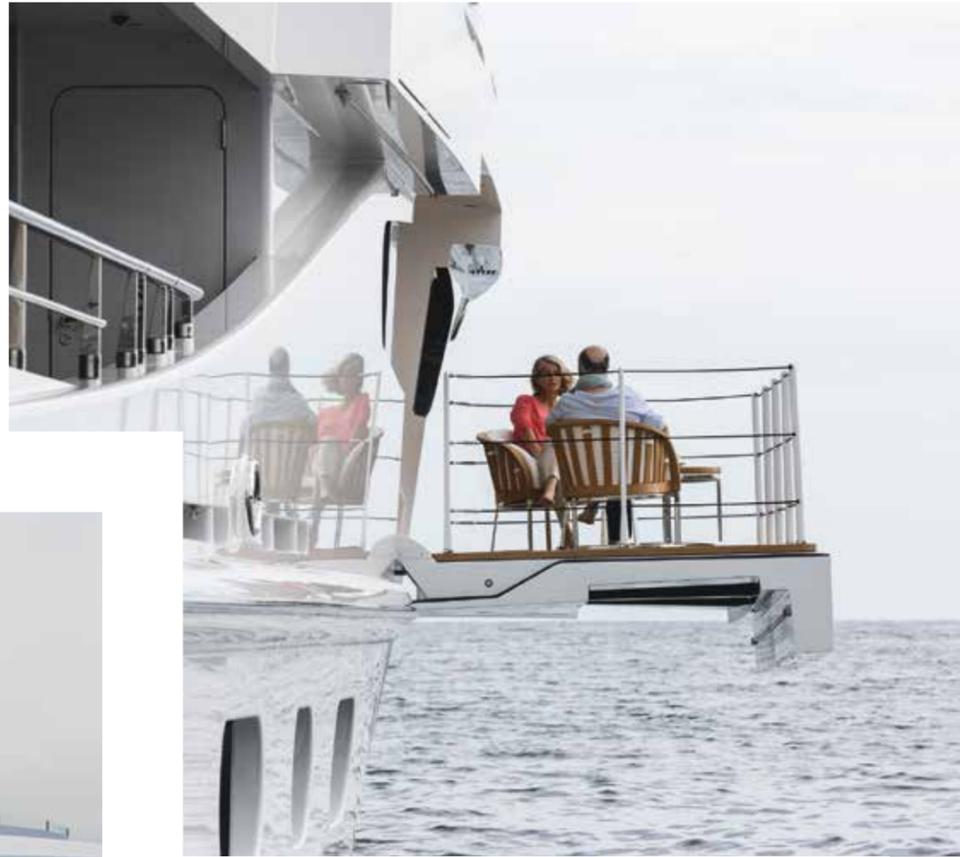
Proactively, Amels’ engineering department corralled its subcontractors – MTU, Veth and exhaust supplier Hug – plus the classification society Lloyd’s Register, to hammer out a solution. Confident that one could be found, Amels unveiled the design for the 188 at the Monaco show in September 2015 and laid the yacht’s keel before the end of that year. “Our head start through voluntary compliance explains how we were the first yacht builder to deliver a Tier III compliant yacht,” says Caminada.

It’s impossible to enter the Limited Editions 188’s engine room without noticing refrigerator-sized silver boxes wedged between the MTUs and the exhaust tubes. This is where the magic happens: a 40 per cent urea solution, also known as diesel exhaust fluid (DEF), is injected into hot exhaust gases from the gensets and main engines in the presence of a ceramic-based metal oxide catalyst. Here, the pollutant transforms into harmless nitrogen, water and minute amounts of CO<sub>2</sub>. The unavoidable size of the catalytic converters and the urea tank (in this case 2,000 litres) led me to ask exterior stylist Tim



**Yes, master**

The oasis that is *Volpini 2*'s 90m<sup>2</sup> main deck master suite is magnified the instant the yacht anchors and the starboard side terrace opens up and expands the seating/television area. The terrace is large enough for two chairs and a table for drinks or a light meal service.



