

Telephone: 01702 431943
Mobile: 07802 264498
Email: euomarinesurveys@gmail.com

Admiral's House
18 Nelson Street
Southend on Sea
Essex SS1 1EF

Commercial Vessel Surveys – Statutory Stability Books – Tonnage Measurements

GUIDANCE NOTES ON PREPARING A VESSEL FOR AN INCLINING EXPERIMENT

The following guidance has been prepared for vessel owners/managing agents to help them prepare a vessel for an inclining experiment.

Vessel Condition

At the time of the inclining experiment the vessel should be as complete as possible. Any loose gear and equipment that is not normally aboard (e.g. tools etc..) should be removed. All heavier items of gear and equipment which would normally be found aboard (e.g. anchors, liferafts etc...) should be positioned in its normal location.

Any equipment which is normally aboard but not present at the inclining must be notified to this office.

All tanks must be either completely empty or completely full. The level of fluid in each tank will be checked before the inclining experiment starts. Valves on balance pipes connecting tanks must be closed.

The bilges must be free of water.

Mooring Arrangement

The vessel must be in a location where there is sufficient depth of water below the keel for the duration of the inclining experiment. Ideally the inclining experiment should be conducted in calm water, such as a dock, lock, marina or harbour and where there will be little movement from passing vessels.

The vessel should be free to float and not foul the quayside, pontoon or anything else it might be moored alongside. During the inclining experiment all mooring lines must be slack.

Draughts and Freeboards

A small dinghy should be made available from which the draughts and freeboards around the vessel can be measured.

Water Density

The density of the water in which the vessel is floating will be measured using a hydrometer. This office will provide an approved hydrometer for this purpose.

Incline Weights

A number of incline weights will be needed to conduct the inclining experiment. The total amount of weight required will be notified to you before the day of the inclining. Ideally these weights will take the form of 20 kg solid hand weights which can generally be hired on a daily or weekly basis from crane testing companies.

Principal Surveyor: Paul Johnson *BSc(Hons), IEng, FCMS, AMRINA, MIMarEST*

The use of water filled containers or the filling and emptying of ballast tanks as incline weights is not permitted.

Larger weights (such as 0.5 tonne weights) can be used provided a crane is made available.

If you intend to use incline weights other than those mentioned above you should contact this office as soon as possible to confirm suitability.

Other than 20 kg hand weights with a marking, all other incline weights should be provided with a Test Weight Certificate or you should hire in a load cell so that each weight can be accurately weighed.

Sufficient crew should be provided to move the inclining weights during the experiment.

This office will advise on the initial position of the incline weights.

Pendulum

This office will provide the required means of measuring the heel angle for each weight shift (e.g. pendulum).

Weather

If at any time immediately preceding or during the inclining experiment the weather becomes unsuitable the inclining experiment will be suspended and will need to be re-arranged. The costs incurred for re-arranging will be passed on to the client.

Inclining experiments should be carried out ideally at Beaufort Force 2 or below (wind speed 4-7 mph, 4-6 knots, 6-11 km/h) but can be carried out at Beaufort Force 3 (wind speed 8-12 mph, 7-10 knots, 12-19 km/h) subject to the vessel's location ie. in sheltered waters, in the lea of a headland, in a dock, marina or harbour where the sea state is slight. We will not conduct an inclining experiment where the forecasted wind speed exceeds the maximum for Beaufort Force 3.

Witness

If the inclining is required for a UK Passenger Vessel or is for a non UK Flag State then it is possible that an Official Witness may be required. The cost and availability of this witness is the responsibility of the client.

Summary (Client's Responsibilities)

Vessel to be complete with all items in their correct positions.

Vessel to be in calm water.

Bilges to be dry.

Tanks to be pressed full or empty.

Small dinghy to provide.

Incline weights to provide with certificate or load cell as required.

Crew to provide to shift the incline weights.

E&OE

February 2020