FILIPPI F52

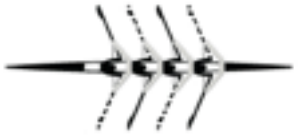
4x/4-

Filippi presents the new arrival among racing boats, dedicated to women rowers.

The **new F52** 4X/4- follows the single F50 recent release. Once again, our attention has been focused to the **woman senior athletes.**

The line has been **newly designed** for women athletes with a swept keel, which is however capable of supporting the weight of the athletes during the stroke. The swept shape has been moved towards the stern and enables the technicians to fine tune the **perfect balance**. The reduction in the submerged section has allowed obtaining **exceptional performance in the 2000m**, whilst taking into account stability and roll. This more easily enables positioning the athletes towards the stern. The limit is only the depth of the deck in the water. The result is always an **increase in the speed** that can be achieved.

$$\left[\tfrac{1}{2}\,\rho_{WATER}\,C_{FRICTION}\,V^2\,S_{WET}\right]$$



Where CF is the friction coefficient, which for equal surfaces and distance from the bow may be lumped independently of the shape of the boat. Speed is assumed to be constant in order to compare between the shapes under study, so that it is clear that the frictional resistance is proportional to the submerged surface: hence by reducing it, the resistance to flow is also reduced.

Particular attention was paid to the development of the floor-plan design (the cross-section parallel to the water) in order to **reduce to a minimum the resistance created by the boat** (this affects 1-2% of the total resistance of the boat).

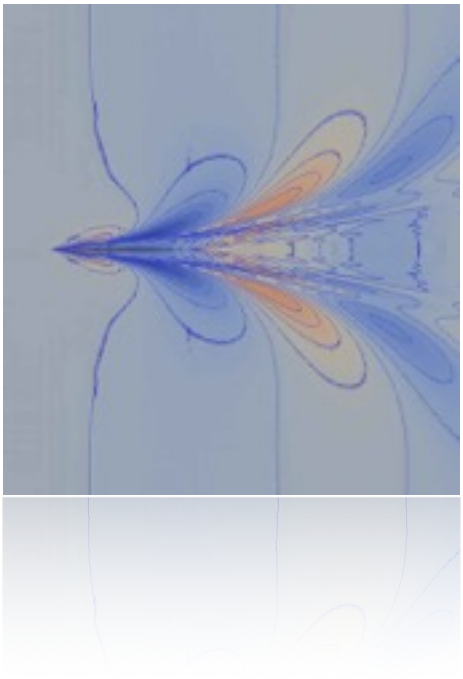
The **length was chosen considering the wavelength**: the wave created at the prow can be added or subtracted from that created at the stern according to the wavelength generated by the boat itself; by choosing the correct wavelength for the boat the two waves cancel each other, thus reducing this type of resistance, which is certainly much less than friction, but always reaches between 5 and 10% of the total resistance.

T h e n e w F 5 2

F52 4X (Women Four)

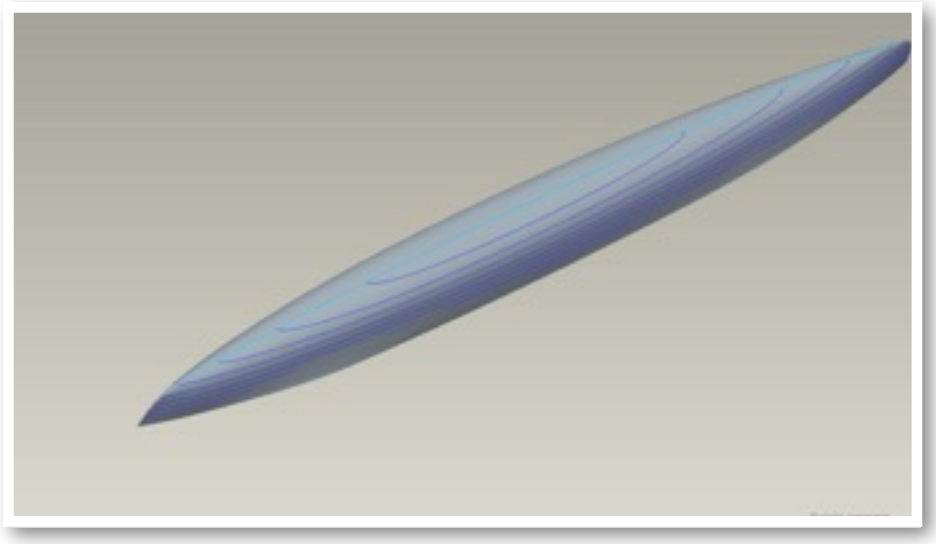
The specific case: F52

A boat also suitable for coxless four competition thanks to the study of the hull with superimposed geometries capable of optimising the speed also when the boat is veering: this particular geometry reduces the tendency of the boat to veer to a minimum in case of roll, which is fundamental in order to reduce the use of the rudder and hence reduce resistance.



What **immediately impresses** about these boats when first employing them, is the feeling of **being at ease** without even optimising the seat, as well as the **streamlined characteristics** of the boat. This effect was created thanks to the **optimisation of the correct distance of the rail from the water**: the fundamental characteristic for the position of the centre of mass of the athletes in order to improve on board stability.

A boat that can provide results for athlets of up to 85Kg, but is optimised for a load of around 77Kg.



Mould F52 4x (4-)
Length: mt 11.89
Width: cm 42.2
Weight: Kg 52(50)
Athlete Kg: 70-85