

# PROJECT OCEAN



Arkssen 85



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# PROJECT OCEAN IN BUILD

This vessel is currently in  
the later stages of fit out.





# ROBUSTNESS, RELIABILITY AND EFFICIENCY

Arksen vessels are designed and built to allow owners to explore the globe, with the confidence, comfort, independence and efficiency expected from a serious, innovative, long-range cruising yacht.

Robustness, reliability, efficiency and lifecycle sustainability are key Arksen attributes. Every Arksen is designed for simple operation and low maintenance, with redundancy and remote monitoring of critical systems.

Conscious to reduce the burden on both the owner and the environment, every aspect of the build, systems and services to support ownership are carefully planned out to optimise the use of the vessel to enable life-changing adventures with minimal impact.

Whether on an ocean  
passage, exploring

# REMOTE COASTLINES

or relaxing self-sufficiently in an anchorage, Arksen owners can rest assured that their vessel is designed to allow them to focus on enjoying their surroundings.

All Arksen owners have exclusive membership to the Arksen Explorers' Club, which offers tailor made expeditions and training to make the most of your vessel and realise your own potential to navigate and explore the remote corners of the world.





# ORIGINS OF ARKSEN

Arksen started with an abundance of heart and determination to accelerate our transition to a sustainable marine future. Discover more about Arksen's ethos and drivers here:



Arksen Founder, Jasper Smith, on his adventures from Australia to Alaska and inspiration behind the brand.

# DESIGNED FOR EXPLORATION



## Yacht

- Built to commercial regulations - MGN 280 Code, Category 0, Unrestricted.
- Incredibly stable and safe - positive stability through 180 degrees.
- Open aft deck includes storage for large tender suitable for safe, long range excursions.
- Accommodation for up to 8 guests and 2 crew, configurable for 4 crew.



## Ownership

- Arksen Explorers Club: a blend of owners club, voyage designer and adventure concierge service.
- Arksen Global Support: Providing real time backup for Arksen vessels in even the most remote locations.
- Mission Ready: Designed and built for off grid world cruising with market leading range and autonomy.



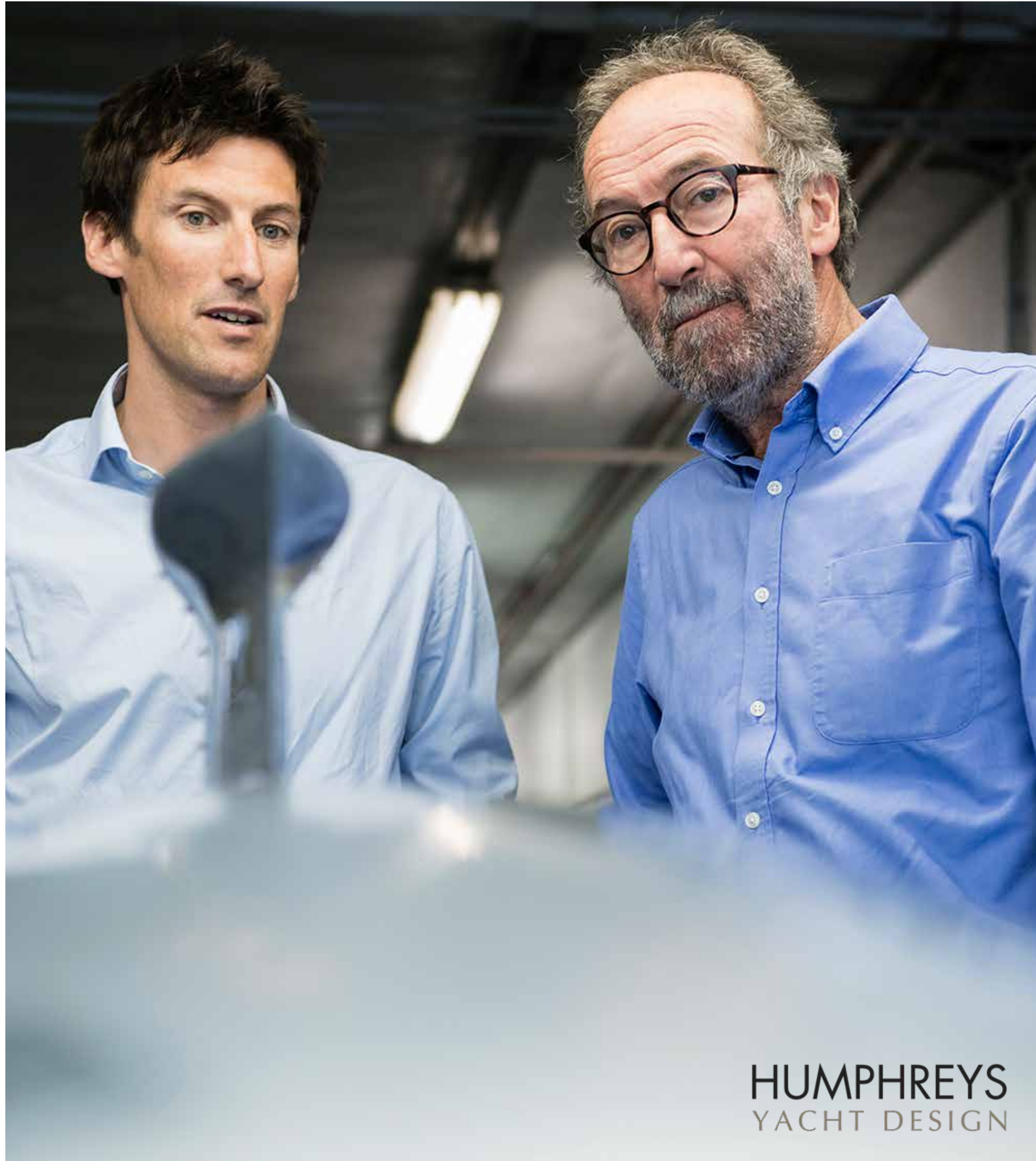
## Credentials

- Up to 7,000nm range.
- Solar array provides zero-carbon electrical power.
- HVAC system uses thermal reclaim for improved efficiency.
- Hybrid propulsion provides increased efficiency, lower emissions and allows silent running.

