# **Unique features**

## **Profiled teardrop section**

Series III and Series IV Seldén carbon spars have teardrop shapes instead of the round tubes commonly available on the dinghy market. The teardrop profile gives the spar the required stiffness ratios fore and aft to counteract upwind kicker loads.



The aerofoil shape of the profiled sec-

tion also gives improved air adhesion compared to round tubes. So the spar directly increases lift and reduces drag, allowing a cleaner air entry onto the luff of the mainsail.

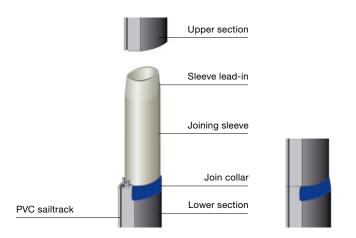
# **Custom-designed PVC track**

Seldén carbon masts have a custom-made track that is shaped to extend the profile. It is extruded from a lightweight plastic that offers excellent heat and UV stability as well as high wear resistance.

The track has a large bonding surface for attachment to the mast. This helps to increase its strength and durability.



Custom PVC track.



## Step-down taper

Each mast incorporates the Seldén Step-down tapered topmast system. This enables an immediate reduction in the tube inertia where the compression loads in a rig change above the hound and/or the trapeze point.

As a result, the topmast automatically responds through gusts and lulls, as opposed to the mast hinging around the hound point and producing an unbalanced rig – as typically occurs with traditional alloy rigs.

## Carbon track

A carbon sail track can be specified as an option on some masts. Bonded to the back of the main spar tube, a carbon track further increases the fore/aft stiffness of spar. It is also very weight efficent compared to the standard PVC track.



#### A range of custom-designed fittings

Although Seldén carbon dinghy spars are designed to fit the same fittings developed for the aluminium range, they also feature some custom-designed parts for carbon applications. These include our stainless steel sail feeder and new high-load stainless steel jib sheave box.

#### **External patching**

All Seldén carbon masts are externally reinforced using pre-preg woven carbon cloth to ensure localised re-inforcement at high-load areas and the secure attachment of fittings.

