

Heesen

SERIES

50M ALUMINIUM

Orion

All roads start with the guts to dream

Chasing it wherever it takes you

That dream is the fuel, required to create

Driven by passion, guided by expertise

Follow that path, to explore, to feel

We... are Heesen

WELCOME



Heesen is a shipyard that continues to evolve. We have long been dedicated to building superyachts in aluminium and steel that offer speed, style and fuel-efficient cruising. Our award-winning vessels continue to match owners' exacting demands, and our unrelenting focus on quality, craftsmanship and innovation has created one of the world's most impressive shipbuilding legacies.

Renowned for our innovative hull designs and hybrid solutions, we are committed to developing more sustainable and fuel-efficient yachts. We combine this with a high level of craftsmanship, Dutch quality and first-class client service.

A yacht is a beautiful way to travel the world in luxury and expand your horizons. At Heesen, we create yachts that make the journey as enjoyable as the destination.



THIS IS WHAT WE DO

CRAFTED IN HOLLAND

Home of yacht building! It is no coincidence that the best shipyards in the world are found in Holland. Our passion for yacht building and our commitment to quality is unmatched. And that is what makes Heesen the world’s leading builder of high-performance yachts.

STEEL & ALUMINIUM 50 - 80M

All of our yachts – displacement, semi-displacement and fast displacement – are engineered and built in the nine sheds at our shipyard in Oss. All our yachts are recognised for their innovative engineering and exceptional performance, stability and comfort. We build in-house using the hardest steel and the strongest aluminium.

ON BOARD SERVICES

We make sure your crew are fully involved throughout the build process, from start to finish. Even after the yacht is delivered, we continue to train the crew and proactively maintain your yacht on board, at our shipyard or at one of our maintenance and refit partners around the world.

SUSTAINABLE YACHTING

We all must take responsibility to better protect what we love. By introducing BlueNautech, we continue to support the future of sustainable yachting through improved efficiencies, alternative materials, energy savings and alternative production methods.

Heesen

SERIES



PROJECT ORION IS A HEESEN SERIES YACHT

All of our Heesen Series yachts have a proven track record thanks to the experience we have gained from previous builds. These yachts are fully designed and engineered. We can deliver them faster as we build them as speculative ventures. Customisations to the interior can be made but are dependent on delivery times and schedule.

- Total proven yacht engineering and design
- Fast delivery due to our speculation programme
- Customisation options possible to a certain extent

Heesen

SMART CUSTOM

Our Smart Custom offer has a proven track record when it comes to hull design and technology. These yachts are fully engineered above and below the main deck but can be offered with a custom-designed superstructure. This means we find a smart balance between proven performance, speed of delivery and customisation.

- Proven hull engineering and design
- Faster delivery due to shorter engineering times
- Custom choice of superstructure and more elements

Heesen

FULL CUSTOM

Our Full Custom offer starts with a blank sheet of paper or is inspired by one of our concepts. All your wishes are fully considered by our naval architects and designers. If desired by the client, we offer ideas and insight based on our previous full-custom yachts builds. To highlight our design and building capabilities, we also create concepts to inspire potential clients and stakeholders in the market.

- Start the design process from the beginning
- One unique yacht in the water
- Personalised value

OUR DESIGN PHILOSOPHY

SIMPLICITY

Less is more. Our simplicity in functional and aesthetic design creates a pure, relaxed and open atmosphere on board.

ELEGANCE

Our style creates impact but does not scream. It has an eye for detail and a timeless elegance.

FLOW

The lines in our designs come together as one, flowing without disruption. It is a singular, seamless, unbroken design. It is one.



SPORTY

Both sporty and functional, on occasion our yachts look fast, but they are always poised for global exploration.

CONFIDENT

Ever confident when facing ocean challenges, our yachts are strong and robust. A quality epitomised by the conviction of our wheelhouse designs.

NATURE

Inspired by and adapted to the surrounding nature, we use natural colours, large windows and extended decks to connect to the great outdoors.



INTRODUCING SUSTAINABLE TECHNOLOGIES INSPIRED BY THE OCEAN



INCREASING HULL EFFICIENCY

We have an impressive track record in creating lightweight and ultra-efficient hull forms. The Fast Displacement Hull Form already decreases fuel consumption by 30%. Less weight means greater efficiency.

IMPROVING PROPULSION EFFICIENCY

Alternative fuels may be the future, but there are still huge possibilities to increase the efficiency of diesel-powered yachts. These include our acclaimed hybrid propulsion system, standard applications of SCR emission control and more efficient propeller designs.

SUSTAINABLE PRODUCTION METHODS

Reducing yachting's footprint includes a sustainable build process. 3D Printing, electrostatic paint-spraying, waste reduction and recycling can significantly reduce environmental impact.

SUSTAINABLE OPERATIONS

Improved waste management and electric-powered tenders are just two examples of how to reduce environmental impact and improve a yacht's operational efficiency.

ALTERNATIVE MATERIALS AND RECYCLING

Each yacht is built from tons of steel, aluminium, wood and other materials that require sourcing and production. Innovation in this field includes extensive recycling and the use of alternative materials, such as sustainable woods.

ENERGY SAVING AT ANCHOR

On average, a yacht remains at anchor for 95% of the time. Sustainable power generators and waste heat recovery systems are therefore highly effective in reducing a yacht's total energy consumption by increasing generator power and HVAC efficiency.

DISTINCTIVE PROFILE

Designed by Omega Architects and built with the ultra-efficient Fast Displacement Hull Form, Project Orion is the third hull in the 50-metre Aluminium series, which combines a lightweight, aluminium hull with Heesen's hybrid solution.

Our hybrid propulsion system draws on two sources of power both separately and simultaneously: diesel mechanical and diesel electrical. The results speak for themselves: Reduced vibrations, less noise, improved efficiency and versatile power management.

Orion is not only ultra-quiet but also highly fuel efficient. At 12 knots, she will consume 98 litres per hour, excluding the hotel load, while at 10 knots in hybrid mode, consumption falls to a mere 45 litres per hour. What an outstanding achievement for a 50-metre yacht displacing 295 tons!

With a shallow draft of just 2.15 metres, Orion can cruise crystal-clear bays in The Bahamas and access the smallest, charming ports in the Mediterranean.

Project Orion is available for delivery in Winter 2025





Hybrid technology provides fuel efficiency and cost benefits, but Heesen's hybrid solution offers even more. Peacefulness is the most significant benefit of hybrid technology, particularly when cruising in the near-silent Hybrid Mode. Noise levels do not exceed 46 dB(A), whilst vibration is so drastically reduced, it's almost imperceptible.

Manoeuvrability is an essential aspect, particularly during harbour operations. High engine torque at low revolutions per minute (RPM) makes manoeuvring at low speeds and in tight quarters more precise. With an electric motor, it is possible to go from full ahead to full astern instantly.

