COBRA WATER SPORTS CASE STUDY

The New Windsurfer LT



The New Windsurfer LT - Taking windsurfing back to its roots with a do it all board for everyone

When Bruce Wylie – Head of COBRA Watersports BU – first came up with the idea for a unique new board design in 2016, he had conceived a board that could be raced, used for teaching or freestyle and even paddled as a stand-up paddleboard (SUP) on days with no wind. The sport of windsurfing was losing numbers and COBRA took on the challenge to reverse this trend with the belief that there should simply be a better board. At the same time, some of the biggest brands in windsurfing were looking for ways to bring more people into, and keep them involved with, the sport, particularly in lighter winds. At one of the regular cross-industry discussions, COBRA was asked for their input, and were delighted to announce they had already started work on the project.



One Simple Board but a Complex Problem to Solve

The aim was to produce a board so simple it could be picked up off the beach and enjoyed by a first-time sailor as well as offering superb tactical fleet racing to a more advanced sailor. Always intended to be a strict one design package of a single board and soft sail rig, performance would be down to the skill of the sailor and not decided by an expensive equipment arms race or the ability to hold down the biggest sail.

In late 2016, Bruce and the COBRA team started work on their first prototypes. Looking for inspiration from classic race boards of the past, as well as the latest design ideas, they produced the first pair of boards. Extensive on the water testing followed with prototype boards #3 and #4 arriving in early 2017, but still, something was missing.

Test board #5 arrived in mid-2017 and was an immediate favourite with everyone that sailed it. This perfect combination of board shape, rocker and underwater profile was something the designers couldn't improve on, coming back to this design even after they tried to develop the design further. Prototype design #5 became the new White Board.

Strong, Light and Beautiful – COBRA's vision

In their 40 year history developing windsurf boards, from compression moulding with EPS cores and plastic skins to hollow prepreg carbon fibre and nomex, COBRA have perfected the art of balancing weight and durability.

The New Windsurfer LT had to withstand rough handling by beginners and have a long competitive life too, so COBRA selected their single shot AST construction technology. A lightweight EPS core is carefully encapsulated with varying weights of chopped strand fibre glass, open structure combi mats and a foaming epoxy resin system then cured in a vacuum closed mould. Despite being built for longevity; the new board's light weight gives excellent performance and keeps it easy to handle. A white paint topcoat is applied after final finishing, with graphics, EVA soft foam deck and other fittings also being produced in house at COBRA.

In manufacturing a one design board intended to be in production for many years, COBRA also looked to their latest sustainability research when selecting materials. By using an epoxy foam with a large biobased carbon content, COBRA have also produced a board with a significantly lower environmental impact. In the future there are also plans to evaluate a fully recycled EPS core option too.



Quality, Consistency and the Capacity to Supply Globally

COBRA wanted to design and build a board that would provide more people with access to windsurfing and to do so successfully meant being able to provide large volumes of high quality boards that could be marketed by individual brands.

COBRA's standardized production lines can respond rapidly to ramp up volumes, guaranteeing supply as a new board generates a spike in demand. Rigorous



online quality control and inspection ensure COBRA boards are produced to the tightest tolerances, each the same as the one before.

All of the new boards will feature a Windsurfer® LT logo as the Windsurfer Class Association, who Internationally are celebrating their own 50th anniversary this year, have given the new board their seal of approval. The Windsurfer® class became involved with the project during the testing and evaluation phase and were so impressed that the Australian, Italian and Japanese fleets have voted to adopt the new boards as standard equipment.





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