

# Quite the journey

We love these proper oceanic motor yachts – a breed that was first pioneered for his own globetrotting by the man who literally did write the book about long distance cruising under sail... Steve Dashew

Rob Humphreys Yacht Design have travelled a long way from their winning IOR yachts of the 1980s to today's innovative modern superyachts, both power and sail. For their latest launch the client brief began with the requirement for near-360° visibility from interior and exterior spaces on the main, upper and bridge decks, which in turn drove a novel single-level deck design, relatively low forward freeboard, and those large tough panels of glazing.

A spectacular owner's suite is also situated on the upper deck with a private lounge and office area. Outside is an external lounge for warmer climes (with a jacuzzi, obvs). Four guest cabins can accommodate 10 in total, with further quarters for a complement of up to 10 crew. Maintaining crew and guest separation was another key brief so some juggling of the layout allows crew direct access to the engine room from the forward crew area, a technically challenging feature on a light-displacement 50m yacht.

The bridge is located in the top tier of the superstructure, also with uninterrupted 360° visibility. Wing stations are located on both sides of the bridge in addition to a full exterior walkway and further external seating areas.

The aft deck stowage area has space for multiple tenders and water toys with a 9.25m tender launched via dedicated C-davit, plus a Palfinger deck crane providing additional multi-functional lifting capability. A concealed Cramm foredeck crane provides launch and recovery for the rescue boat, jet skis and smaller toys.

Significant optimisation went into the refinement of a fast-displacement hull form to ensure that all performance, seakeeping, manoeuvrability, vessel motion and comfort criteria could be met



or indeed exceeded. In-house studies, including high-resolution RansCFD analysis working with our project partner Cape Horn Engineering, were undertaken, culminating in scale model testing and further design refinement. Throughout the design process particular attention was paid to analysing vessel motions and the effect of various pitch damping and roll stabilisation devices.

The design utilises a parallel hybrid propulsion system with twin shaft drives, powered by MTU 12V 2000 diesel engines, coupled to ZF gearboxes and 290kW Danfoss electric motors. A maximum speed of 20kt is achieved in hybrid boost mode, with a range of over 5,000nm at the economical 12kt cruising speed. Soft mountings are incorporated throughout to ensure exceptionally low levels of noise and vibration for a yacht of this kind. In a distant spin-off from Imoca technology transom-mounted CMC 'intruders' allow enhanced trim control at higher displacement speeds.

The hull is constructed in aluminium while the upper tiers of the superstructure are constructed from infused GRP composite to satisfy all displacement and centre of gravity targets. □