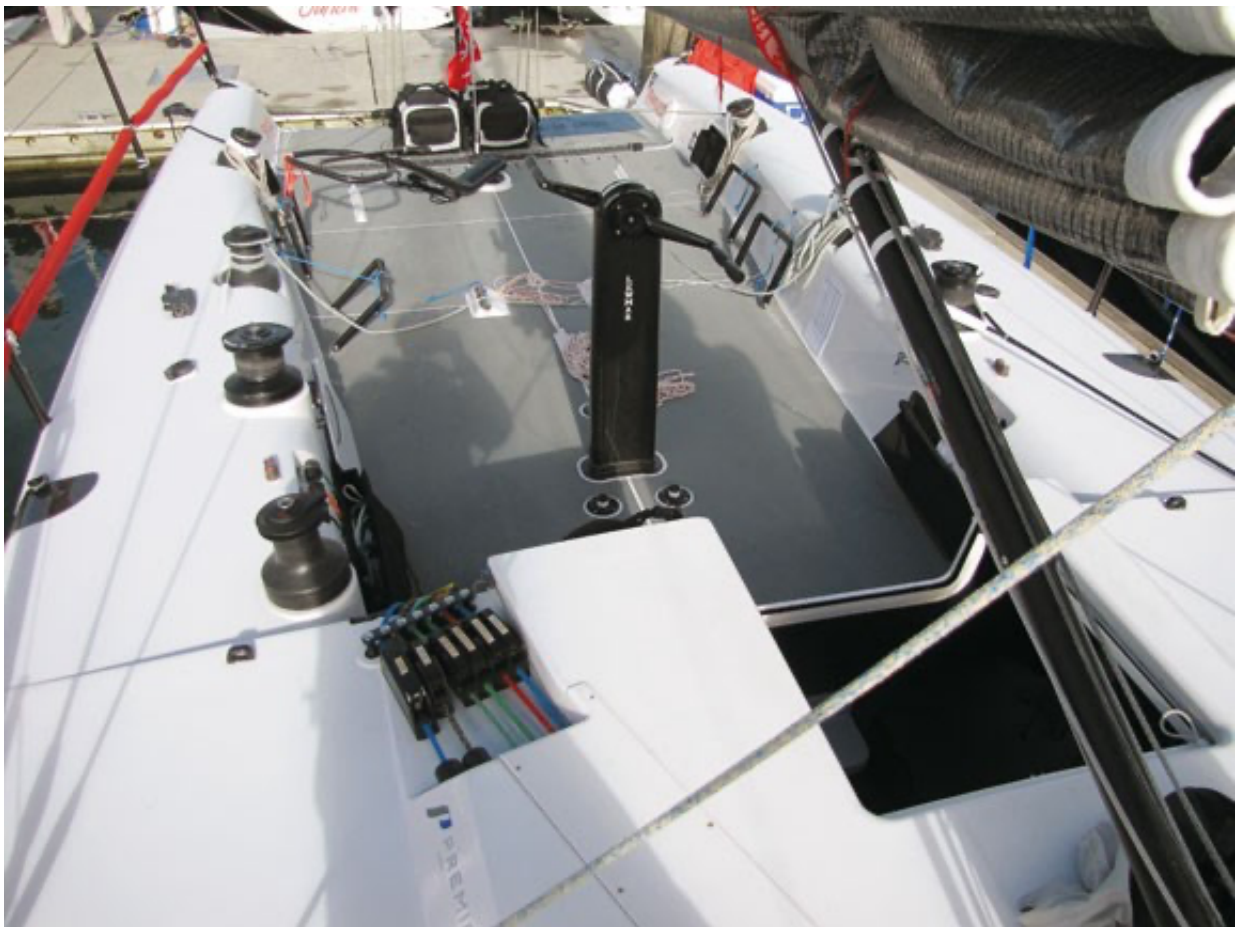


# Farr 400 One-Design

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**One-design race yachts have had mixed fortunes in New Zealand but are enjoying a resurgence offshore, particularly in Australia where high wages and a high dollar are playing into the hands of Aussie yachtsmen. The new Farr 400 looks set to become the next big thing in the 40-foot class.**



Farr  
400  
One-  
Design

The new Farr 400 one-design has enough waterline for fast passage-making, is sufficiently seaworthy for offshore competition, yet requires less crew and resources than, say, a TP52 campaign. In fact the new carbon-hulled Farr 400 has been described as a mini TP52 thanks to big-boat features such as the carbon Lewmar pedestal and similar deck layout with big asymmetric kites, essentially putting the same sail area on a one-tonne lighter hull.

Other key attributes that should win her global popularity is portability, as it fits into a 40-foot container that ought to make campaign costs significantly cheaper than running its 15-year-old predecessor, the Farr 40, which remains a popular class here in Australia.