# Naval Architecture & Exterior Design







*“Fusing performance and functionality with aesthetic appeal, while never losing sight of safety as the overarching consideration, is the design ethos that has driven all our work for Arksen.”*

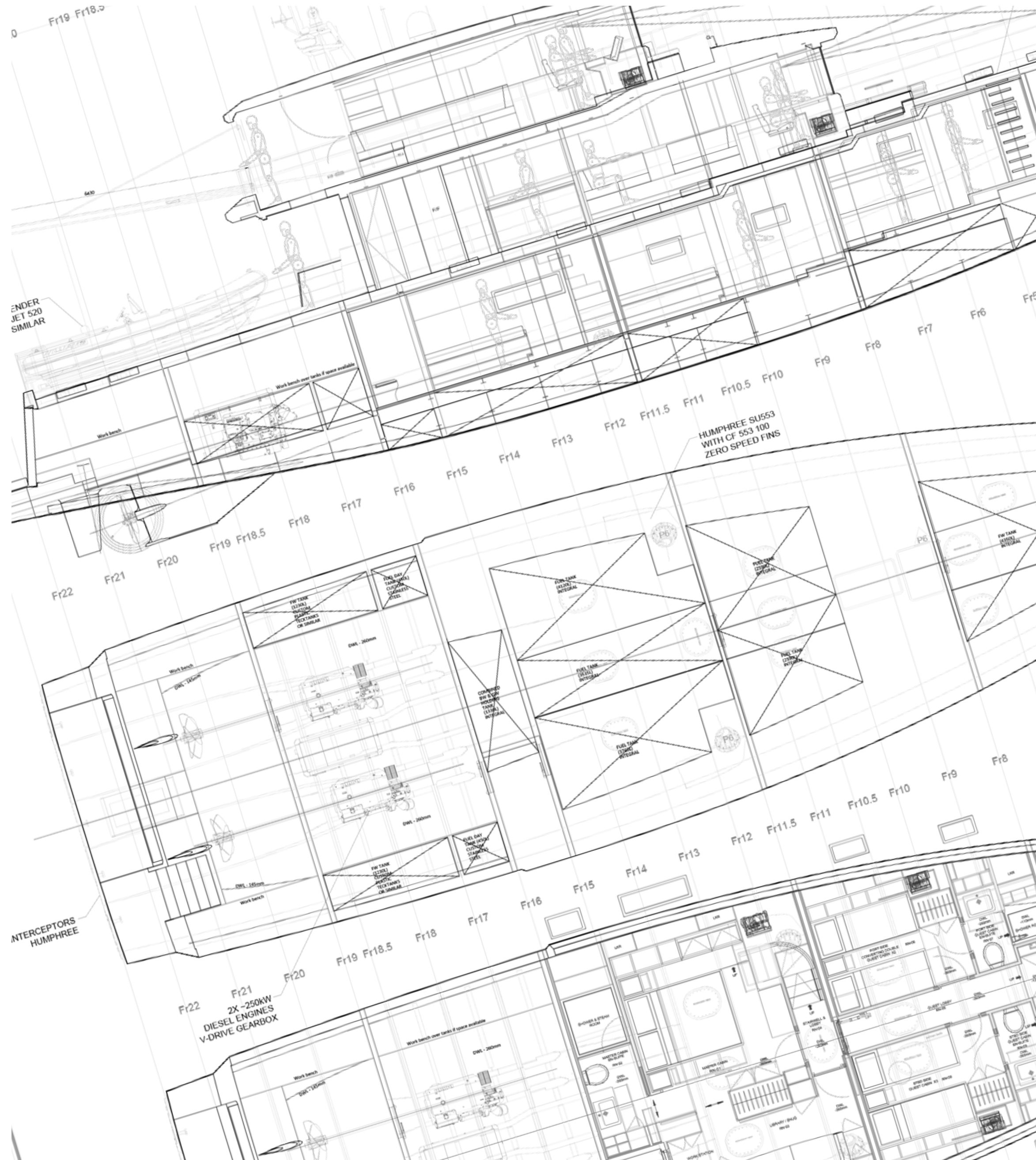
- Rob and Tom Humphreys,  
Chief designers, Humphreys Yacht Design



Humphreys Yacht Design are a world-renowned naval architecture and yacht design studio, with a heritage spanning almost fifty years, combining the latest technology with a hugely experienced team. All the studio's projects are the combination of efficient, easily driven and seaworthy sail and motor yachts, overlaid with the distinctive aesthetic and functional requirements of the owner.

[Watch the Arksen 85 Model Testing](#)

HUMPHREYS  
YACHT DESIGN



# 'GO ANYWHERE' CAPABILITY

## 'GO ANYWHERE' CAPABILITY

- Exceeding MCA Category 0 build regulations for unrestricted operation.
- Hull built to exceed Lloyds SSC G6 structural rules for unrestricted service.

## SAFETY

- 180 degrees of positive stability in cruising trim.

## SIGNIFICANT AUTONOMOUS OPERATION CAPABILITY

- 7,000nm range thanks to a hyper efficient hull design.
- High capacity water maker.
- Large amounts of storage.
- Designed to facilitate easy maintenance in service.

## COMFORT IN TOUGH CONDITIONS

- Sea-kindly and stable hull design aided by active fin stabilisers and gyro stabilisers.
- Insulation and climate control to cope with both high latitude and tropical conditions.

## LEAVE NO TRACE

- Zero discharge capable through the latest waste management hardware.
- Zero emissions capable whilst operating in full electric mode with hybrid propulsion system.
- Zero emissions time at anchor extended by the solar array.

