

UK SAILMAKERS ITALY

Mast tuning Beneteau 25'

Foreword

The following trim guidelines are based upon measurements taken on board “Le Coq Hardi”,

ITA-25109, winner of the 1999 and 2000 editions of the European Circuit and Italian national Champion 2000 and 2001.

This boat is rigged with a Z-Spars mast and metric turnbuckles which allow adjustment of the shroud tension down to half turns. This setup works best for fine tuning.

Tensions have been measured with a Loos & Co. PT-12 metric tension gauge. The values specified are reference, however, as it is unlikely that all tension gauges are equally calibrated. In any case they will give you a valid base indication to set up the mast correctly for UK Italy's sails.

Stepping the mast

Before stepping the mast you'll have to check that all measurements comply with the Class rules. Get a copy of the rule book on the international Class website, www.platu25.org .

Check the forestay length (9470 mm.) and the distance from forestay pin on the mast to the mast butt (10100 mm.)

The spreaders' angle is crucial for a proper setup. Tie a thin line to one shroud just above the spreader, tension it and tie it to the same spot on the opposite shroud. The distance between the line and the mast aft face should read to 165 mm.

Check the position of the black bands on the mast and boom and replace them if needed. They shall be marked permanently on the spars.

Mast partners

Check that the deck passage for the mast is correctly located on the boat's centerline by tying a line between the forestay and backstay deck attachments.

Measure the distance between the chainplates on deck and check that they are equally spaced from the boat's centerline.

When everything is correct, you must snugly block the mast in place at the partners so that it won't move.

Mast step

Check the distance between the central hole in the mast step fitting and the upper bolt in the forestay chainplate belowdecks. It should read to 2790 mm. In a straight line.

Of the three possible stepping positions the central one is recommended.

Shrouds tension

The shrouds tension is of paramount importance, as it affects mast bend and forestay tension.

Sailing upwind with 6-8 kts. True, tension the shrouds until the tension gauge reads 20 for the diagonals and 23 for the upper shrouds, then tension the intermediates until the mast stops "S" bending when sighted sideways.

Once this is done, measure with a gauge the distances between the turnbuckle position and the chainplate on deck for each of the 4 shrouds, and record them in a trim book for future reference, particularly when you will have to rig the boat again.

Final considerations

The Beneteau 25, as it's the case with all high performance sailboats, needs continuous tuning with varying conditions. Shrouds tension cannot be adjusted while sailing, so it's important to figure out what the conditions of the day will be before taking to the water. A proper mast tuning, however very important, isn't sufficient to sail fast. Sail trim plays a very important role, and a perfect feeling between helmsman and tailers, combined with the crew ability of keeping the boat always in trim, makes the difference.