However, a changing of the guard is likely with the arrival of the first new 400. Hull number nine was brought to Sydney Harbour earlier in the year by new owners Matt Allen and Walter Lewin to do battle with another hot new boat, McConaghy's MC38, as well as the Kerr 40 and a myriad of First 40s plus other cruiser-racers that ply their regatta trade.

Farr's president, Patrick Shaughnessy, describes the one-design 400 as epitomising the modern Grand Prix racer, with key features of large-

volume bow sections, big-headed main to promote bow-up reaching, while chines at the stern helps the flow of the hull and heeling angles. To hold up the large sail plan on the light hull a deep keel and bulb is used, meaning stability is high at 60 percent. The result, says Farr, is a yacht that can excel around the cans while also having some offshore potential (with an IRC 1.250 rating).

"To grow the class we've tried to do something different with the Farr 400 — the movability to rack it, so it can transfer anywhere in the world inexpensively," said Shaughnessy.

## Cockpit kit

First impressions of the 400 Ichi Ban, as I help prepare it for a morning's CYCA Winter Series race on Sydney Harbour, is the cockpit size. The long, wide, cockpit is dominated by a central pedestal coffee grinder winch and large carbon tiller, while all running rigging is hidden in gutters, providing for extremely clean decks. Both tiller and twin-wheel steering are options, replacing the large single wheel used on some of the Farr 40s.

A major change from the old 40 and other new similar-sized boats is the inclusion of a carbon Lewmar winch pedestal that can be engaged for speedy spinnaker hoists and drops as it has an overdrive gear for ultra-fast grinding; and it's connected via a T-drive to the primary winches either side. The cockpit is uncluttered as are the decks, thanks to all running rigging led below via dedicated tunnels.

As I found during our race, all cockpit controls are well spaced, giving crew plenty of room to work. Behind the tiller, the main track runs fully athwartships with sheeting running forward either side to oversized carbon Lewmar 50s, while the traveller line is embedded below. A pair of Lewmar 48s control the running backstays — located farther down the mast to give more forestay leverage — and near the offset main hatch are a set of wide-bodied Lewmar 60 primaries with starboard halyard Lewmar

48 winch, and a single set of jammers nicely positioned nearby. Of course, Farr 400 OD rules state only port roundings, hence the starboard jammers.

Having raced the 40s on various occasions and finding myself stuck halfway down the main hatch, I definitely prefer the layout of offset main hatch and jammers to one side. Other good ergonomic features include the mainsheet trimmer sitting beside the boom vang line that runs on a block from the cockpit sole along with cunningham as well.

The wide cockpit sole is grippy, has some chocks to give footholds and the drop-down foot bars along both of the rounded coamings are functional. Extra weight saving is delivered via composite stanchions which are as strong as stainless steel, but something the boat's owner Matt Allen had a battle convincing Australian safety authorities about.

## **Deck and rig**

The low-profile deck means the vang is well clear, making it much easier for crew to cross over when tacking, while smooth gunwales allow for comfortable hiking. The 400s jib track runs across the cabin top which closes the slot nicely with the addition of barber haulers. The foredeck sliding hatch is large and offset to port with a carbon roller on its lip for fast kite drops.

The South African-built Southern Spars Grand Prix carbon mast is held up by EC6 carbon rigging for lightness and strength, while halyard locks are used on the headsails. The shrouds are angled outboard and the forestay is adjustable. For smooth jib hoists there's a turnbuckle block and tack line running aft as well. The extendable bowsprit is centred and controlled by dual tack lines, and for asymmetrical kites there are also retrieval line fittings. The bowsprit actually points down, which may not look pretty when combined with the reverse sheer, but it does prevent any ingress of water when it retracts.

The sail plan has a square-headed main and 105 percent jib, with limited numbers of running sails (15m<sup>2</sup> bigger than the Farr 40) permitted in the one design class rules. The sail wardrobe on Ichi Ban was an Ian Short carbon main and jib with North Sails asymmetricals, so gone are the Farr 40 poles.

"This boat sails so fast on the angles we don't need a symmetrical kite and pole like my old Farr 40," explained Allen as we readied the boat. One-design class rules allow for your own sail maker but a sail button system will limit the wardrobe (and cost) per season.

## **Hull and foils**

Reflecting the challenging global market, several yacht companies have chosen to trim costs by building in cheaper labour markets as Farr has done in Dubai with the 400. Premier Composites in Dubai has a large operation, building not just the new Farr 400 but several other race yachts including a Farr rival, the Carkeek HP40 IRC that has been built to the new High Performance Rule (HPR). "I'm watching the development of this new HPR rule in the States with considerable interest," says Allen.