Fuel efficiency is achieved when diesel engines and electric motors are combined. It increases efficiency and reduces cost. The most noteworthy fuel consumption benefits are in Hybrid Mode at 10 knots: just 45 litres per hour.

THE SOUND OF SILENCE

The forward seating area offers privacy and fresh air when underway or docked stern-to in the marina. The 6.2m tender is stored in an open bay and launched with a 2400kg crane.

FORWARD SEATING AREA





Orion's outdoor spaces are carefully designed to connect seamlessly with the indoors. Guests can enjoy 240 sqm of well-conceived and perfectly organised outdoor space where they can enjoy the beauty of the nature surrounding them.

Orion provides stylish cohesive living made simple. Floor-to-ceiling windows and open bulwarks offer unparalleled views and bring the beauty of the surroundings indoors. The access on board through the striking central staircase makes every entrance grand!

OUTDOOR-INDOOR CONNECTION



The generous 77-square-metre sundeck is ideal for casual al fresco dining protected by a hard top. The whirlpool provides endless hours of fun for kids and relaxation for adults.





The hydraulically driven swim platform delivers comfortable access to the sea and adjusts to the dock height to make the boarding operations smooth and safe. For those who like diving, it is the perfect springboard to jump into the water!

COMFORT AND ACCESSIBILITY

DESIGN IN MOTION



When Frank Laupman of Omega Architects carved out the original exterior for the 50-metre Aluminium series, little did he know he created the dawn of a new design language.

A chiselled bow, sharp lines and long waterline give Orion presence on water, not to mention progressive buoyancy when carving through rough waters and a good seakeeping capacity.

The yacht's angular shapes continue with rectangular bulwark openings, straight sliding doors and tapered interior saloons for an emphasised elegance to the aft area.

"The design boasts a calm and elongated silhouette that allows for a larger amount of space on the exterior decks than other comparable sized yachts," says Laupman.

A fold-down transom platform enlarges the beach club, with stepped access to a glass-sided veranda that leads into the main saloon.

"The large amount of onboard glass gives the yacht a sporty and striking appeal."

Featuring 33% more external glass than previous 50-metre Heesen semi-displacements, Orion enjoys a sense of openness to the natural surroundings and light-filled guest areas on all.



FRANK LAUPMAN | OMEGA ARCHITECTS

**FOLLOW
THAT PATH
TO EXPLORE
TO FEEL**



SPECS ORION

50M ALUMINIUM

HEESEN SERIES

GENERAL

Yacht number:	20750
Hull type:	FDHF (Fast Displacement Hull Form)
Naval architect:	Van Oossanen Naval Architects / Heesen Yachts
Exterior design:	Omega Architects
Interior design:	Cristiano Gatto Design
Classification:	ABS ✕ A1 Commercial Yachting Service ✕ AMS Large Commercial Yacht Code REG-YC
Hull:	Aluminium
Superstructure:	Aluminium
Delivery:	Winter 2025

PROPULSION DETAILS

Main engines:	2 x MTU 12V 2000 M61
Maximum power:	2 x 600kW
Gearbox:	2 x ZF 3311 with PTI/PTO
Shaft Machines:	2 x Danfoss EM-PMI375-T800, 130kW each
Engine control:	MTU RCS-5 (4 propulsion modes)
Propellers:	2 x five blade fixed pitch
Main generators:	2 x Zenoro variable speed DC. Max 209kW each
Bowthruster:	ZF-Marine 90kW, electrically driven
Stabilisers:	Naiad Dynamics, 2 Fins, Type 720, Zero Speed

DIMENSIONS

Length over all:	49.80 metres / 163 ft 4 inches
Beam over all:	9.10 metres / 29 ft 10 inches
Draft:	2.15 metres / 7 ft 1 inch (half load)
Displacement:	Approx. 320 tons (half load)
Tonnage:	Approx. 499 GT

ACCOMMODATIONS

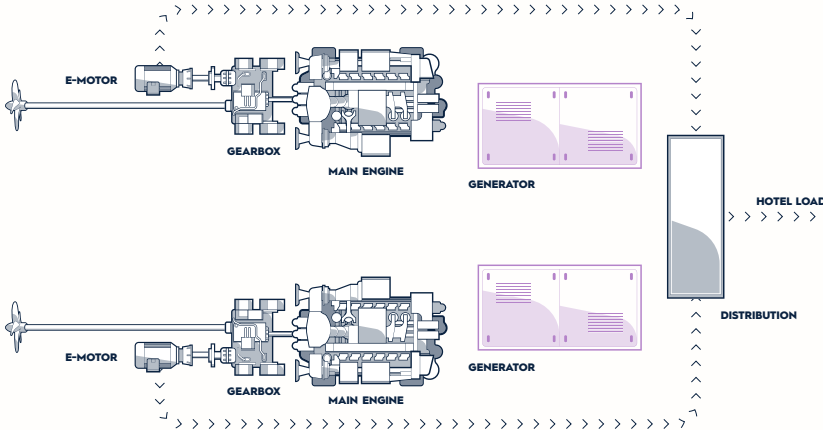
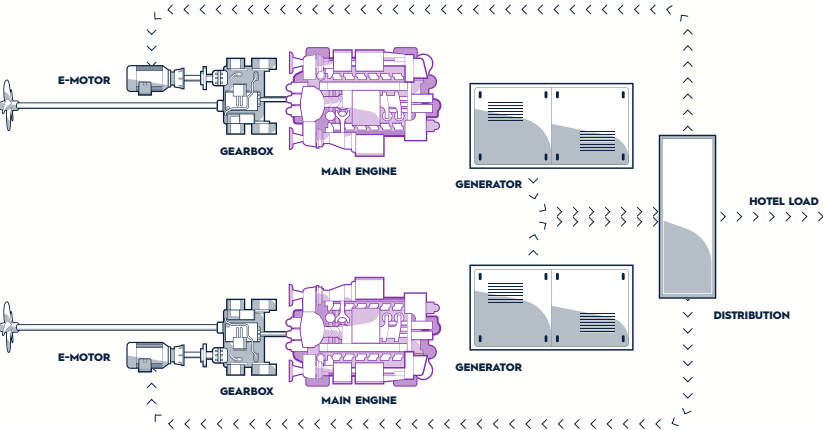
Crew:	Nine
Guests:	Twelve
Cabins:	Full-beam owner's stateroom, one full-beam VIP suite, two double guest suites and two twin guest suites.

