

# TAKE THE WHEEL

*Horizon's hugely popular FD line adds a new size yacht for owner-operators with loads of space for the whole family.*

By Kate Lardy



On Wednesdays in Cor D. Rover's studio, the designers have a golden rule: They don't work for clients—free of all constraints, they design their own boats. It was on a rainy Wednesday when Rover sketched a boat that had the maximum amount of volume on the smallest possible waterline length and included an on-deck master stateroom.

"As a designer, sometimes you have an idea, and you're very convinced it is a good idea, but we don't have the money to bring it to life," says Rover. This was one of those times, so they planned to show the concept to a few shipyards. "John Lu (CEO of the Horizon Group) was the first one, and he was the last one as well," says Rover. "He had the vision and the resources to say, 'Okay, let's start building it.'" Thus, the first of the Fast Displacement (FD) series was born four years ago.

"Now look at this harbor," Rover says, referencing a stretch of FD boats lining the face dock of the Horizon City Marina in Kaohsiung, Taiwan. "It's a little fleet of FD series."

We're at the 2020 Horizon Open House, a biannual event that brings together dealers and clients from all over the world for a gala, shipyard tour, and yacht hop showing off the latest launches—the vast majority of which are FD boats this year. It is the fastest-growing model in Horizon's lineup and a particular favorite of Americans, who have taken delivery of more than half of the nearly 30-strong fleet. Lu and Rover were ahead of the curve with the concept, coming together at a time when owners had begun to look for exactly what they are offering: huge amounts of both interior volume and deck space within a reasonable size LOA.

With their high freeboard and wide beam carried far forward, they offer a lot of boat for their length, which is why Elise Moffitt Caulder of Horizon Yacht USA tells me that owner-operators have been asking if they had anything a little smaller than the 80-, 85-, and 87-footers that were currently built. "We saw a gap, so we started developing this with Austin Lin (head of Horizon's Vision Shipyard)," she says, showing me around the premier hull of the FD75, one of the stars of the Open House.



*The FD75 offers huge amounts of interior volume and deck space, as shown on the flybridge.*



Clean lines in the design provide a seamless transition from the roomy salon and galley to the oversized aft deck.



instance, a breakfast bar that latches to the port wall under the windows converts to a full-size dining table that stays put via magnets in the floor. “Austin’s idea was to have clean lines with no catches or latches in the floor so no one stubs a toe,” explains Caulder. The flexibility of the dining arrangement also keeps the room uncluttered by a formal table that will only be used occasionally.

Staying true to the emphasis on wide open space, the corner galley blends into the salon, bordered by beautiful, yet practical, Cambria quartz bars with a heated marble floor that feels terrific on bare feet. The forward feature wall adjacent to the galley

hides appliances and cupboards behind its vertical oak slabs. Motion sensors detect when someone is nearby and light up the spots on the wall where the doors open. They automatically turn off after five minutes.

The décor amplifies the copious natural light coming through the expansive salon windows and master stateroom skylight with white stones, oak joinery, and glass and mirror accents that maintain the light and airy feel. Adding to this, lighting design is one of Lin’s specialties. As he says, “You use light to describe the space.” Spot and indirect illumination, therefore, have been carefully considered. For example, cool LED strips edging spaces like the guest corridor sole add definition and drama.

#### Hybrid Hull

Glancing at the exterior, one might assume a boat this voluminous has a full displacement hull to perhaps plow through waters at around 10 to 12 knots tops. But no, the

#### Wide Open Space

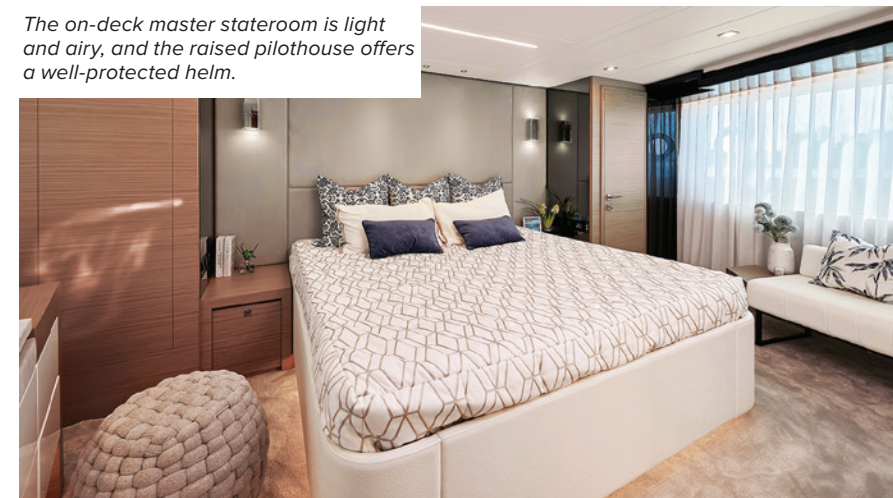
Challenged by the concept’s innately chunky exterior, Rover and Horizon worked on every detail to scale it down to 75 feet while keeping it as sleek as possible and maintaining the spirit of the series—a key feature of which is the superyacht-like master suite. Their solution was to make a semi-on-deck stateroom that is just two steps lower than the main salon.