## SUSTAINABILITY

- Hull and superstructure built in low carbon, recycled aluminium.

# READY FOR ACTION

For its size Project Ocean has a huge capacity for carrying tenders and other equipment.



Smaller equipment such as bikes, dive scooters, kayaks, etc. can be stowed in the lazarette where there is also a workshop.

Zero emissions mode and silent running are possible at anchor and underway with the solar array and hybrid propulsion system.

A removable davit can lift small tenders/toys/equipment onto the foredeck.

The aft deck has a payload capacity of 4,000kg and can accommodate vehicles up to 5.5 metres long such as a large tender and a submersible.

When stationary, extending chocks allow tenders to be carried outboard to keep the aft deck clear.

# TIME TO RELAX



We know that one of the best things about owning an Arksen is the stunning scenery you will see from onboard, so we have designed multiple seating areas where you can sit and soak up your surroundings.

## **AFT DECK DINING AREA**

The aft bench is reversible to face forward or aft. The table can be lowered and, with a cushion infill, creates a lounging pad. To port is a BBQ/grill, fridge and sink.

## **FORWARD SEATING AREAS**

There is a bench seat up on the bridge deck for panoramic views when underway, or for privacy when moored.

On the main deck there is a large lounging area with a coffee table that can be converted into a sun bed. Forward of this seating is additional space for truly stunning alfresco dining.

A bimini can also be placed over this area when required.

### BRIDGE DECK DINING AREA

Aft of the bridge deck is a third outdoor dining area within easy reach of galley via the internal stairs and with access to the 360 degree external walkway.



### BRIDGE DECK LOUNGING PAD

The central table can be lowered and a cushion insert forms another large lounging area, for ultimate relaxation.

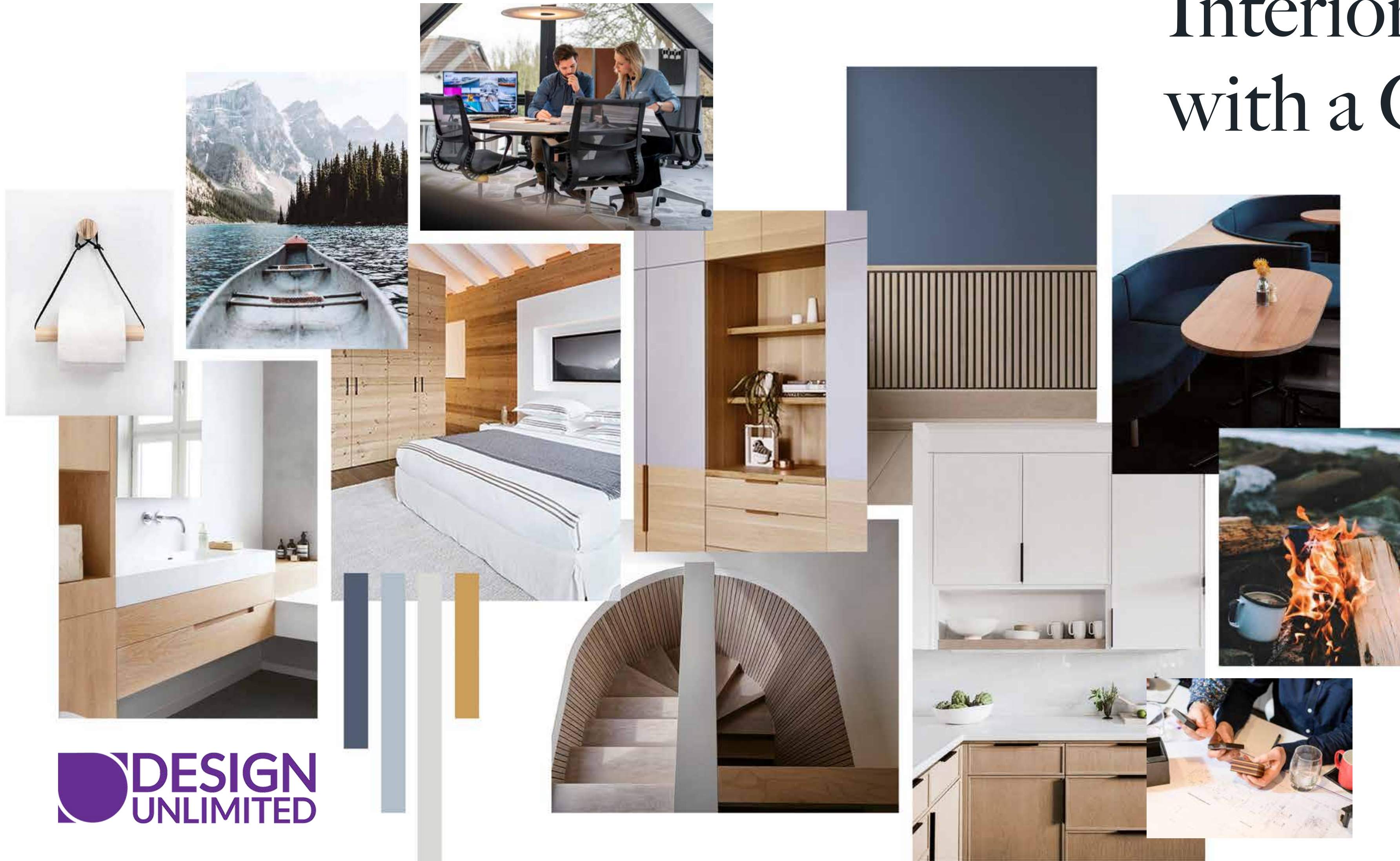
# Interior Design with a Conscience

It's not just the design that has been carefully thought out but also the choice of materials used.

Our partners at Design Unlimited have gone to great lengths to source durable and environmentally friendly products and fabrics to fit out this eco-conscious vessel.