TECHNICAL DETAILS

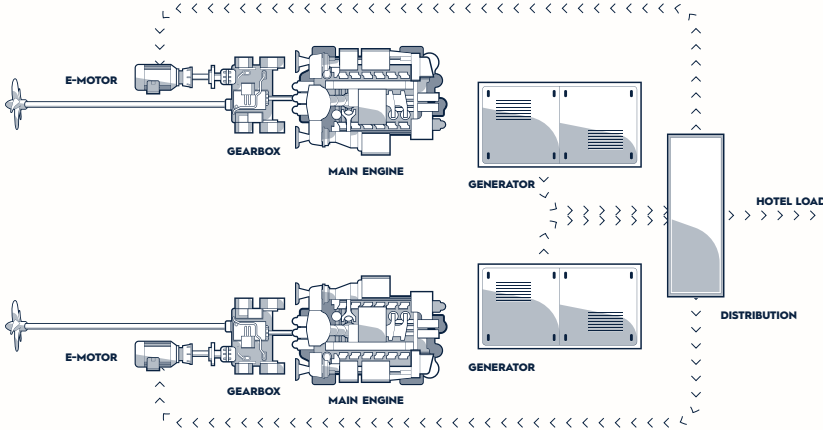
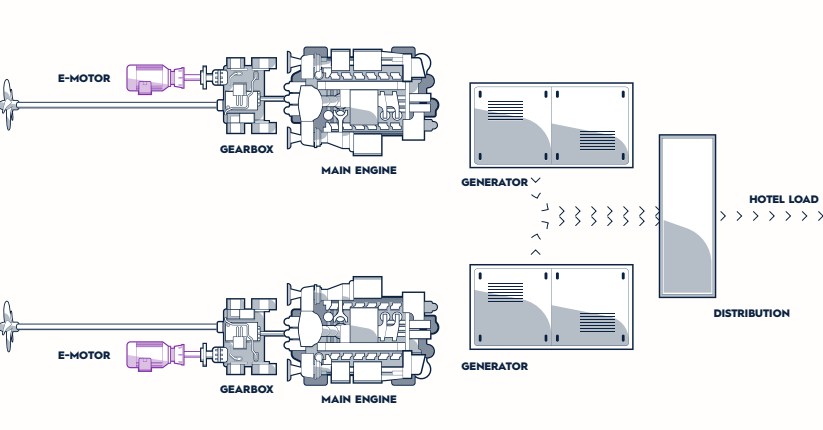
Maximum speed:	16.3 knots (Diesel Direct) 9 knots (Diesel Electric)
Range:	3750 Nautical Miles at 12 knots.
Fuel capacity:	47,000 litres / 12,416 US Gallons
Fresh water:	16,000 litres / 4,226 US Gallons

HYBRID SOLUTION

With our ever-increasing desire to minimise environmental impact, coupled with the enormous improvement in alternative power systems, Orion’s hybrid engine system embraces the very best of 21st century technology. The hybrid system offers irresistible advantages over a conventional diesel-powered system: it’s cleaner, quieter and more fuel efficient. The engine can be operated in four different cruising modes depending on your priorities.



Sounds complicated? Well, the technology is complex, yes. But operation is simplicity itself. And the benefits - particularly when you’ve experienced the smooth and silent operation at lower speeds - are fantastic for you and the environment.



HYBRID MODE

- Electric propulsion
- Main generators on / main engines off
- E-motors providing mechanical power (propulsion)
- Speed up to 9 knots

For speeds of up to 9 knots. Propulsion is derived solely from the yacht’s electric motors and generators. Hybrid Mode is beautifully silent, with maximum noise levels in the owner’s stateroom reaching just 46 dB(A) – the sound of softly falling rain. Boxed and insulated generators result in vibration-free cruising, while fuel consumption is no more than 70 litres per hour.

ECONOMIC MODE

- Diesel propulsion
- Main generators off / main engines on
- E-motors off
- Speed up to 12 knots

For speeds between 9 and 12 knots. In Economy Mode, propulsion comes from the main engines. The generators are switched off while the electric motors, powered by the main engines, function as generators to supply electric power for the yacht’s hotel services.

CRUISING MODE

- Diesel propulsion
- Main generators on / main engines on
- Speed 12 to 15 knots

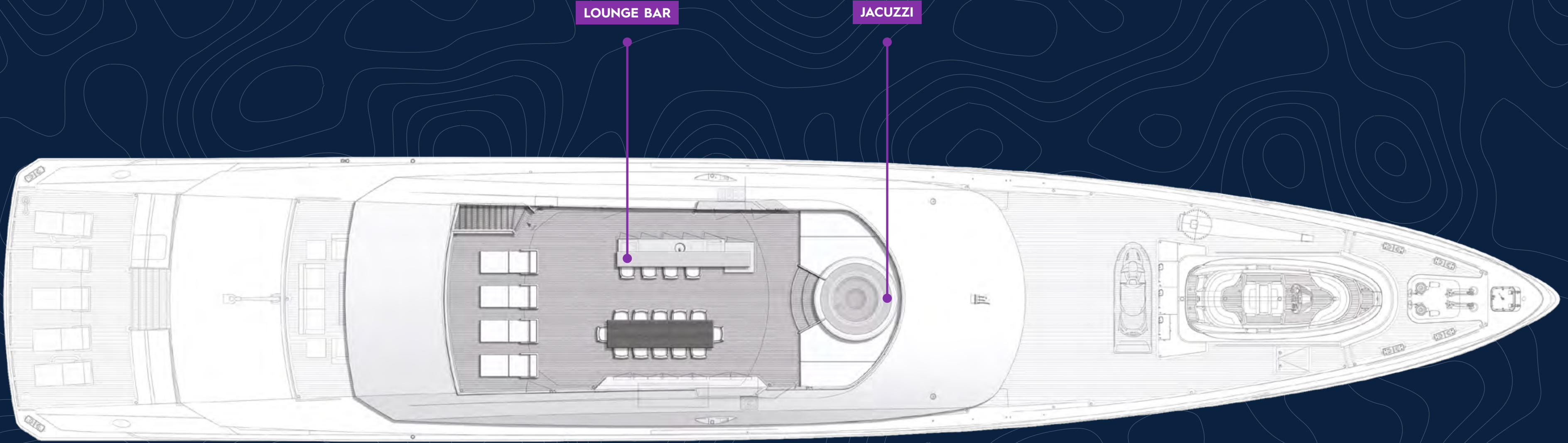
This is the most conventional mode. The electric motors are switched off, while the generators provide power for the hotel load, and the main engines turn the yacht’s propellers. In Cruising Mode, Orion cruises between 12 to 15 knots.

BOOST MODE

- Diesel and electric propulsion
- Main generators on / main engines on
- E-motors providing mechanical power (propulsion)
- Speed up to 16.3 knots

Boost Mode enables Orion to hit her top speed of 16.3 knots with ease. The yacht runs on the main engines, and the generators power the electric motors, which supply their additional propulsive power to the propellers via the gearboxes.

