

# Nacra F-20C

NACRA took all the best features and characteristics of our current F18 Infusion, which has won the last two F18 Worlds, and applied it to the new boat, as an example: the rudder system, mast extrusion, beams and some other small bits and pieces, this way we have proven technology on the new F20 Carbon.

The development was done by world renowned designers, Melvin & Morrelli for hulls, Niels Bunkenburg, A cat guru for the foils, Performance Sails for the rig & sails combined with the in-house knowledge at Nacra.

Development and testing has been underway for over 18 months, 2 boats were fitted with both straight daggers and with foils to allow the team to compare; a third boat, a Nacra 20 was fitted with the wide beams and the new rig. The 3 test platforms allowed the development team to test in the real world without revealing too much about this new boat, so they could adjust and fine-tune the design.

A variety in masts, mast hardware positioning and different sail cloth and shapes has been tested. The new hull shape which has been created, starting with a wave piercing bow forming a diamond shape hull stretching backwards into a square-ish transom, is of major importance due to the combination with the curved dagger board. Although the basic shape was chosen, several adjustments were made driven by new technology [computer fluid dynamics] and knowledge which was gathered by Morrelli & Melvin while working on the Americas Cup project for BMW ORACLE.



Pete Melvin: It is not a coincidence that the hull shape of the new F20 Carbon shows resemblance with the floats of the AC boat, we were able to take the knowledge we gained at the AC project and scale it down to the F20 Carbon. The most noticeable and distinctive feature is the chine that runs from the bow backwards on the hull allowing the water to flow away from the hull. Combining the chine and wave piercing bow with the upper deck shape reduces drag piercing through the waves both upwards and downwards.

## **Details**

**Boat Length:** 6.2m

**Boat Width:** 3.2m

**Mast Length:** 10.45m

**Area Mainsail:** 21m

**Area Jib:** 5.2m

**Area Spi:** 28m