Below are three guest cabins, including a full-beam amidships VIP that could be a second master. Aft of the engine room is a crew cabin that could equally serve guests (or the space can configure into a beach club).

Deck space is another fundamental attribute of the series, and the FD75 delivers an oversized aft deck, a foredeck lounge, and generous flybridge entertainment space. A raised pilothouse gives the owner-operator a nice protected helm in addition to the open bridge above.

Lin is an interior designer as well as a builder, and his attention to detail and ingenuity shows throughout. For

The on-deck master stateroom is light and airy, and the raised pilothouse offers a well-protected helm.



F in FD stands for fast not full, and the FD75 is a 20-knot boat. Rover and the Horizon engineering team developed a hybrid hull with a versatile tunnel design that’s efficient over a range of speeds. It transitions from a hard chine forward to a soft chine midship and aft, but the *pièce de résistance* is the unique “High Performance Piercing Bow” that leads the charge. Protruding forward of the hull under the waterline, the pointy appendage reduces pitching in a head sea while slicing through underwater currents which decreases resistance and fuel consumption by 10 percent compared to a traditional planing bow.

Hull No. 1 was specified with twin 1,200-hp MAN engines that bring her to 20.2 knots with a range of more than 2,000 nautical miles at 7.8 knots. The standard power, however, is 1,135-hp Caterpillar C18s. Hull No. 2 will have these, and the yard’s performance prediction tests show her reaching 18.6 knots at 2,300 rpm.

That’s just one difference between the first two 75s, the initial one developed for the European market and the second one coming to the U.S. to debut at the Fort Lauderdale boat show in October 2020. Hull No. 2 also changed up the main deck layout placing the galley aft within easy serving distance of the aft deck.

#### A Growing Quest

Even though the 75 is the smallest in the FD series, the level of customization remains extremely high. It’s part of the

#### SPECIFICATIONS

**LOA:** 77' 8"  
**Beam:** 20' 4"  
**Draft:** 5' 5"  
**Displacement (half load):** 131,200 lbs.  
**Fuel/Water:** 2,400/300 U.S. gals.  
**Power:** 2x MAN V8 @ 1,200-hp  
**Cruise/Max Speed:** 12-14/20 knots  
**Range:** 1,285 nm @ 10 knots  
**Contact:** Horizon Yacht USA  
 (561) 721-4850  
[horizonyacht.com](http://horizonyacht.com)

#### 6D INFUSION TECHNOLOGY



One of the Horizon Group’s biggest assets is its composites facility Atech, whose expertise is honed across other industries as well, like aviation and national defense.

Atech recently took the vacuum infusion process (which results in a lighter, stronger product) to a new level, patenting 6D Infusion technology that infuses all the 3D macro structures, such as the stringers and traverse frame, in one shot along with 3D micro structures of fiberglass to accelerate the resin flow. It guarantees even resin distribution and reduces the total weight by eight percent compared to infusing only the hull shell. Very large FRP hulls are no problem now. In 2019, Atech set a world record by infusing a 140-foot hull in a single shot. They also have the ability, unique among Asian shipyards, to thoroughly examine the hulls and components to ensure quality using three aerospace-grade, non-destructive testing methods: infrared thermography, ultrasonic inspection, and laser shearography.

shipyard’s ethos. “Normally a shipyard complains, ‘Oh, this is too complicated, make it simpler,’” Rover says from the designer’s perspective. “Working with Horizon, however, every time we say, ‘Can we do this?’ they do a little extra; when we say, ‘Is this possible?’ they give us a little more.”

This can-do attitude spills over to the clients with seemingly unlimited opportunity to make their yachts their own creations. It helps that engineering is the strength of the Taiwanese yard with 20 naval architects on staff.

That bodes well for Horizon’s future. Rover, who was spot on trend with the FD series, has another prediction: “The quest for customization will only grow,” he says. “Every client wants to be individual; kids today all have their own ideas.” And if those ideas require a lot of space, the FD boats have it. 🌊