SUN DECK



1:100 SCALE

0m

10m

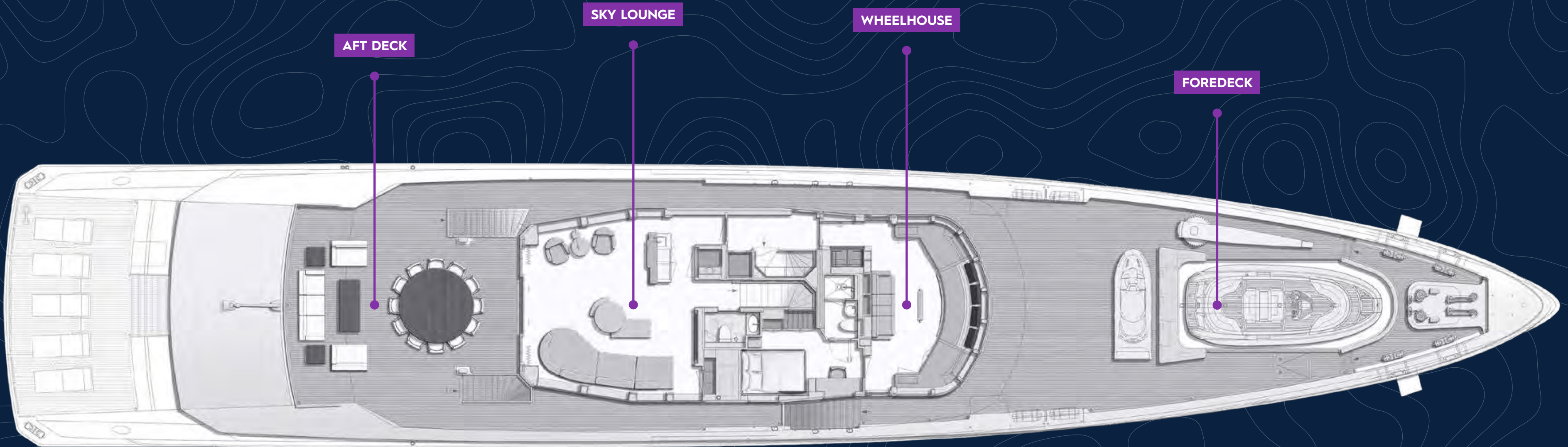
20m

30m

40m

50m

WHEELHOUSE DECK



1:100 SCALE

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10m

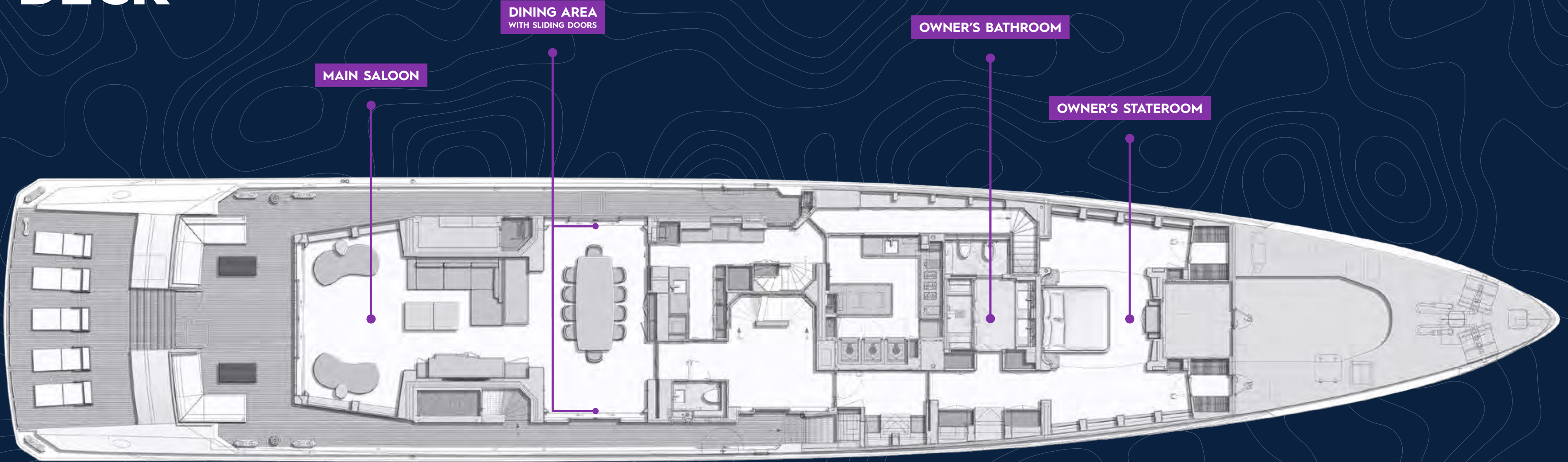
20m

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50m

MAIN DECK



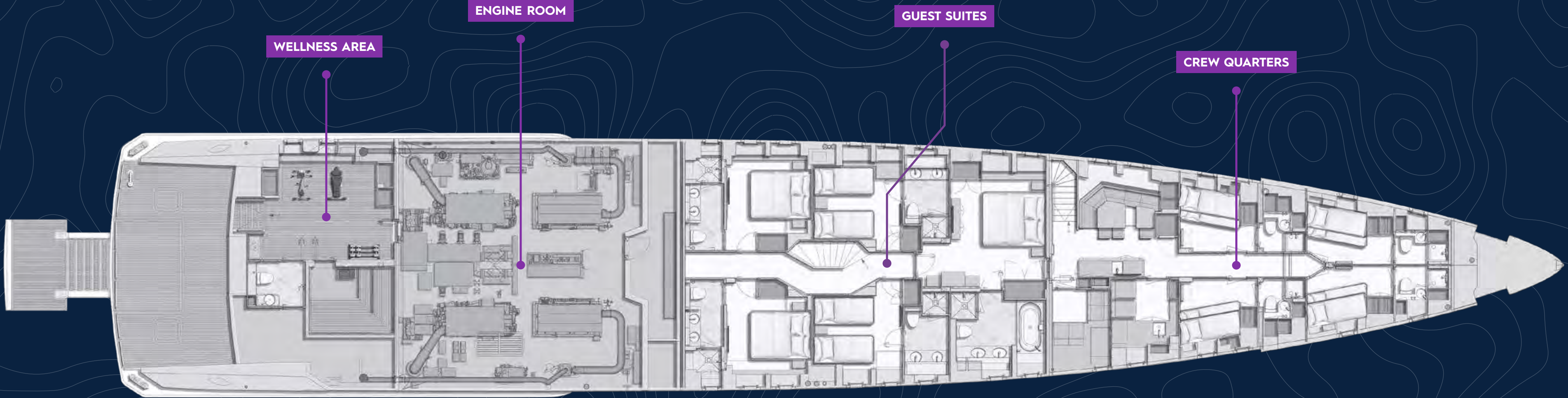
MAIN SALOON

DINING AREA
WITH SLIDING DOORS

OWNER'S BATHROOM

OWNER'S STATEROOM

LOWER DECK



WELLNESS AREA

ENGINE ROOM

GUEST SUITES

CREW QUARTERS

ORION

WHAT MAKES THIS YACHT
REALLY SPECIAL?