Design Unlimited are an innovative yacht design studio with an established reputation for excellence in both interior design and exterior styling.

The multi-award winning team excels in new challenges, creating designs for everything from modern luxury motor yachts, large sailing superyachts and classic gentlemen's yachts to racing yachts.





## Bridge Deck

Comprehensively equipped bridge, superb 360 degree views and an internal stair that allows safe access to the main deck in all conditions.

# Bridge Deck

A door to port of the helm and another aft provide access to the 360 degree external walkway, connecting a Portuguese bridge with sofa forward and dining area aft.







## Saloon

Seating raised to window height provides an all-around view. Forward study area with a concealed helm position.

# Saloon & Galley

Access to the side deck via a starboard side door and to the aft deck via a lobby/wet room, from where there is an internal stair to the bridge deck.





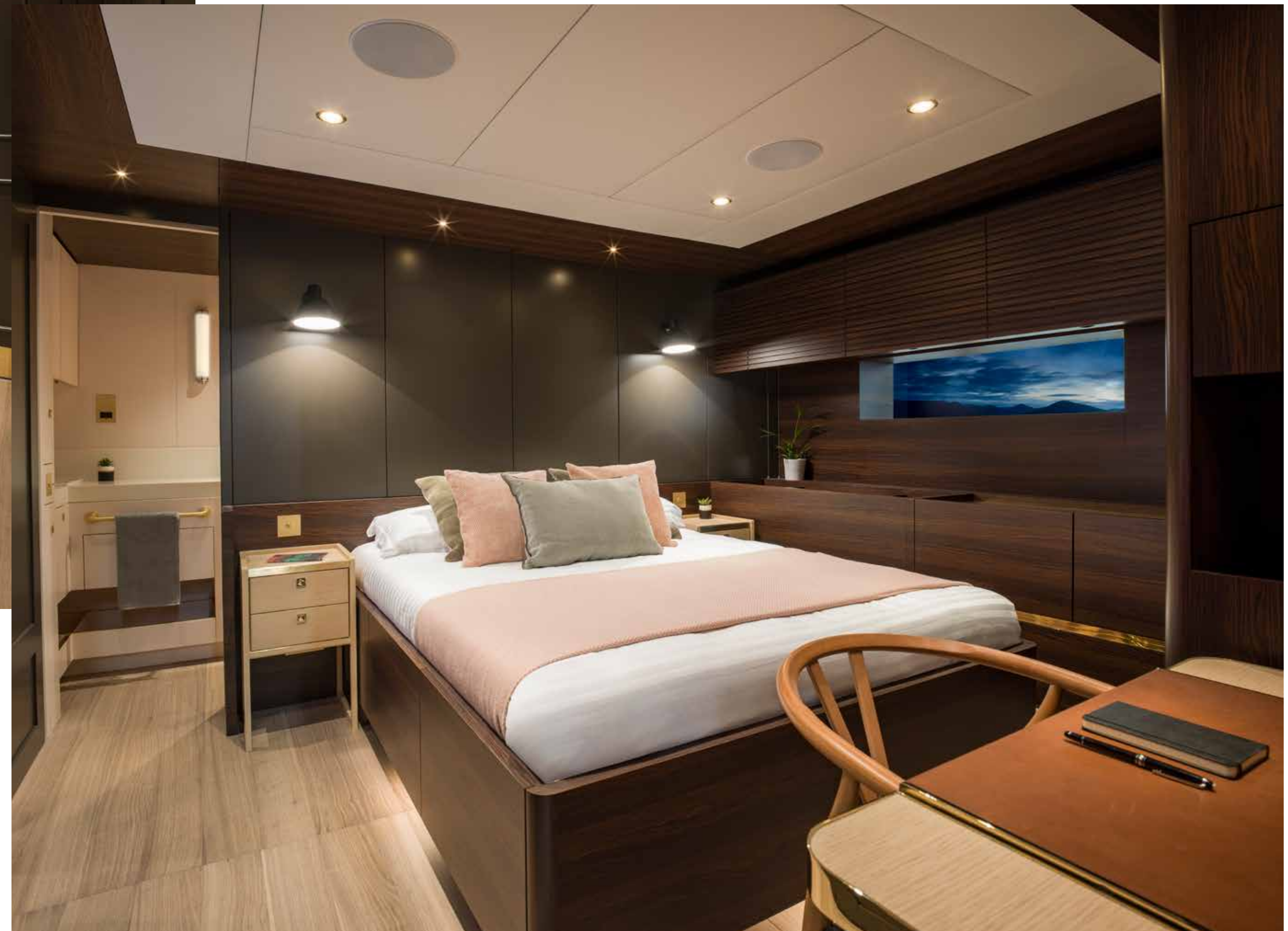
## Galley

Sociable, open galley with superb views and easy access to multiple dining areas in the saloon, bridge deck, aft and forward decks.



# Master Cabin

Current Colours





# Master Cabin Alternative Colour Options

The colour schemes and finishes as built could be reconfigured. This is an example of the standard colour scheme.



# Master Cabin

Alternative Colour Options



## Master Cabin Snug

The colour schemes and finishes as built could be reconfigured as with the Master Cabin.