The tall headboard behind the king-size master bed is by Italian firm Studioart. Its tactile leather surface brings a wonderful lightness to the room

The owners appreciated the 2.2m overhead height available throughout the luxury spaces. To make sure the owners can take advantage of all the clothing storage in the dressing room, the highest bar in the wardrobe cleverly unlocks and swings down and out for easy reach



Left: the terrace, on the starboard side of the owner's suite, deploys in just a few minutes at the touch of a button and the stainless steel and rope railings are stored in a nearby cupboard. As the terrace folds down, a section of teak automatically fills the transition space, creating an unbroken floor for the lounge

Leather wall panels face the custom aqua velvet sofa bed by the London-based Sofa & Chair Company



Carpets in the owner's area, main deck saloon and bridge deck saloon are a 50/50 wool-silk blend in pale taupe, woven by Tai Ping. The square pattern in the weave recalls the crisp shapes of the joinery

Hull No 2 of this Limited Editions range is already under construction and will also feature a Raymond Langton interior. It will have an even larger master cabin than Volpini 2 and vertical windows in the adjacent owner's office



Heywood whether Tier III equipment necessitated a change in his design. “Not at all,” he says. “From the beginning, we wanted to create a boat with high ceilings – 2.2 metres on all decks – and a fifth tank deck for extensive provisioning. Amels gave me the blocks of space for the luxury interior area and the machinery spaces and it was my job to create a flowing line over them while keeping the profile as low as possible.”

Heywood has penned the “flowing lines” of every Limited Editions exterior since day one. The 188 is his sixth design for the range – and Amels has since confirmed that all future 188 hulls will be stretched to 60 metres, with most of that extra space going to the beach club and stern. “No other designer has gotten so much freedom as I have with Amels. I’ve had such pleasure working with them,” Heywood says.

In listening to him talk about the styling features of the boat, it becomes apparent that he also appreciated the intellectual exercise of working out tricky design to make the yacht work as smoothly as it looks. In fact, some things that look like styling features are engineering solutions, such as the curved buttresses holding up the deck overhangs that also conceal ducting and deck drains, and stacking the aft deck staircases to preserve space while at the same time creating a little drama with stainless-steel supports and handrails.

“Each of the editions is unique, but you can tell it’s from the same hand,” says Heywood. Yes, but Heywood pushed the 188 in a slightly different direction. It emulates the style of the 199 series, which Heywood says is his favourite, but while the 188 could be built with a similar scimitar bow, hull No 1 at least has the same flared bow as most of its stablemates. What it doesn’t have are the characteristic, almost signature, Heywood wing stations. Instead, the exterior is smooth with curves and twists subtly inboard and expressed on such things as the bowed support columns aft, the form of the owner’s suite windows and the dynamic mast. The wing stations are neatly tucked inboard on the Portuguese bridge while a subtle bulge or eyebrow on the side of the deck above gives slight cover to anyone who might be using them.

In profile, the Amels 188 has a sporty look. The downward slope of the main deck bulwarks towards the stern pairs with the side deck fashion plates

sweeping up and transitioning to the overhead on the bridge and sundecks, creating an arrow form. This motion is accented by sleek railings that angle outward at the stern. “In all my work I draw on the natural world as an inspiration and it can be remarkable to see that materialise,” says Heywood. “In fact, my partner, Vanessa, was very observant when she mentioned how my drawings [for this yacht] resembled a cruising swan ruffling its wings.”

The sportier look to the 188’s profile is carried into the interior as well. Amels held a competition for the interior design of the spec yacht, providing firms with a basic GA featuring a large folding balcony in the owner’s suite, a lift and central stairway, interior access to the stern beach club and a

VIP suite on the bridge deck. Reymond Langton, a design firm that had not worked with the yard before, impressed the builder with an “inspirational” and highly detailed design and a “level of refinement more common on 70-metre yachts”, says Caminada. Amels proposed Reymond Langton’s renderings at that 2015 Monaco Yacht Show and, after receiving positive feedback from clients, decided to build the interior according to the studio’s concept.