FAST DELIVERY - WINTER 2025

PERFORMANCE

50 metres and below 500 GT
Powered by next-generation IMO Tier-III compliant MTU engines
Ultra-efficient lightweight all-aluminium FDHF

COMFORT

Hydraulically driven swim platform for easy operations
Silent cruise in hybrid mode up to 9 knots
Seaworthy hull providing comfort in all sea conditions

INNOVATION

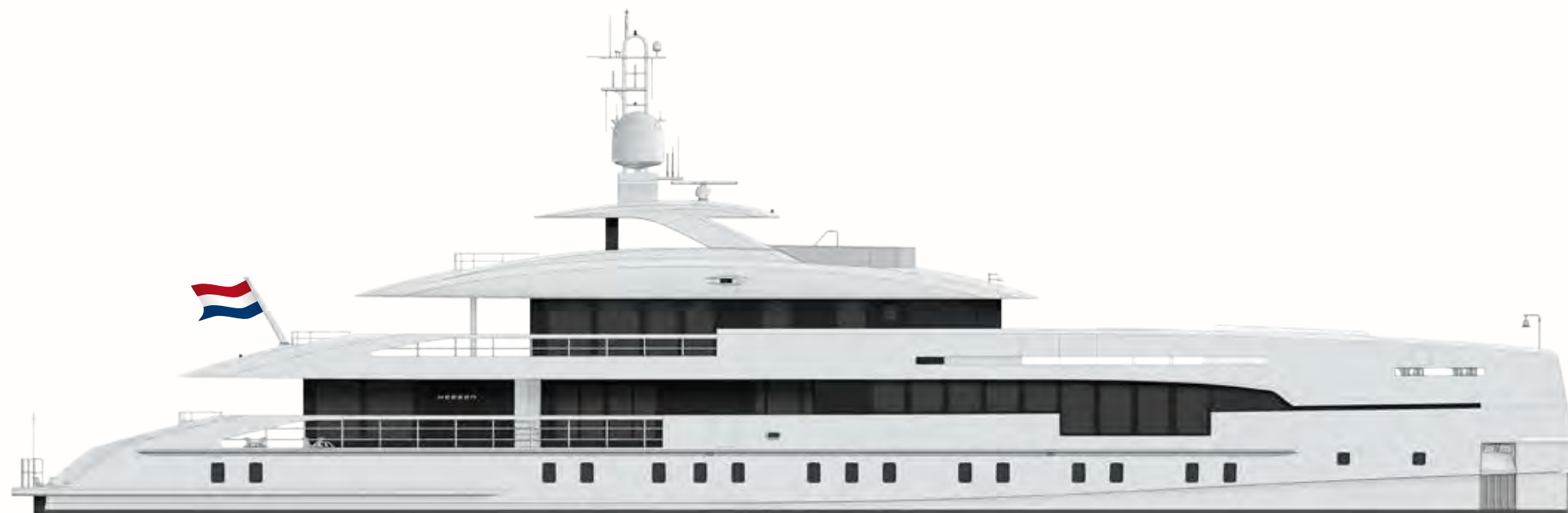
Efficient Heesen hybrid solutions
Zero-speed stabilisers for unparalleled comfort at anchor

DESIGN

Stylish, nearly vertical bow with spray rails
12 guests in six staterooms
Enhanced indoor-outdoor connection

INSPIRED BY COLOUR

The bespoke colour choices for a superyacht hull and superstructure carry just as much significance as the customised interior. There are nine carefully selected, long-lasting, high-performance and durable marine paint colour schemes to choose from for project Orion. The darker tones of stealth grey and sapphire dark blue suggest a powerful presence on the water. The lighter colours of ice grey and perfect taupe suggest a cool and refreshing onboard environment. The variety of available paint schemes ensures each boat enjoys custom details from start to finish.



TITANIUM WHITE



PEARL GREY



PERFECT TAUPE



STONE GREY



ICE GREY



STEALTH GREY



ODYSSEY BLUE



ONYX GREY



SAPPHIRE DARK BLUE



**WE
TURN
DREAMS
INTO
REALITY**



INTERIOR DESIGN

THE POINT OF PERSONALISATION

“Orion is an expression of the three Es – experience, efficiency and extraordinary design,” says Cristiano Gatto of Cristiano Gatto Design.

“As the third hull in the 50-metre Aluminium series, Orion features an evolutionary and modern interior that benefits from owners’ feedback.”

Owners now have the choice of either combining the beach club at the stern with a sauna and gym or a sea terrace lounge, to increase the yacht’s indoor-outdoor connection.

“We see more owners enjoying space devoted to well-being, which is why Orion is one of the first yachts of its size to truly embrace waterside living.”

The sky lounge on the upper deck remains a key component of the interior, providing a cosy and private space to relax and be with family and friends.

Floor-to-ceiling views are enhanced with soft grey carpets, polished steel and a dazzling silver Majilite ceiling – a design feature that is also used in the main salon.

“The silver ceiling is quite special, drawing the eye skyward, and because we’ve used an upholstery material it’s also super flexible.”

In the owner’s suite, Nabuk walls and oak Tatumi flooring contrast with a white lacquered ceiling and sunken LED lighting. In the bathroom, Patagonia marble with a tan leather finish complements the suite’s polished white Lasa marble.

“Orion enjoys extra levels of personalisation that work beautifully with the whole design, yet also show how owners can put their own stamp on the interior to make it feel comfortable, personal and private.”

