

PM FOR HELLING TEST (USING THE MAIN BOOM)

The test is preferable carried out on a fairly calm day at a jetty where a strong point (vertical load see item below) for the heeling device can be found.

1. Secure loose items onboard (max. heeling angle will be 10°)
2. Make sure that the mast is properly tuned.
3. Swing out the main boom in "running position", secured fore and aft by the main sheet and a preventer to the stemhead respectively. Protect the boom against contact with the lateral rigging. Any mainsail with cover can be left on the boom.
4. Attach the "heeling device" to the boom end. Depending on the force required, a tackle or a mechanical device can be used.
To achieve the desired heeling angle of minimum 50° , a heeling force of 2-3% of the yacht's displacement is required.
(If found convenient, the tail of the tackle can be pulled by a vehicle (car, fork lift etc.)
Note: When reading the balance, the tail of the tackle must be relieved to get the correct heeling force.)
5. Suspend the boom with its end 1.5-2m above level using the main halyard and/or main boom topping lift, spinnaker halyard to add strength /stiffness.
6. Fit a (spring)balance between the lower end of the heeling device and the attachment on the jetty. The balance must be the only connection between the device and the jetty.
7. Measure the horizontal distance from the centreline of the yacht to the heeling device.
8. The heeling angle is measured acc. to the sketch on the front side. The length of the two bars should be 700-1000mm. The lower bar is fixed to the deck transversally in the vicinity of the mast. The upper bar is hold in horizontal position (use a spirit level) and the distance H is measured (a pair of vernier callipers are recommended).
9. Make an initial heeling corresponding to 50kgs (100 lbs) on the balance.
10. The following heelings should correspond to 100, 200, 300kgs etc. on the balance.
Minimum heeling must be 5° corresponding to a H-measurement of 9% of the bar length "b".
11. The series of heelings should be carried out to both starboard and port.
12. Enter all values into the shaded areas of the test report.
13. Make a rough estimation of water and fuel volumes carried onboard, as well as other equipment, and add the figures to the report.
14. Measure and enter locations of chainplates.

List of equipment.

1. Heeling device (tackle or mechanical device)
2. Spring balance
3. Spirit level
4. Measuring tape 10m
5. Measuring scale or pair of vernier callipers
6. Two bars, length 700-1000mm (wood, aluminium etc)