Sail measurement

Tools

Sail measuring table. - Table dimensions 200 x 600 cm, with a height of 70 cm is good.

Surface should allow drawing of lines directly onto the table or to apply masking tape for the same purpose. Sometimes it pays to make a mylar gauge to replace the table with lines on it. Every sail loft has its own preference.

Sail top gauge. (see pics below)

Ruler 1000 mm,
Measuring tape at least 7m long.

Transparent mylar gauge with a circular line to the extent of 90 degrees with the radius 425 mm and 5mm hole in the centre of the circular line.

Preparing the table

Mark the sail measuring lines on the table (Upper leech point lines respectively 425, 1500 and 3000 mm from the head point, upper widths at 1500 and 3000mm point). Fix the mylar gauge with the Sail Top Gauge through it´s centre hole under the same screw. Leave the screw a bit loose to allow turning of the sail top together with the headboard.
Measuring process.

Lay the sail on the table with its head on the gauge (see pic left). The gauge helps to check the width of the headboard, depth of the headboard and primary reinforcement, location of the Aft Head Point and the distance from the 425 mm Upper Leech Point to the luff.

This gauge with the axis through the head point allows the headboard to be turned to lay the leach on the table without wrinkles and mark 1500 mm upper leech point and 3000 mm upper leech point and check the distance between the Head point and Clew Point.

Check the dimensions of the sail top and the distance between Head and Clew Points, (see pic below - left) keeping the Top Point directly over the centre of the screw (see pic below - right).
Mark the leech points at leach (see pic below). Check the widths. Check concavities on the leech and sail reinforcements.

For checking the battens it is practical to use narrow batten with batten lengths marked on it. It is not necessary to remove battens from the pockets when measuring its length and leech length. Check batten pockets and sail corners.

It is very difficult to measure girths in case the sail luff is built with the direct seam next to luff rope. The majority of the sailmakers do not use this seam. Because of the wrinkles around the luff, shock cord luff become shorter and widths longer. To have reliable result the luff should be tensioned in order to remove wrinkles. This operation needs some practice.

IFA, 2010