

Topper sailing dinghy (1977)



In a major British design retrospective taking place at the Victoria & Albert Museum in London, one innovative exhibit is the injection moulded Topper sailing dinghy. The polypropylene dinghy has, for the past 35 years, provided the first sailing experience for many enthusiasts.

The Topper is the largest plastics design on show at the exhibition, called "British Design from 1948", which runs until 12 August 2012. The dinghy's size - the hull is 3.4m long and weighs 43kg - provided design and production challenges, says Topper International, the company that now owns and manufactures the boat.

Working for JV Dunhill Boats in the early 1970s, Ian Proctor designed the Topper to be made in glass reinforced thermoplastics. But when ICI's injection moulding subsidiary Rolinx became involved, an ambitious project was started to make the hull and deck from two huge mouldings.

The size of the moulds that would be needed mitigated against conventional tools machined from steel, which would have been very expensive and would have involved long lead times. Instead, the company decided to cast the tools in an alloy of zinc and magnesium, which incorporated steel bolsters.

In another ground-breaking step, two injection moulding machines of 1,600 tonnes each were twinned to produce a 3,200 tonne clamping force for each moulding.

The Topper was launched to great acclaim in 1977, when it won a Design Council Award and the Horner Award for Plastics Design and Innovation.

While the design has remained the same over the years, the production location has not. After Rolinx, the Topper was moulded by Sulo in Germany, then Otto in UK, French and German locations.

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