

Persico Marine and Carkeek Design Partners introduce F 70 full-foiling day sailer-racer

The F 70 – a new breed of high-performance dual-purpose day sailer and racing foiling yacht – has been introduced by world-renowned yachtbuilder Persico Marine of Nembro, Bergamo, Italy, and highly regarded inshore-offshore yacht designer Carkeek Design Partners of Palma de Mallorca, Spain. This new sailing platform for owners and crews alike will bring state-of-the-art yacht design within reach of a wider audience.

Through a video published on their respective social media pages, the two firms recently announced their partnership agreement aimed at the production of this innovative craft.

“We are extremely satisfied we have finalized an agreement with Carkeek Design to offer the market a spectacular full-foiling yacht,” **Marcello Persico, president of Persico Marine**, stated. “We are looking forward to collaborating with Shaun Carkeek and his outstanding team, who have already had great success in launching the world’s first HPR designs. Carkeek Design’s boats have turned out to be winners – their Ran VII was awarded the 2018 World Sailing Boat of the Year. And we are sure this new 70’ foiler will be a real groundbreaker”.

“We are delighted to join up with Persico Marine, known worldwide for its cutting-edge know-how in building racing and performance cruising yachts,” said **Shaun Carkeek, lead designer of Carkeek Design Partners**. “This year, Persico has been in the news for its role in the 2021 America’s Cup. Not only has the yard built Luna Rossa Challenge’s two boats, but it is also the supplier of the foil arms for all America’s Cup boats. And our state-of-the-art full-foiling day racer will take full advantage of Persico Marine’s extensive experience.”

The new F 70 is an ultra-fast and lightweight, foil-assisted carbon composite day sailor and racer, designed to deliver unprecedented performance with style and comfort. Incorporating the latest design R&D and technology, the F 70 Series is Carkeek’s response for a dual-purpose full-foiling yacht. The goal is to deliver an innovative concept for owner drivers: a stylish, simple, strong, safe and highly competitive foiling yacht, offering a seamless transition between day sailing and racing sailing modes.

The next generation, foiling dual-purpose F 70 is easily driven and fast in all conditions and angles, whether day sailing or racing. The yacht features advanced performance control systems allowing the owner and crew to sail safely and reliably at high speed. The designer and builder have pushed the boundaries with well-researched and tested ideas to maximize competitiveness and surpass expectations.

“Seventy feet has been deliberately chosen as the starting mid-range size most able to provide an optimal all-round solution,” **Mr. Carkeek** explained. “It takes into account low crew requirements, dual usage, racing and lifestyle requirements, while also keeping an eye on cost and the bigger picture.”

The main foils combined with the rudder T-foils are designed to fly the F 70 at 10 TWS. The custom F 70 foil retracting and control systems use the latest technologies developed for the America's Cup and IMOCA boats, so as to offer safe yet precision flight control and modes in all conditions. As the foils must be stored to allow the boat to berth normally, a unique system is employed to achieve this function at rest mode. The foil package has been developed utilizing the latest CFD and VPP simulation software.

All composite components will be built in-house at the Persico Marine yard, utilizing the latest Persico-developed robotic technology.

To sum up, **Mr. Persico** had this to say: "The F 70 has been conceived and developed as a robust and versatile yacht for any owner driver and is therefore equally suitable for day sailing or inshore racing, as well as for a typical 150- to 600-mile race."

CARKEEK DESIGN PARTNERS

Carkeek, based in Palma de Mallorca, Spain, is a fully independent and highly creative design consultancy whose success is based on a unique combination of vision and expertise. Its innovative, multi-disciplinary team work on a global range of projects varying from initial research and strategy to production design.

The Carkeek team meld proven production expertise with unconditioned global talent to excel at what they do. The various team members bring together specialized skills in design, naval architecture, engineering and management. Moreover, the global background of the team enables them to keep in close touch with international client markets.

Carkeek's approach is oriented towards designing the performance sailing yachts of the future: the first question is always: "Why will this design be successful in the future sailing context?"

Through understanding clients' needs and gaining insight from experience, Carkeek Design Partners define innovative ideas, beyond the known yachting conventions. With their know-how, the Carkeek team can design and develop the ideas into beautiful and feasible products that clients find irresistible and love to use.

