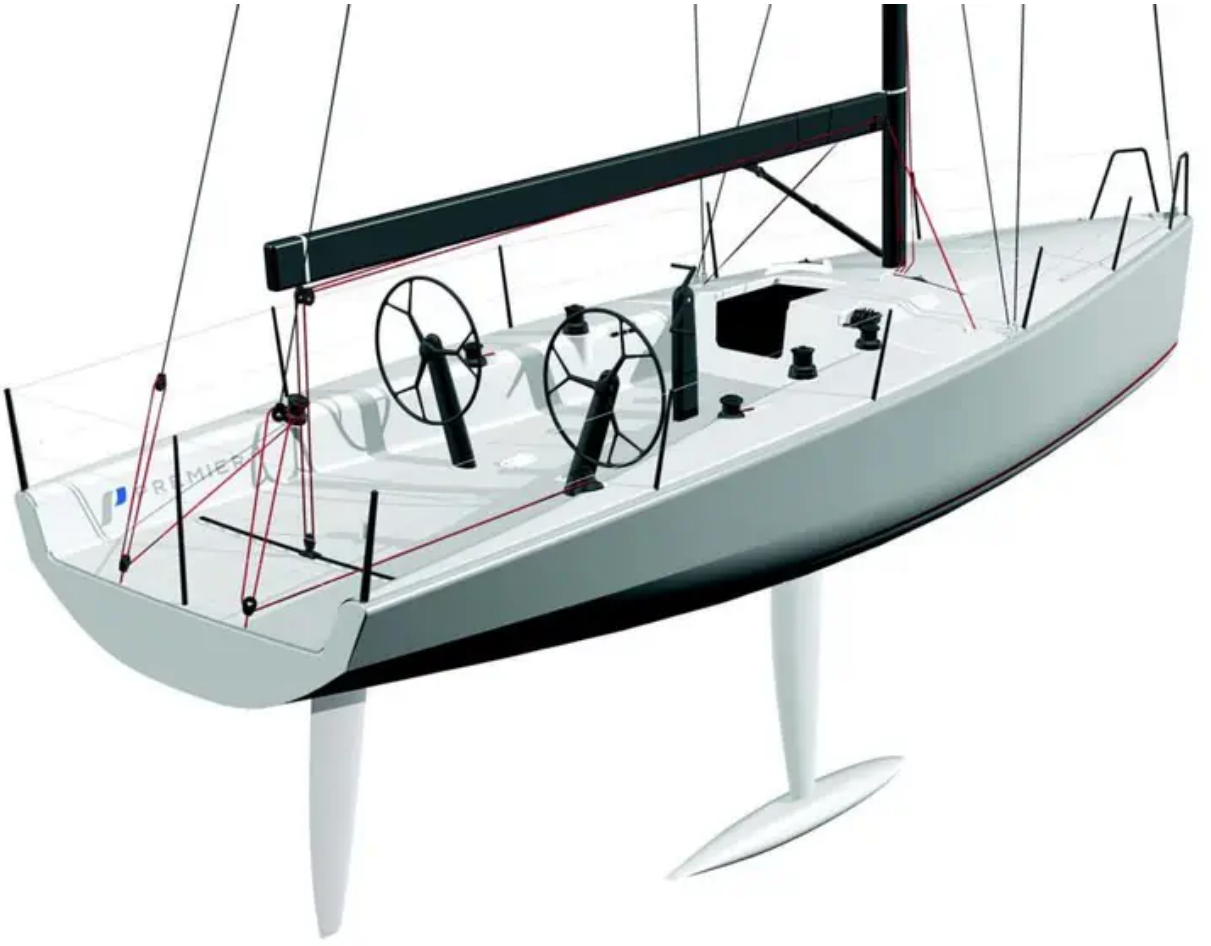
Designed For the Times

As the one-design world turns, the latest grand-prix big-boat offering comes as its predecessors enjoy their golden years. "New Boats" from our April 2011 issue.



Farr 400 Design

The portable Farr 400, now in production in Dubai, is billed as the next big thing in owner/driver, grand-prix racing. Courtesy Farr Yacht Design

With the prohibitive operating costs of bigger boats, many owners and crews have turned to smaller high-

performance designs of late to get their racing fix while awaiting an attractive 40-foot option. The impending arrival of the first Farr 400 later this spring could put an end to waiting game.

A design commissioned by Premier Composites Technology in Dubai, the Farr 400 is more akin to the box-rule GP42s that raced the MedCup circuit in Europe over the past two years than it is its suggested predecessor, the Farr 40. Whereas the Farr 40 is strictly a buoy racer, designed some 15 years ago, the 400 will be pulled into both buoy and distance racing duty.

“Current and past [Farr 40] owners have recognized that design trends moved on, and faster, more exciting boats have come along,” says Bill O’Malley, of Farr Yacht Sales. “They’re anxious for something new.”

For some of those owners, he adds, the Melges 32, an excellent boat in its own right, is too athletic and dinghylike, and the TP52s too grand-prix and expensive to campaign. That’s not to say
the Farr 40 is inexpensive for serious teams to campaign. A cost-reduction effort is fundamental to the 400: it’s designed to be much more portable than the 40, less reliant on yards and shore teams, and less costly to transport between events.