“I begin designs with the lower deck – that is the start, the heart of the boat,” says Pascale Reymond. “Amels said they wanted something different, more sporty. We were not told a specific budget but they asked me to be sensible. I asked if I could use certain stones and you will see they agreed,” she says, pointing out the Crema Marfil marble, green onyx, Azul Cielo from Brazil, white Thassos and white, grey and gold Calacatta marble on our tour.

On the lower deck are four cabins off a fore and aft corridor at the bottom of a sweeping column of oak stairs that sets a new standard for indirect lighting. The treads are lit

underneath as is common, but the steps themselves don’t quite meet the surrounding walls, allowing light to escape and softly wash the leather wall surface. It’s a lighting design theme that repeats throughout the yacht. Walls appear not to touch ceilings and cabinets so that light spills through the gaps, creating shadows and shapes and the illusion of even more space. In the owner’s office, leather wrapped walls are opened to create interesting pockets of light. The floating ceilings add layers. Leather – the main suppliers of which are Foglizzo, Sinn Living and Studioart – covers many



Right: details are simple and crisp; sophisticated indirect lighting via architectural elements is a theme throughout the yacht



A white luxury yacht is shown from a side profile, moving across a deep blue sea. The yacht has multiple decks, large windows, and a prominent radar scanner on its uppermost level. A red flag is visible on the stern. The background features a steep, rocky cliffside with some greenery and buildings at the top. The sky is blue with scattered white clouds.

The exterior is smooth with curves and twists subtly inboard and expressed on such things as the bowed support columns aft, the form of the owner's suite windows and the dynamic mast



“Amels said they wanted something different, more sporty. We were not told a specific budget but they asked me to be sensible. I asked if I could use certain stones and you will see they agreed”

of the interior surfaces as well as bedside tables and headboards, showcasing a double stitch trim detail.

Just as Heywood hid drainpipes and ductwork outside, Reymond Langton hid features such as doorways, lamps, televisions and wardrobes inside. It brings a sense of calmness to the spaces, as does the absence of any gloss lacquer.

As previously suggested, this yacht, as the first of the range, was started on spec. In September 2017, less than a year before its anticipated delivery date, an owner stepped forward to claim the yacht as his own. Interestingly, it wasn't the boat's environmental advances that attracted him at first, but the lift that connects the three interior decks with the sundeck. He was the owner of a 49.3-metre Amels custom built in 2004 as *Larissa*, which he bought on the brokerage market in 2014, refitted and renamed *Volpini*, which means “little fox” in Italian. By sheer coincidence, both Reymond and her partner Andrew Langton worked on the *Larissa* project while they were in the employ of that yacht's principal designer, Donald Starkey.

When the owner stepped into the 188 project, the designers and shipyard prepared themselves for design tweaks. “That is always quite a nervous time for designers; you worry if they are going to want to change wood or colours or reject your work entirely,” Reymond says. “Their old *Volpini* was quite classic.”

The nerves were all for naught as the new owners of what is now *Volpini 2* embraced the light taupe colour scheme with its splashes of blue and aqua recalling the sea. The only structural change requested was to remove the wall and door between the owner's sitting room on starboard and bedroom on port. Now bookcases with open shelving are all that divide the space, allowing the light from the open balcony to grace the bedroom as well. In the adjoining office, dark wood and leather furniture by Minotti creates a distinctive look. Emanuela Chirieleison, from Reymond's team, worked with the owners to manage the interior changes and accessorise the boat.