PERSICO MARINE – YACHTBUILDERS

Persico Marine is a well-known independently owned company with a large team of highly experienced builders and engineers of carbon racing yachts. The shipyard's technology, which combines the expertise of technicians with equipment normally used in the aerospace sector, makes Persico the supplier of appendages and in particular carbon foils for the main ocean circuits and sailors. Headquartered in Nembro, Bergamo, Italy, the team have worked on many of the most iconic racing yachts of the last 15 years, including America's Cup and Vendée Globe yachts, TP52s, Volvo 65s/70s and classic racing yachts, such as the IRC72 Momo, Ran. In the performance sailing sector, Persico Marine has built numerous yachts between 60' and 145' and are currently working on two motor yachts, respectively of 100' and 55', and the new ClubSwan80.

The F 70 is to be constructed at Persico Marine’s purpose-built yachtbuilding facility equipped with the latest technology: numerous component ovens, autoclaves and vacuum tables, in-house CNC machining and pre-preg cutting equipment. The Persico Marine design and production teams bring their extensive know-how and many years of race boatbuilding experience to bear on every project they undertake.

F 70 PRINCIPAL SPECIFICATIONS

LOA	21.4 m
Beam	5.2 m
Draft	4.5 m
Weight	10,000 kg
Mainsail	190 m ²
Jib	145 m ²
Reacher	270 m ²
Construction	Full pre-preg unidirectional IM carbon Nomex Kevlar honeycomb core

SAIL PLAN

I	28.5 m
J	9.68 m
P	30.3 m
E	9.1 m
Main	190 m ²
Jib	143 m ²
Spinnaker	272 m ²

F 70 / Modern, future-oriented design/ Lightweight / Robust construction / High-speed planing) / Easy to manage (2-4 crew members) / furling sails / dual mode (full foiling/skimming system) – retractable system (this does not have to be an issue for docking / Crew area (sleeping area / daily fridge system/ galley / shower / toilets) / Modern table chart/ Anchoring system (optional) / Fresh water capacity (min 400 L) / Air-conditioning system (optional) / Water maker / Sail locker / Canting keel

F 70 – KEY FEATURES

- State-of-the-art foiling day sailer /racer.
- Unique blend of performance, innovation, engineering and design.
- Harnesses latest developments from Grand Prix, IMOCA and AC.
- Enjoy foiling and short-handed sailing at high speed with control.
- Superior speed and control vs. benchmark canting, fixed-keel yachts.
- Iconic, unique, modern futuristic yacht.
- Foil lift, precision control and stability mechanisms.
- New generation hull with potential for dynamic lift and sustainable high speeds.
- Low-drag form in light and low heel.
- High grip and optimum balance at all angles.
- Ability to push the yacht without the risk of losing control.
- Racing higher power to weight ratio with unprecedented acceleration, response rate, control and safety.
- Cutting-edge design engineering to achieve lightweight, innovative solutions.
- Emphasis on minimum weight without compromising stiffness and strength.
- Easy to handle and drive. Reliable and robust yet lightweight.
- Wing rig, deck stepped, rotating with outriggers.
- Canting keel.
- Retracting foils with variable pitch and T rudders.
- Engineering of optimized integrated solutions.
- Customized component integration.
- Suppliers R&D-Electric hybrid, light robust parts with easy service and spares.
- Weight savings, component customization, lightweight materials and solutions.
- High-end FEA composite engineering.

- Interior fit-out and assembly with smart systems.
- Sailing systems – low windage and WCG combined with ergonomics.
- Carefully defined and optimized yacht to take charge of the maxi 70 fleet.
- F 70 Yacht outperforms 100-footers.
- Light and responsive.
- Easy to drive and competitive.
- Foiling dual mode hull form with low TWS transition to foiling.
- Unprecedented upwind and reaching.
- Careful attention to the steering system and balance using our latest design tools to create optimum all-round performance.
- Rig and C-of-E aft.
- Unique deck shape giving improved aero-dynamics, global stiffness and reduced structural weight.
- Twin T-rudder setup.
- Key attention to water detailing - flush recessed channel for most line systems.
- Increased global stiffness due to the unique Carkeek hull/deck shape and geometry, optimized with CFD and FEA tools.
- Unique shorter cockpit design for less water on deck and increased interior volume.
- Highly styled supercar interior.
- Carbon wing /aft sunbed that doubles as a swim platform.
- Central cockpit for socializing forward of the split companionways.
- Recessed sun awnings.
- Retracting foils to allow for normal docking.
- Custom wing rig and boom.