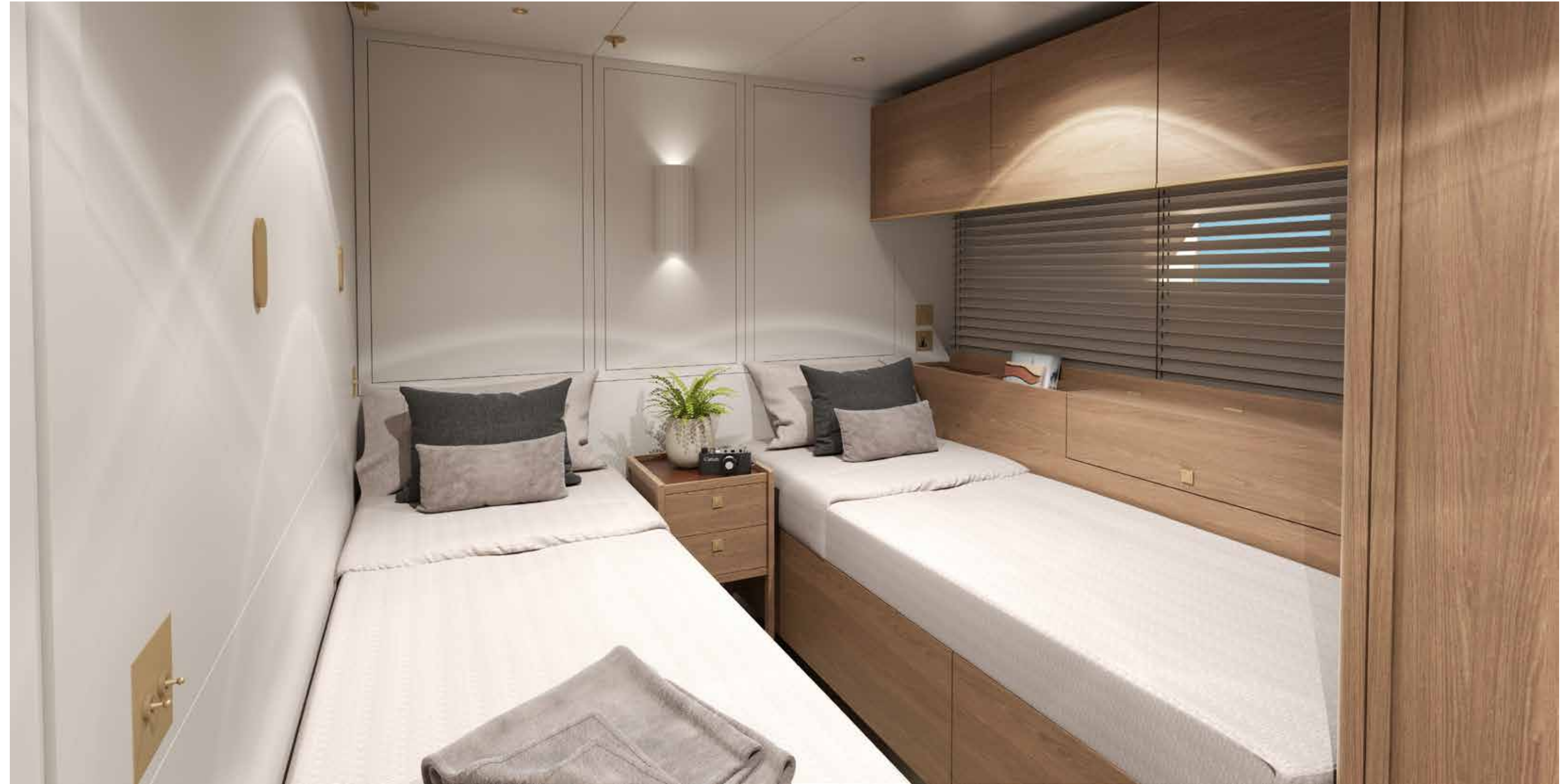
## En-suite

Very large walk-in shower and steam room with large window, full size head, excellent storage, heated mirror.



# Guest Cabin

Both the port and starboard guest cabins have berths that can be configured either as twins or as a double. This cabin also has third pipe cot.