CRISTIANO GATTO | **CRISTIANO GATTO DESIGN**



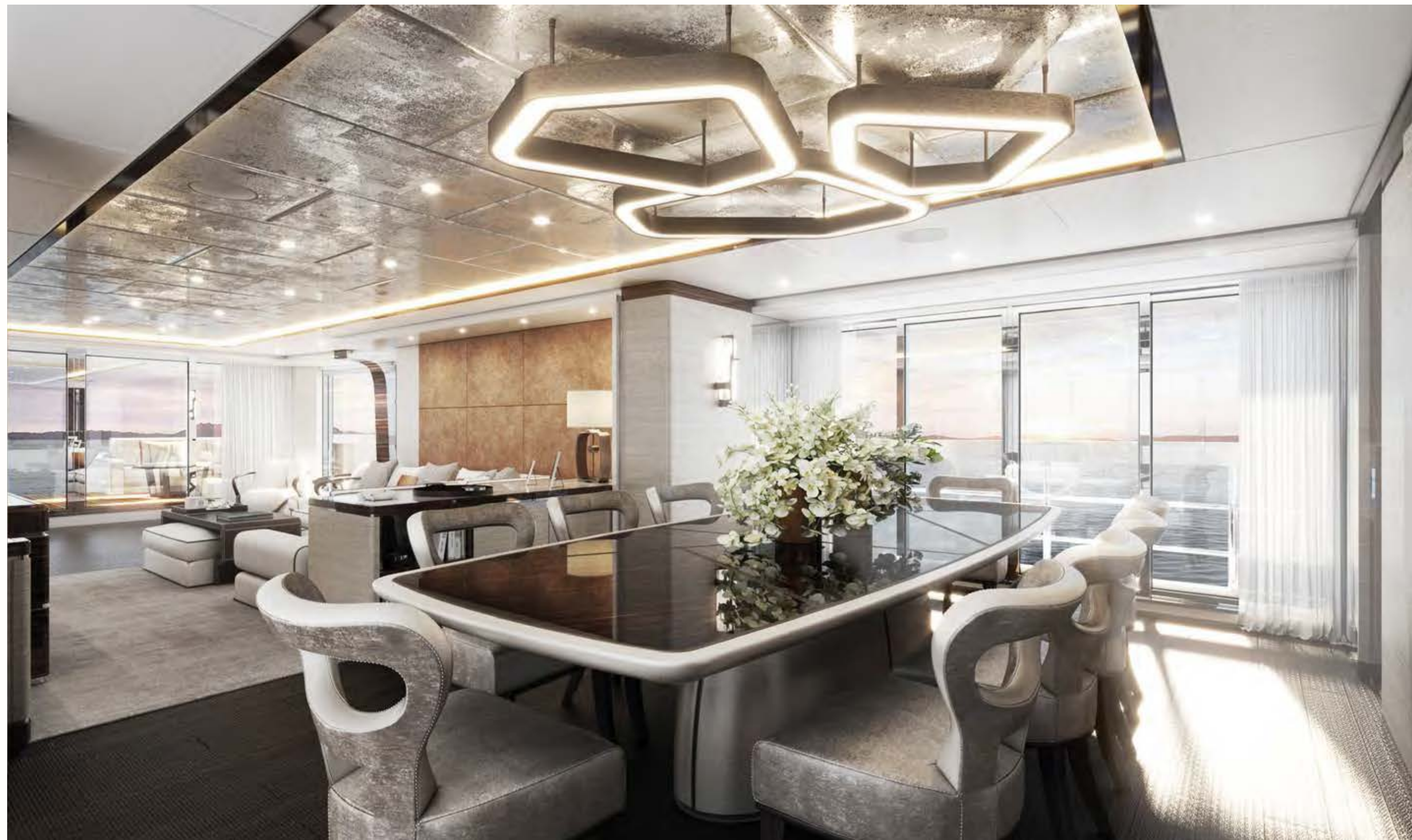
COSY AND ESSENTIAL LUXURY

Orion is one of the brightest stars in Heesen's fleet. Every detail has been conceived to deliver a multisensorial experience. The design, the colour scheme and the finishes come together to generate an overarching sense of pleasure. It's a comfortable and cosy atmosphere where luxurious design elements adorn the pure lines of the interior. The discreet luxury of this elegant interior by Cristiano Gatto lies in the bespoke furniture full of unexpected details and specially created to enhance the unity and preciousness of an interior crafted by Heesen Yachts Interiors, the shipyard's luxury cabinet-making factory.





MAIN SALOON

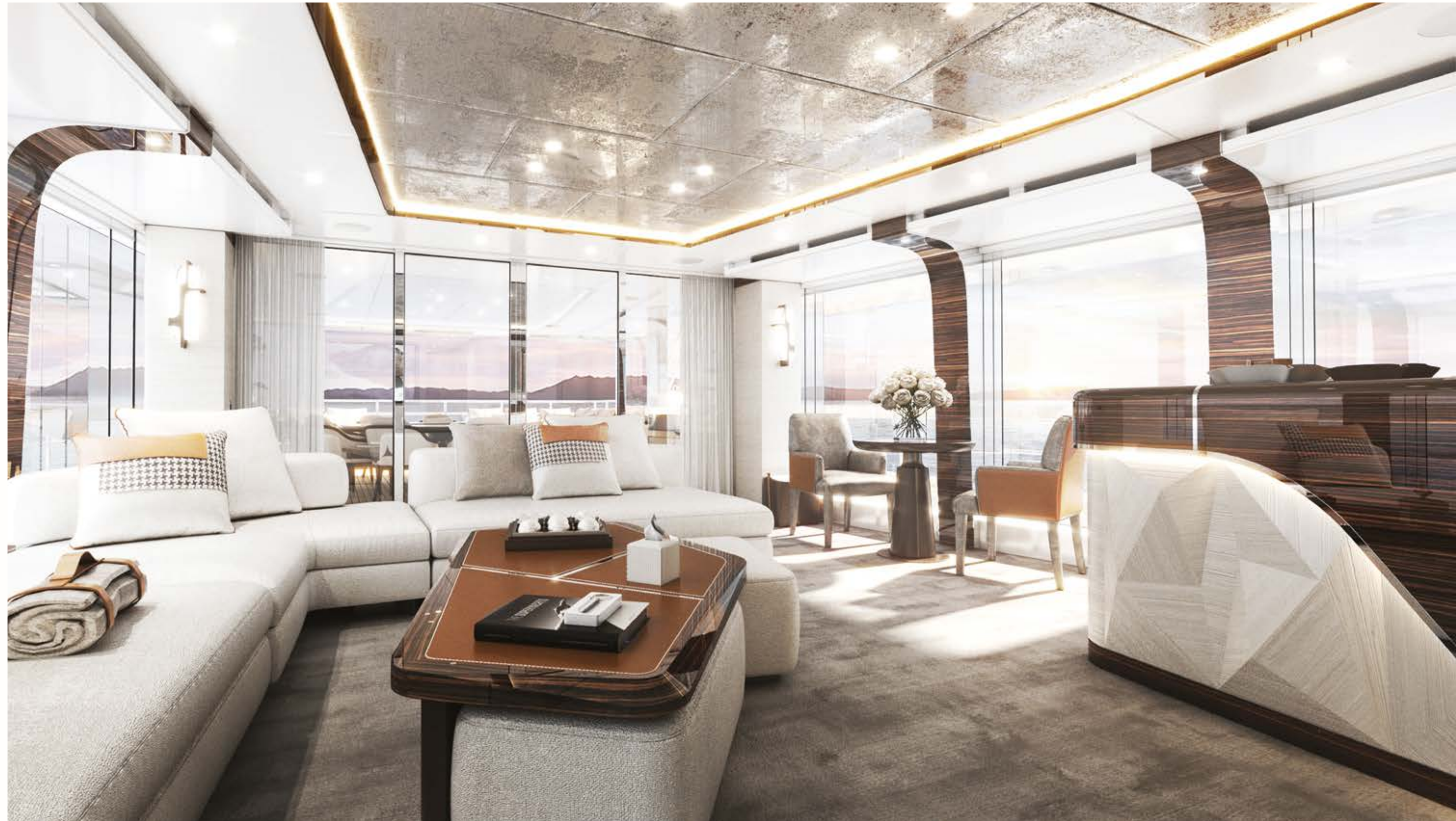


Orion offers the unique experience of fine dining at sea while cruising in silence. The main salon's rich atmosphere will be home to extraordinary gastronomy, enjoyed on board a yacht that can glide through water creating no more noise than the sound of softly falling rain. Sweeping vistas through the floor-to-ceiling windows will enhance the dining experience to create long-lasting memories.