The 400's lightweight hull is built utilising SP Systems carbon infusion, employing highly precise five-axis milling leading to very low tolerances — the first three hulls have been reported to be within 3kg of each other, which enhances the one-design aspect of the replacement for the iconic Farr 40.

The keel is partially retractable using the primary winches and pedestal which is handy for shallow marina berths (but is heavily bolted down when deployed, so juddering isn't expected). It's made of a high antimony lead bulb with iron fin encased in a composite fairing for minimal friction.

## **Container fit**

Portability is an important feature of the Farr 400, with two-piece mast and detachable lifting keel (reducing draft from 9.51ft to 6.50ft) and rudder. This means the 400 can fit into an open-topped 40ft container on a dedicated cradle that allows the hull to be rotated onto its side for shipping once the keel and rudder have been removed. The two-part Southern Spars carbon mast also fits within the same container footprint. In Ichi Ban's case she was shipped with keel off to Hamilton Island Race Week this year and knowing Allen's credentials, I wouldn't be surprised if she ends up going farther afield.

## **Below decks**

Stepping down onto the large keel box reveals a spartan interior. The keel box is heavily laid-up and has a single strong-point for lifting the entire boat. As you'd expect on a Grand Prix race yacht the interior is bare but with rounded mouldings in pleasant white and red, increasing natural light. Two sections divide the area, with four pipe cots aft and, forward through the open bulkhead, a dedicated sail locker and plinth for the chemical toilet. The main cabin has plenty of headroom and space for crew to kit-up in. For offshore category compliance there's a galley module that clips into the starboard side near the companionway that incorporates a two-burner stove and sink.

For navigation Ichi Ban had a Garmin plotter clamped to a bracket to starboard under the cockpit and the power switchboard portside. Access to the Volvo Penta Saildrive is either side of the companionway bulkhead but fairly cramped. Quadrant access and Jeffa steering gear linkages are back here as well.

The keel stepped mast is strongly supported by a huge crossbeam with hefty carbon chainplates integrated into the gunwales, and the spar has a hydraulic jack for adjustment. Further structural integrity comes from other small crossbeams and longitudinal stringers acting as open bilges to prevent water sloshing around. These bilges also give more headroom.



This kind of strong build in such a performance package has earned the boat the moniker of 'offshore sports boat', which I'd say is apt and should give prospective owners plenty of choices for future campaign plans.

The fun factor was clearly evident on the F400 in the CYCA Winter Series race with Sydney Harbour giving us its average wind pressure — about 12kts after gusting to 25 — for much of the two-hour race. Operating the runners went without drama. There's plenty of space at the transom and the inward angled winches allow you to put ample purchase on them from inboard. When grinding, I made sure to keep my eye on the forestay tension so as not to exceed four tonnes.

The beat towards the Harbour Bridge had us mixing it with First 40s and 45s, but a clean hoist — thanks to the pedestal's overdrive gear mechanically doing the job of a mast man — set us up quickly for the downwind leg. Another clever feature with the integrated pedestal to primary setup is allowing the jib to be trimmed from the windward rail. We sped nicely to double digits, passing many boats and even mixed it in the lighter conditions with the TP52 of Bob Steel. Our only blemish came at the bottom mark near Manly, when a foul-up with the kite retrieval line put it in the water. But it was stashed below easily thanks to that big forehatch with roller bar.

On the upwind leg in increasingly fickle conditions, we suffered for our choice of No.4 headsail, but the B&G mast jumbos still showed healthy numbers — 7.6kts SOG in the 10-knot breeze — but maybe only a knot up on her predecessor.

"Reaching and running under IRC, we will do well but windward legs perhaps not so well," commented Allen. He added that Ichi Ban has been clocked at more than 20kts off the wind.

Tacking along the eastern shore showed the nimble handling of the Farr 400, with tight angles and good acceleration out of the turn as the four-

tonne hull powered up quickly. Getting the weight to windward was also easily done thanks to the uncluttered cockpit and cabin top.

The Farr 400 is undoubtedly the kind of race yacht that brings a smile to the helmsman's face and the word 'fun' cropped up time and again when chatting to Matt Allen about his new boat.

"This is a very easy boat to sail," he says. "It's very forgiving, thanks to the deep keel and bulb so you can do almost anything, including having plenty of fun."

### **The last word**

The Farr 400 deserves to be the next one design race fleet. It's an exciting boat offering prospective owners many benefits, including both inshore and offshore campaigning, portability, and all in a quality, high-tech package that is sensibly priced. h

Supplied by: Vicsail, Rushcutters Bay, Sydney, Visit [vicsail.com](http://vicsail.com) or [farr400.com](http://farr400.com).

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