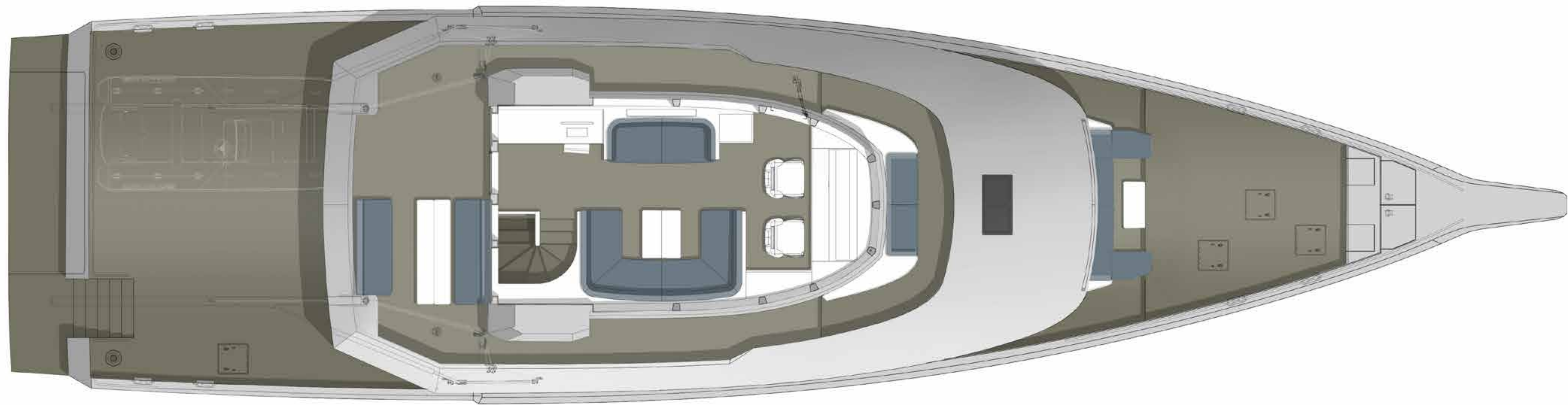


## Crew Cabin

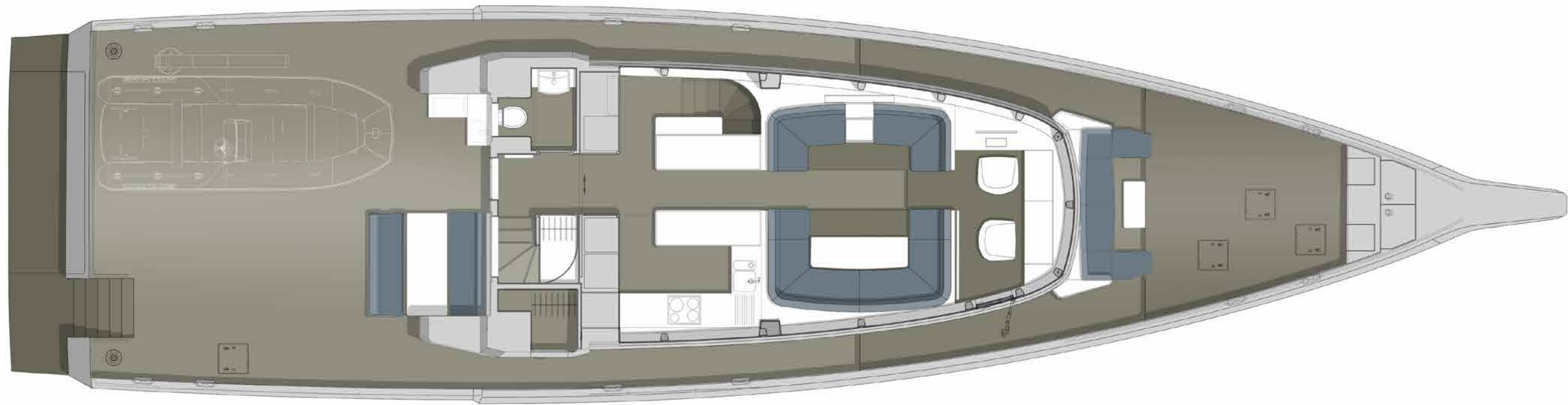
Complete with en-suite and fitted out to the same standard as the rest of the yacht. Direct access to the utility room stores. Well separated from the owner / guest accommodation.



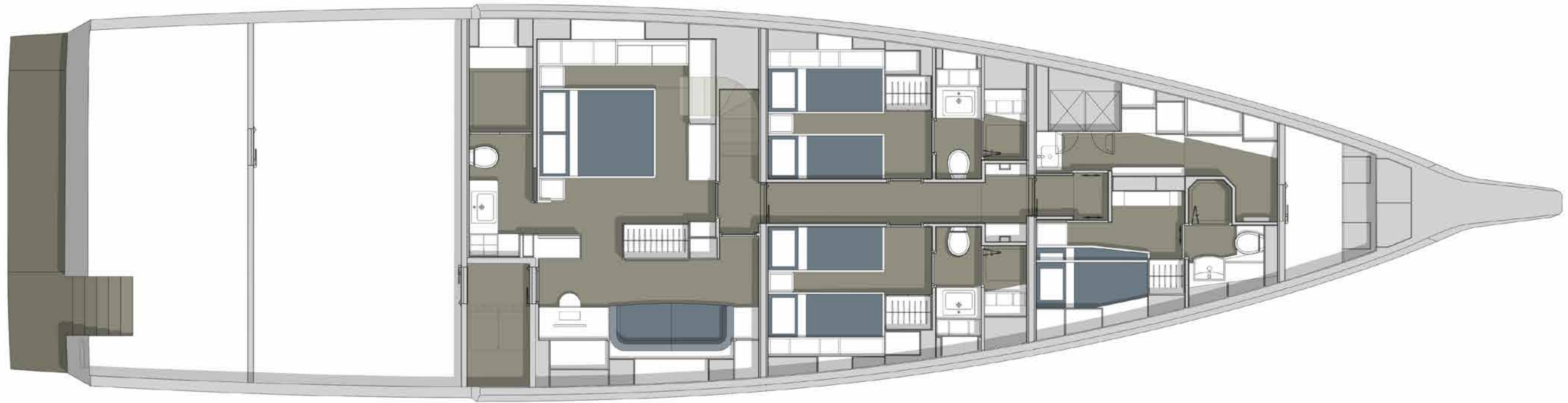
# Bridge Deck



# Main Deck



# Lower Deck



# WHY ALUMINIUM?

We take responsibility to ensure that the materials used in building our vessels have as minimal an environmental cost as possible, both during production and use, and that they are fully recyclable at the end of life.