DINING AREA

Conversation and conviviality are at the centre of this room's layout. A games table, a fully serviced bar and a large inviting sofa make this recreational area one of the most desirable aboard Orion.

SKY LOUNGE



OWNER'S STATEROOM





The owner's ensuite is a jewel box in polished white Lasa marble and warm caramel Patagonia marble.

OWNER'S BATHROOM

Five guest suites; two doubles, two twins and a full-beam VIP create the perfect haven where guests can rest after an exhilarating day at sea. On all decks there exists a richness of material and luxurious finishes to complete the scene.



GUEST SUITES





**CLASSIC
APPEAL
ORIGINAL
DESIGN**

OUR DNA

We have long pursued one consistent mission: to create yachts with exceptional engineering and high attention to detail. We achieve this with a highly-skilled workforce and a passion for perfection.

The aim is to fulfill every customer's dream. Each yacht is built in-house, using the hardest steel and the strongest aluminium. This craftsmanship is matched by a hunger for innovation and challenge. The result: designs that continue to push limits and set the industry's benchmark. But the Heesen experience goes beyond building a perfect yacht. It's about exceeding the client's expectations with first-class service throughout the customer journey.



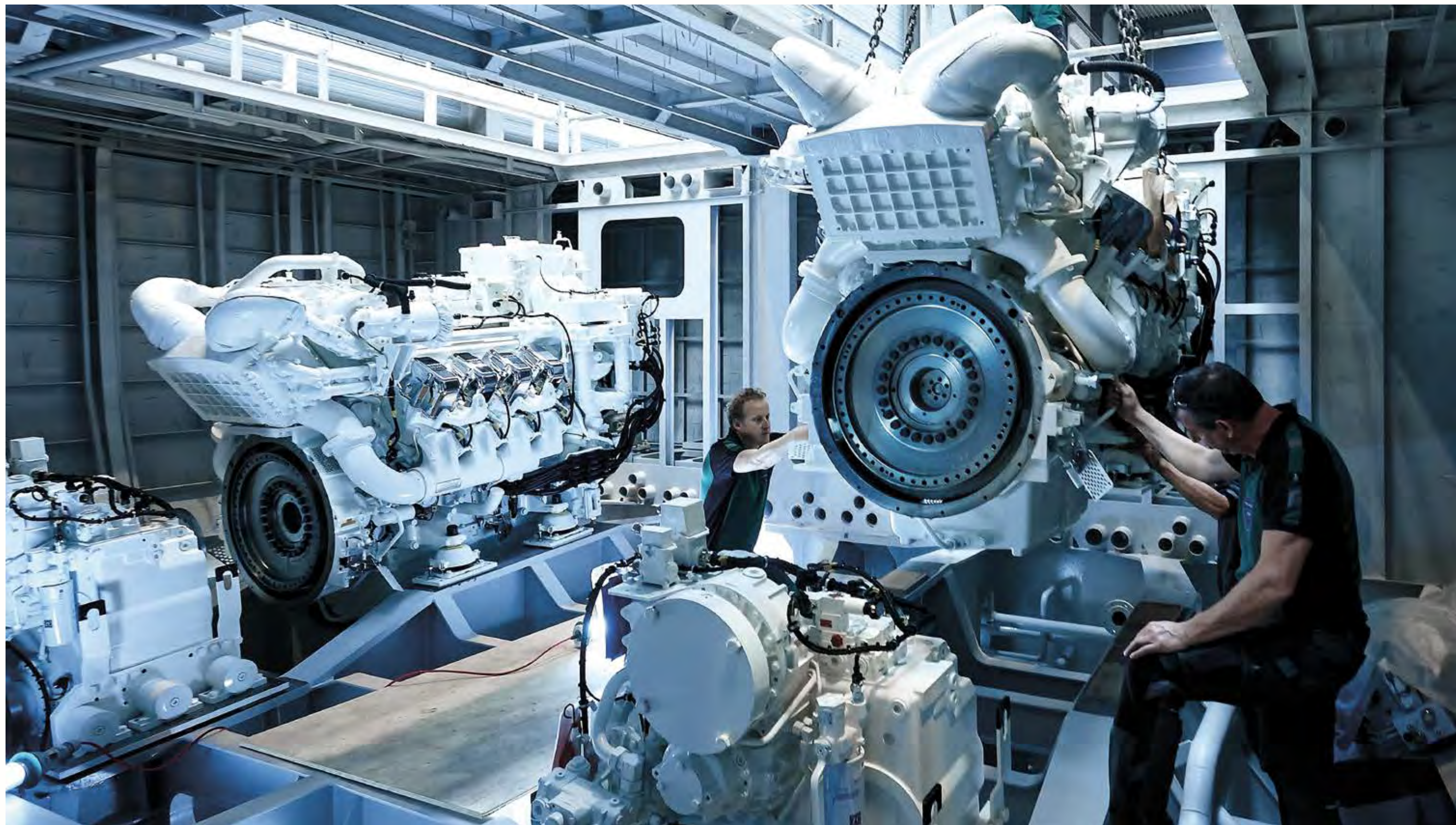
We build our lightweight aluminium hulls in-house.



PRIME TECHNOLOGY

Building a yacht is one of the most challenging construction processes in the world. Few activities require as much skill or expertise. What's more, in this high-tech era of robots and automated production, a Heesen yacht is still largely crafted by hand.

We are known worldwide for our expert welding. It is always a magical moment when the first curves of the hull appear, and the yacht's design comes to life. We construct our yachts out of aluminium – which requires highly skilled and experienced welders – and steel. The exterior outfitting stage is the biggest challenge within yacht building; difficult to do but executed by us to perfection.





Achieving the perfect finish on a large surface area is hugely challenging. Several layers of epoxy primer are applied to the aluminium and steel surfaces of a yacht, giving the hull and superstructure a smooth finish and a perfect base for the paintwork. It takes a trained eye and skilful hands to apply each layer at exactly the right thickness. Thankfully, our welding is so perfect, the surface requires less preparation work than is needed at other shipyards.