In the months since her launch and delivery, *Volpini 2*'s owners cruised the Med extensively, enough for the yacht's chief engineer, Paul Vickery, to

The master bath is a study in white Thassos marble, with beautiful aquamarine and light Azul Cielo blue stone adding contrast. Abstract resin art panels by Alex Turco provide decoration in the bathroom



Watch *Volpini 2* sail the crystal-clear waters of Capri in this video of her inaugural cruise [boatint.com/volpini2](http://boatint.com/volpini2)



Alex Turco-designed resin art panels in the steam room, above. Elsewhere, London-based decorative arts studio DKT Artworks created glass door and wall panels for the beach club and upper saloon. For the beach club, it came up with “aqua decorated glass”, with bubbles sandblasted on the back and hand-painted in a colour grading from aqua green to baby blue





get a handle on how the hybrid electrical system, a first for Amels, and the emissions reduction package were working.

Vickery kept extensive records on the exhaust output with and without the catalytic converter in operation at various loads and engine temperatures. He showed me tables reflecting reduction in NOx with the catalytic system in use. "Here's one run with the exhaust entering the catalytic chamber at 647ppm of NOx and leaving the chamber at 66ppm. That's a 90 per cent reduction in my book. We are only required to use it in America now, and soon the Baltic, but for the good it does, it's definitely worth the engine room space and I plan to use it as much as possible." The urea tankage on *Volpini 2* allows for 1,500 nautical miles of NOx-reduced cruising, although Amels says it has room to fit enough storage for a 5,000 nautical mile range. "If it [DEF] was accessible, I'd use it all the time," he says, noting that the fluid was difficult to find in the Med last summer. "We shipped it in from Germany."

Amels also undertook to reduce total power consumption aboard the yacht, "as part of a focus on sustainability and lowering the cost of ownership", it says. The builder analysed fleet data from existing Limited Editions yachts to create a holistic approach with waste heat recovery, dividing auxiliary power generation into one large and one small genset, and adding a compact (56kWh) battery bank for peak load shaving and shedding. The system, developed by Amels and Alewijnse Marine, works in the background to manage hotel loads, automatically adjusting the balance of engines and battery power. The system is expected to save, conservatively, €100,000 in operating costs per year.

*Volpini 2*'s captain, Nathan McFadyen, says: "In eight weeks' cruising this summer we noticed that we have about the same fuel consumption on *Volpini 2* as on our previous yacht, despite the new yacht being significantly [about 50 per cent by volume] larger." I guess you could say that *Volpini 2* is helping to preserve the environment by being a little foxy. ▣