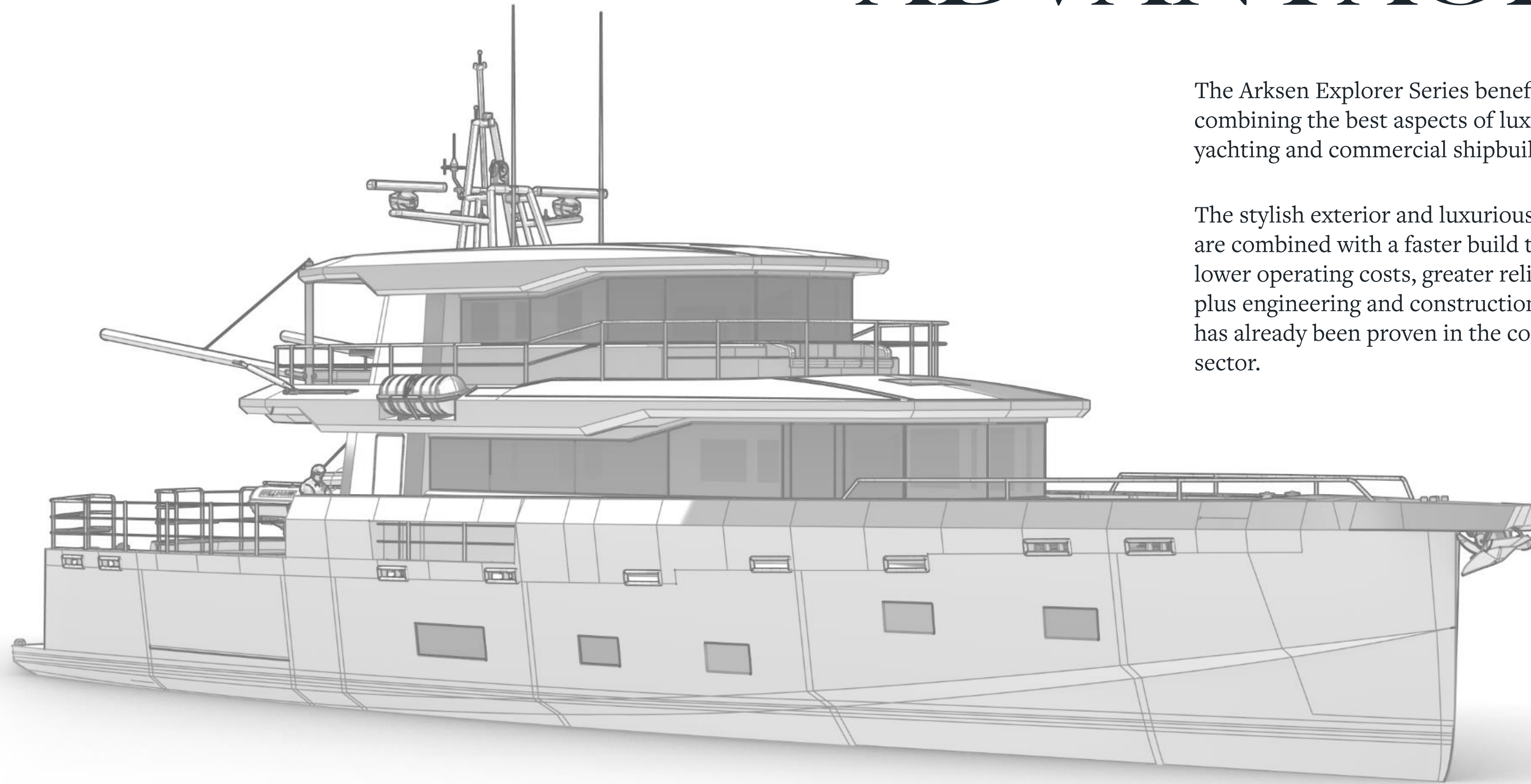
This is why the aluminium used in building Arksen Explorer Vessels contains up to 40% recycled content.

Other reasons for using aluminium are:

- 100% recyclable. Around 75% of all aluminium ever produced is still in use.
- Excellent qualities in terms of weight, strength, corrosion resistance and insulation.
- 15% to 20% weight saving over steel means less propulsion power required, less fuel consumed and less emissions.



# THE ARKSEN ADVANTAGE



The Arksen Explorer Series benefits from combining the best aspects of luxury yachting and commercial shipbuilding.

The stylish exterior and luxurious interior are combined with a faster build time, lower operating costs, greater reliability plus engineering and construction which has already been proven in the commercial sector.

## **BENEFITS FROM COMMERCIAL**

- Reliability
- Proven systems
- Reduced build time
- Lower maintenance
- Function focussed

## **BENEFITS FROM LUXURY YACHTING**

- Great appearance
- Luxury throughout
- Wider appeal
- Better residual value



# SPECIFICATION

## Introduction

<b>Builder:</b>	Arksen Ltd, UK
<b>Naval Architecture:</b>	Humphreys Yacht Design, UK
<b>Exterior Design:</b>	Humphreys Yacht Design, UK
<b>Interior Design:</b>	Design Unlimited, UK
<b>Structural Regulations:</b>	Lloyds SSC
<b>Classification:</b>	MGN 280 Code, Category 0, Unrestricted.
<b>Hull Type:</b>	Low Displacement Length (LDL) Hyper Efficient
<b>Hull Material:</b>	Aluminium (Up to 40% recycled content)
<b>Superstructure Material:</b>	Aluminium (Up to 40% recycled content)
<b>Accommodation:</b>	8 guests, 2 crew

## Dimensions & Capacities

<b>Length Overall:</b>	27.4 metres
<b>Loadline Length:</b>	23.99m
<b>Beam Overall:</b>	7.01 metres
<b>Draft:</b>	1.55 metres
<b>Displacement Half Load:</b>	99 tonnes
<b>Fuel Capacity:</b>	18,000 litres
<b>Freshwater Capacity:</b>	6,000 litres

# SPECIFICATION

## Propulsion & Capability

<b>Main Engines:</b>	Praxis Serial Hybrid System: 2 x 250kW Electric Motors 3 x 200kW Variable Speed Diesel Generators
<b>Thrusters:</b>	36kW Fixed Bow Thruster 36kW <i>Swing Down Stern Thruster</i>
<b>Trim Tabs:</b>	Transom mounted active interceptors to mitigate pitch and roll
<b>Stabilisers:</b>	Fin Stabilisers Interceptor Ride Control System <i>Gyro Stabilisers</i>
<b>Range:</b>	7,000nm
<b>Efficient Cruise Speed:</b>	9 - 12 knots
<b>Maximum Speed:</b>	14 knots

## Electrical & Domestic Systems

<b>Generator:</b>	3 x 200kW Variable Speed Diesel Generators
<b>Solar:</b>	6kW Maximum output
<b>Batteries:</b>	160kWh LiFePO <sub>4</sub> Propulsion/House Batteries in A60 Battery Room 200 Ah LiFePO <sub>4</sub> 24V DC Service Battery Bank 300 Ah LiFePO <sub>4</sub> 24V DC Emergency Battery Bank 100 Ah LiFePO <sub>4</sub> 24V DC GMDSS Battery Bank
<b>Power Management:</b>	AC power provided by generator or inverters or a combination as required Generator auto start and shutdown as required.  Large lithium ion battery bank, provides AC power to domestic grid via inverters
<b>Air Conditioning:</b>	Variable frequency matching load to demand to avoid on/off cycling
<b>Watermaker:</b>	High capacity, 2 x 276 lph