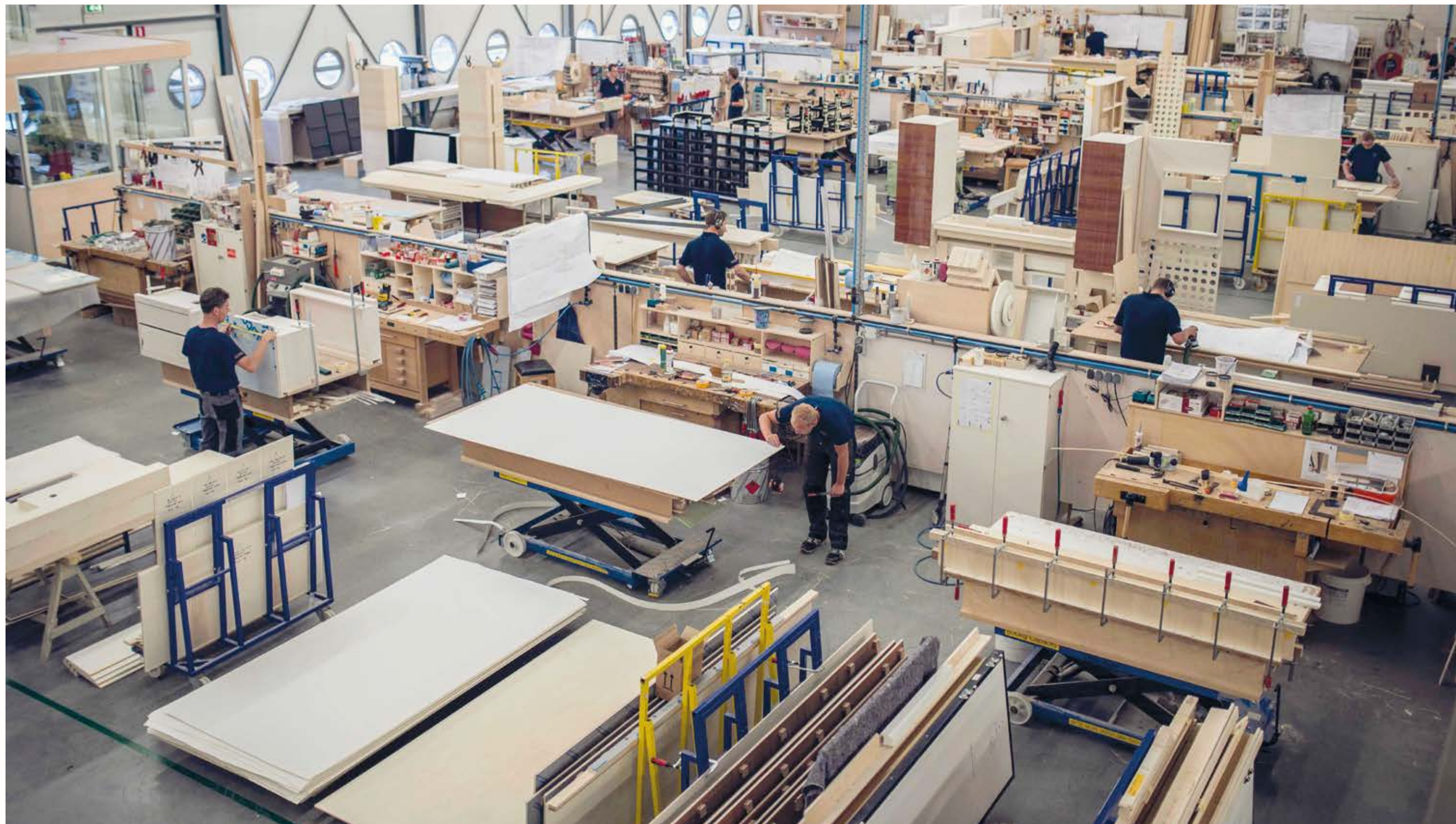
A PERFECT FINISH

HAND-BUILT IMAGINATION

As one of the few yacht builders to have an entire in-house department of interior specialists, we guarantee quality and custom design solutions to spark your imagination.

Our main interior workshop is in Winterswijk, just over an hour's drive from Oss. It provides more than 8,100 square metres of working space, allowing craftspeople to work on up to five Heesen projects at the same time. This is where all the luxury areas – such as the dining area, owner's stateroom and guest suites – are created. At the shipyard in Oss, a large group of craftspeople work on the service areas, interiors and sky lounges.

Interior building requires a lot of skill and machinery and is one of the reasons why we invest so heavily in young talent. "The interior workshop has evolved over time, and we are very proud of it and our many award-winning yacht interiors," says Henry Schreur, director of Heesen Interiors. Examples include the acclaimed My Sky, Galactica Star, Elena, Amore Mio, Galactica Super Nova and the mighty Galactica.





Mock-up

The interior construction process consists of two phases: the first is the creation of a full-sized, fully-finished interior mock-up fitted with handles, switches, lamps, fabrics and flooring. If the owner approves the concept, the interior team begins the workshop drawings and materials sourcing.

Exquisite materials

The second phase is the creation of the interior. The craftspeople work with all types of exclusive wood, including teak, wenge and Macassar ebony. We also use glass, ray and goat skin, marble, onyx and other minerals. There are no limits to what our interior specialists can create.

Perfect finish

Raw materials, such as bamboo, wood and leather, differ from each other in their colour or texture. To create uniformity, our interior specialists treat each piece of wood and animal skin by bleaching, staining or dying. Every piece needs to look exactly like its proposed design.

Interior assembly

All the interior elements are created in the wood shops in Oss and Winterswijk and are then assembled and finished on board the yacht. This requires a range of skills and expertise to achieve a perfect result.

INTERIOR WORKSHOP

AFTER SALES AND YACHT SERVICES

With an ever-expanding fleet of superyachts cruising the world, it was only natural for us to broaden our scope of services and launch a comprehensive programme called 'Yacht Services by Heesen'. Alongside the shipyard's existing After Sales, which ensures premium care and provides maintenance and technical support throughout the yacht's entire lifespan, the Yacht Services programme enhances owners' overall experience and improves the operational reliability of their assets. In addition, we proactively reach out to all owners with the range of yacht services detailed on the following pages.

Original Spare Parts & Provisioning

By offering original components at all hours, we ensure operational reliability and avoid a delayed or cancelled cruise due to technical failures. We also offer owners a complete package of recommended spare parts before they take delivery. To be able to offer this, we maintain excellent relations with all equipment suppliers in food, beverage, crew clothing and medical equipment, etc., to make sure high-quality, warranty-protected and competitively priced parts arrive on time.





Refit

We introduced our refit service to ensure Heesen's Dutch quality standards are maintained throughout the lifecycle of our yachts. Owners sometimes need to fall back on local shipyards and subcontractors when maintenance and repair work is required. Therefore, we provide managerial assistance on necessary refit, repair and renewal work, either from a distance or on location. A flying squad of technicians is ready to travel at a moment's notice to any location in the world.

Customer Support & Warranty

Our Warranty team looks after all claims and warranty requirements. Our Customer Support provides general 24/7 assistance to any Heesen client in need, even on location thanks to our flying squad. By offering a 5-year, 10-year or 15-year Class Survey to all our yachts through our dedicated After Sales team, we ensure the Heesen quality-standard continues long after delivery.

AT YOUR SERVICE

LET'S STAY CONNECTED

If you have any questions or would like to know more about our yachts or services, please do not hesitate to contact us.

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Launch

YN 20750 | Project Orion | December 2024

Hull FDHF | Metres 50 | Knots 16.3 | Year 2025

















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Construction progress

YN 20750 | Project Orion | December 2024

Hull FDHF | Metres 50 | Knots 16.3 | Year 2025



































































































































































