



## **SB20 Weighing Procedures**

These notes are for the guidance of measurers or owners when weighing the SB20. To be accurate the weighing needs to be done indoors, or outdoors in dry, light wind conditions.

Strip all the movable gear, sails, kite bag, anchor, engine out of the boat and sponge it dry before starting any lift.

### Equipment Needed

- Certified Crane scales 1 Tonne capacity
- Chain Hoist 1 Tonne capacity (if no crane available)
- Padded counter weight of about 9Kgs or 10kgs – pre-weighed
- Spare 25mm certified lifting shackles
- Certified lifting straps
- Bright torch and batteries.
- Absorbent sponges and wipes.
- Notebook and pen.
- Make sure batteries in load cell are fully charged.

### Boat preparation

- Ensure all equipment and ropes are removed, including spinnaker bag.
- Mast, boom, rudder, tiller and any fittings screwed to the boat can be left in situ
- Keel crane is best left in boat and weighed separately afterwards. They weigh approx. 11.kgs.
- Fit keel wedges
- Spi pole, tack line and jib sheets should be left in situ
- Make sure everything has been removed from down below. Use the torch to have a thorough look including in the bow.
- Ensure the boat is completely dry below decks. (damp is not good enough). Tip the boat 10-15 degrees bow down and rock from side to side to make sure all the water is out. Do not forget to sponge out keel post socket.
- Engage keel hoist and raise keel just clear of trailer. Disconnect boat from trailer tie downs, including winch clip.

### All up weight

- Tare scales to zero with straps, shackles etc
- Fit straps and take up the load on the hoist whilst placing the lead counterweight in a position which facilitates lifting the boat level, usually towards the bow. If weighing without the mast, the counter weight may need to be directly on bow.
- Lift boat slowly until it is clear of the trailer, particularly at the bow and then check readout on scales.
- The boat needs to be still before a reliable reading can be confirmed. Make a note of this number.



### Adjustments

Deduct 21 Kgs for counterweight (assuming it is 10kgs) and keel hoist post.

Add if not weighed with these items -

1. 30 Kgs for Mast (If it was not rigged on boat)
2. 7 Kgs for boom
3. 10 Kgs for rudder and tiller

The balance is the all up weight of the boat as defined by the rules. It is advised but not essential to check these assumed weights are correct.

### Keel weight

- Lower keel onto trailer
- Remove keel post
- Tare load cell
- Attach to centre hoist on top of keel.
- Remove keel wedges.
- Lift keel very slowly with someone in the boat preventing the keel from swinging forward and hitting the front of the keel box.
- The keel needs to be lifted only about 300mm to be clear of the trailer bed.
- Swing keel gently fore and aft to ensure it is not touching anything.
- Note reading on scales.
- Lower gently to trailer bed.
- Fit post and re hoist keel on it gently until it swings into its natural resting position.
- Put wedges back.

### Inaccurate readings will arise in the following circumstances:

- The inside and/or outside of the boat is damp or wet
- Wind which moves the boat will lead to incorrect readings.
- Keel weighing may be affected by friction in the keel box or water in the keel fin.

It will normally be possible to hear any water inside the keel. Unless the keel is overweight, the measurer does not need to be concerned about water in the keel fin.

- The boat cannot be reliably weighed if there is any evidence of damp or lying water. Water easily gets trapped behind bulkheads and needs the jockey wheel lowered to its minimum for several minutes to get all the water down below to run far enough forward to be sponged out. On a warm sunny day, a damp boat sponged out will be dry enough to weigh after 4 hours provided hatches are left open for adequate ventilation.

- If you find the boat is overweight – then recheck thoroughly that it is dry and no water is trapped below. Older boats tend to add weight with age and it would not be unusual for this to amount to 2Kgs -3 Kgs a season for dry sailed boats – more if kept in the water.

If the boat is underweight you will need to add lead. The procedure for this is also on the website and in the rules. Knowingly racing without lead when it is required is a serious offence and rule 69 may apply.