As a powered-up 9,105-pound carbon-composite build, the 400 will leave a Farr 40 in its wake, but it will also be

more versatile, meeting ISAF Offshore Special Regulations (Category 2). The reverse sheer line provides interior volume and headroom (about 6 feet in the main section). The class concept, as it's evolving, says O'Malley, will include coastal racing, a staple of European events of late, along with windward-leeward racing. The hull has a narrow profile, a trait that plays to FYD's typical emphasis on upwind/downwind performance, but the af chine creates the af planing section desirable for downwind reaching.

The asymmetric deck layout has a clean look, and borrows many systems developed on Farr-designed GP42s. Integral to the layout is the string-line spinnaker take-down system, and the twisted Lewmar pedestal grinder (not shown in the renderings). The pedestal is unique on a 40-foot production raceboat, O'Malley points out, not to mention helpful for jibing the big asymmetric. It's hugely beneficial for spinnaker hoists and the line-drive take down, as well.

The take-down setup includes a carbon roller on the aft face of the front hatch, and, when doused, the spinnaker is pulled into a sock running the length of the interior on the port side. The take-down line runs to a block on the transom, then forward, and exits out of the cockpit window adjacent to the primary winch. The grinder loads the line into the winch's self-tailer and grinds the spinnaker in until it's 90-percent in the sock. The bowman collects the head, tack, and clew, and closes the hatch.

The spinnaker launches right out of the sock.

Masthead kites will be flown off a retractable sprit, and having the sprit on centerline required the forward hatch to be offset to port. With this arrangement, the spinnaker sock has a straight run for left-side takedowns, which is the preferred method to avoid shrimping oversized kites.

The companionway is also offset to port, and as a result, all the pit controls are to starboard. This was also done to accommodate the lifing keel in its upright position, and to allow the pitman to quickly get lines to the primary winch.

While it may seem limiting to commit the pit to one side, O'Malley says they're happy with the set up and feels it's better for the dual-purpose nature of the boat. "You can easily set any halyard to a winch," he says. "Many times boats are set up only for windward/leeward racing and end up being terrible setups for distance races."

Lower-cost portability is an essential trait of the design, and the 38'9" LOA comes in under the magic 40-foot length for easy travel. The Southern Spars carbon mast (fitted with Element
C6 composite rigging) is a two-part arrangement. The split rig simplifies transport dramatically, and when disassembled, the spars and boom ride on the fat-rack shipping cradle. At just over 9,000 pounds and sitting shy of the 10-foot high mark, trailering the boat is well within the means of most tow vehicles. O'Malley, who's well

versed on the finances of moving grand-prix boats, says, for example, the cost of transporting a Farr 40 from Newport, R.I. to Fort Lauderdale, Fla., is roughly $6,500 for trucking alone, one way. Add in yard fees at either end, rig stepping, keel-joint fairing, shore crew salaries, and days lost to sailing, and it all adds up. With the 400, he says,
most of that goes away, by as much as two-thirds.

The custom cradle has three “modes”: high-mode with the keel on, low-mode with the keel up, and a third mode with the keel removed and the hull tilted at 80-degrees. The lifting keel arrangement is intentionally simple: a post built into the interior of the boat swings over the keel head. A block-and-tackle is led out the companionway, and led to the primary grinder.

They went with a retractable centerline sprit, rather than the fixed bowsprit common to custom raceboats of late for a reason. “A fixed sprit makes it a 46-foot boat and adds another complication in removing it every time for transport,” says O’Malley. “The centerline sprit takes that issue away.”

The boat comes standard with a tiller, but for teams with offshore aspirations, the twin-wheel set up would be the way to go. The high-aspect keel is a solid cast-iron fin with composite fairing, which, says O’Malley, should help control the one-design aspect, and allow for easier repairs. The bulb is removable, and the keel fin can be

extracted through the companionway, or through the bottom of the boat by removing the keel head.

The class rules will be modeled after those of the Farr 40 class (owner/driver), and the boat will be raced by eight. Better systems add up to requiring one less body, says O'Malley, which ultimately saves the owner crew costs as well. Because it's a relatively narrow, slab-sided boat, crew weight isn't as beneficial as it would be with a fared-beam profile, but that doesn't mean crews can be lounging on the rail.

What's the cost of admission? The starting price is $395,000, but by the time it gets to the racecourse with electronics, sails, and shipping essentials, O'Malley puts the figure at $525,000 to $550,000. It's an introductory price, he adds, but they've been aiming all along to keep costs in check by creating fewer structural parts, and by developing partnerships with suppliers (i.e., Lewmar, Spinlock, Southern Spars, Volvo Penta, etc.,) to keep it all high-tech without pricing it beyond reason.

Class management will not come through the Farr office, but will be an owner-driven structure. O'Malley says interest in the boat has been "overwhelming," and Premier is keen to first focus on Europe and the United States, from where most of the initial interest has come. As of late February, six boats were sold, and build slots were accounted for through 2011, with a projected one-boat-per-month cycle.

Farr 400 Specs

LOA 38′9″

Beam (max) 11′3″

Draft 9′6″ (6′6″ w/keel up)

Displacement 9,105 lbs.

Ballast 5,432 lbs.

SA (u/d) 1,098/2,530 sq.ft.

IRC TCC 1.230