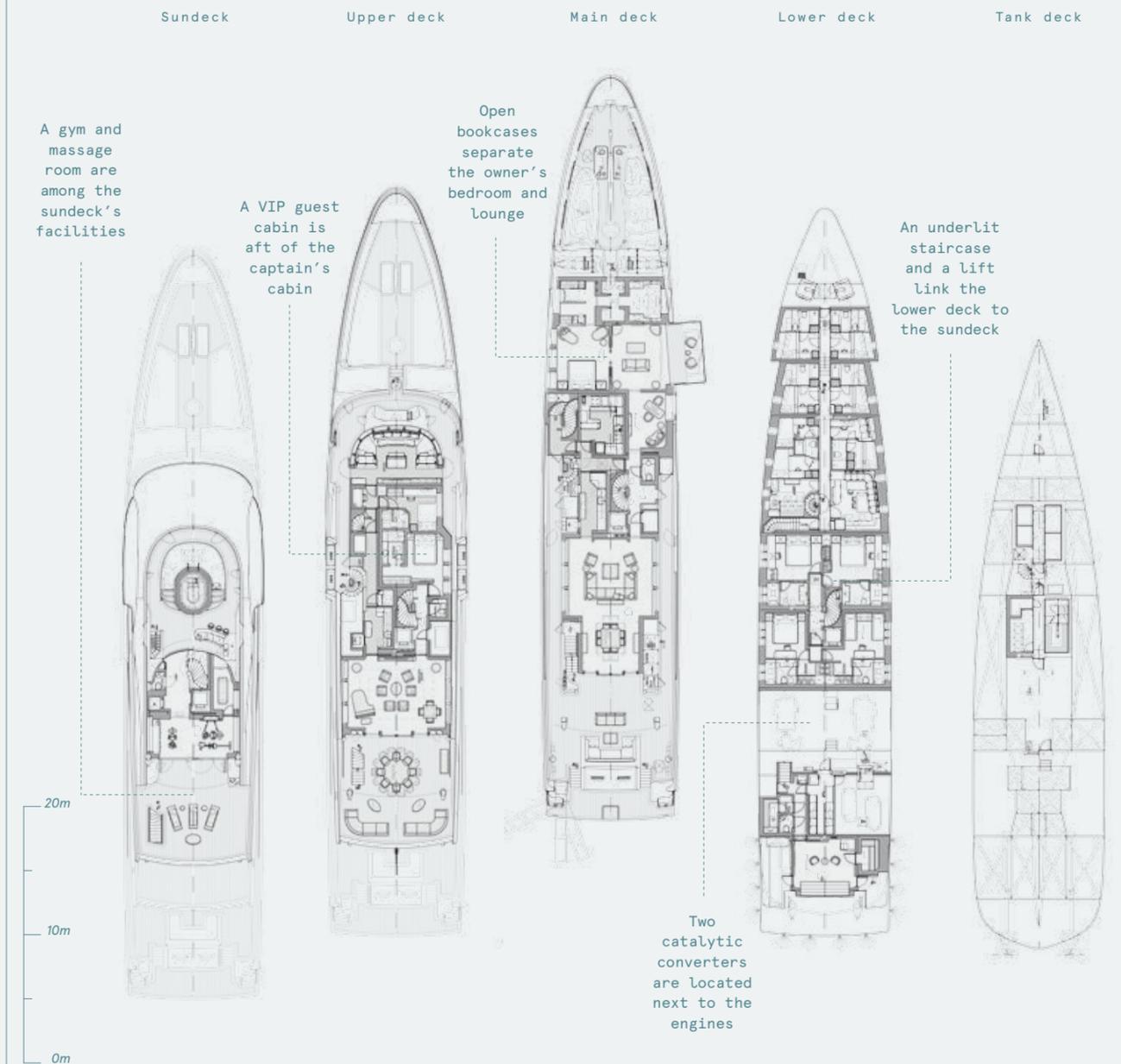
"I begin designs with the lower deck, that is the start, the heart of the boat," says Pascale Reymond, who was responsible for *Volpini 2*'s interior. A double guest cabin, above, and the twin, below, from the lower deck show her use of leather - from Foglizzo, Sinn Living and Studioart - to cover headboards, bedside tables and all kinds of interior surfaces



## S P E C S

VOLPINI 2

AMELS



<b>LOA</b> 57.7m	<b>Speed max/cruise</b> 15.5/13 knots	<b>Fuel capacity</b> 146,000 litres	<b>Owners/guests</b> 12	<b>SCM IMO</b> Tier III compliant, US EPA Tier 4 compliant	<b>Builder/year</b> Amels/2018
<b>LWL</b> 51.93m	<b>Range at 13 knots</b> 4,500nm	<b>Freshwater capacity</b> 24,000 litres	<b>Crew</b> 13	<b>Naval architecture</b> Amels	<b>Builder/year</b> Vlissingen, the Netherlands
<b>Beam</b> 10.2m	<b>Generators</b> 1 x Scania 250ekW; 1 x Scania 185ekW	<b>Tenders</b> 1 x 7.3m Whitmarsh ST73; 1 x 6.2m Whitmarsh ST625	<b>Classification</b> Lloyd's Register + 100 A1 SSC Yacht Mono G6, ⚙ LMC, UMS,	<b>Exterior styling</b> Tim Heywood	<b>Builder/year</b> t: +31 118 485 002 e: info@amels-holland.com
<b>Draught (full load)</b> 3.45m				<b>Interior design</b> Reymond Langton	<b>Builder/year</b> w: amels-holland.com
<b>Gross tonnage</b> 979GT					
<b>Engines</b> 2 x MTU 12V 4000 1380 bkW					