# SPECIFICATION

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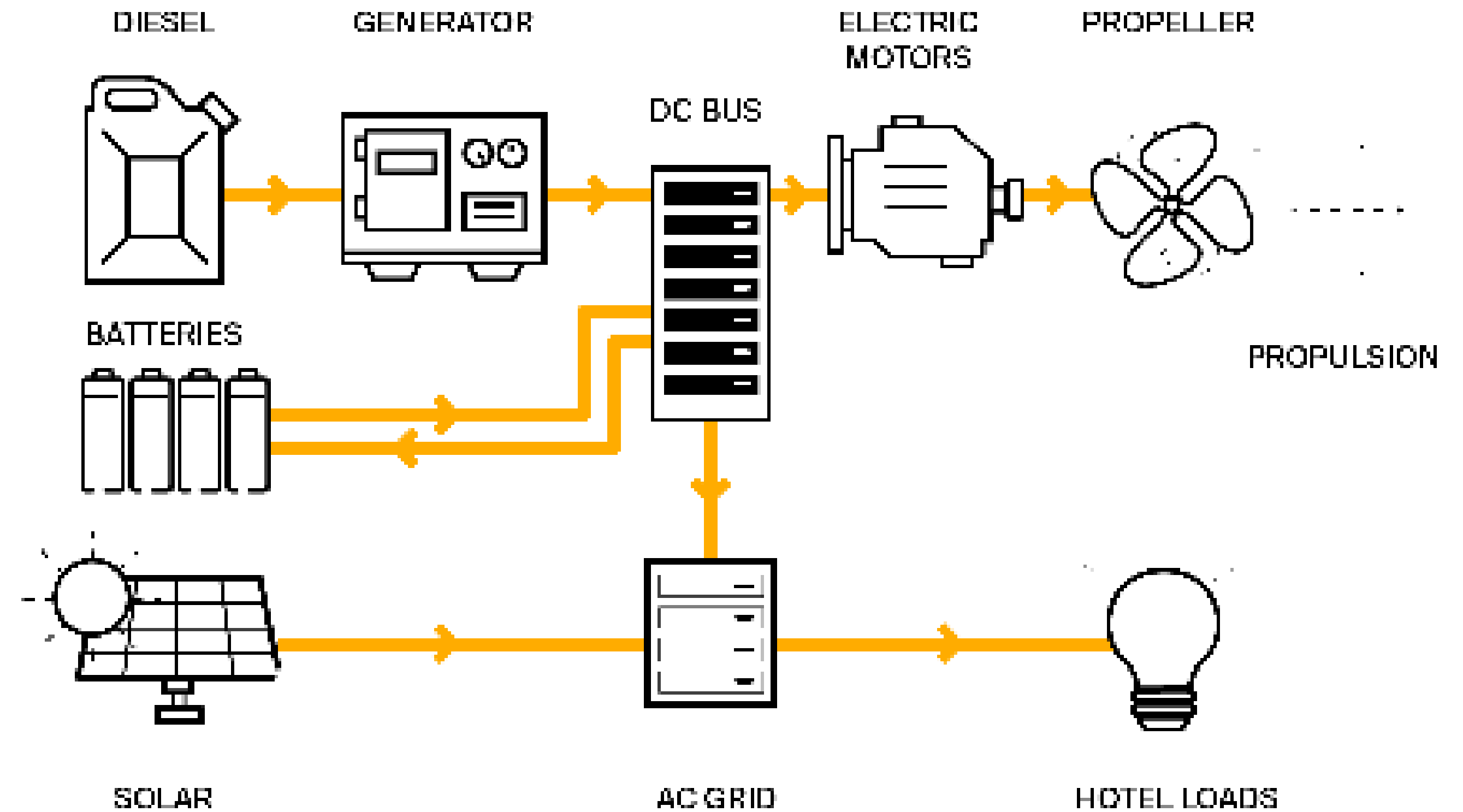
## Tenders & Adventure Equipment

- Lazarette:** Large transom door opens to form an extended aft platform  
Spacious lazarette
- Aft:** Load capacity of 4,000kg  
Maximum tender length of 5.5 metres  
Outriggers to port and starboard for lifting  
Hydraulic deck crane  
To keep the aft deck clear when stationary the vessel is fitted with tender chocks that extend to port and/or starboard so that tenders can be carried outboard.
- Foredeck:** Removable davit for small tenders, toys and equipment

# HYBRID SYSTEM

There are three power sources; generators, batteries and solar. Generators and batteries run the electric motors for propulsion and the solar power feeds directly into the AC grid which runs the hotel load. The more solar power feeding into the AC grid means less fuel required by using generators to power the system. Batteries are charged by the generators or direct from shore power.

The key to the system is running each generator at maximum efficiency, and using up any excess power that is produced to balance the system.



## Energy efficient cruising

Generator provides power to electric engines, with any excess used to charge batteries

## Silent arrival and departure

Electric-only mode uses batteries for arrival and departure propulsion and overnight hotel loads

## Virtual anchor in protected zone

Electric-only mode uses batteries to run electric thrusters to maintain position with zero emissions

## Peak shaving at anchor

A single generator meets standard hotel loads, with batteries kicking in to support increased demand, rather than using second generator

If battery power is insufficient, a second generator is run at optimum efficiency, meeting extra hotel loads and using excess to charge battery

# USEFUL LINKS



Arksen Philosophy



Why Aluminium



Interior with a Conscience



The Design Approach



Science & Philanthropy



Arksen 85 Model Testing



Arksen 85 USP's



Origins - Jasper Smith



Project Ocean Bridge Deck



Project Pelagos Launch

