

Translation. Only the Danish version has legal validity.

Guidance no. 10062 of 5 September 1988

Guidance on equivalence regulations for bottom surveys on passenger ships

Passenger ships shall be subject to main surveys at intervals of no more than 12 months, calculated from the last main survey.

In the regulations laid down by the Danish Maritime Authority on the scope of surveys,¹ it is, among other things, stipulated that a periodic main survey shall include an external inspection of the ship's bottom. Until now, this survey has in general been required carried out while the ship is in dock.

However, the Danish Maritime Authority has in a number of cases permitted the holding of every second bottom survey while the ship is in the water.

On the basis of the experience gained in this way, the Danish Maritime Authority will, for passenger ships to be subjected to bottom surveys every year, in general permit the holding of every bottom survey without the ship being in dock or being hauled up.

Subsequently, it will – when the provisions of item A or B have been met – be possible to carry out the bottom survey without any special permit from the Danish Maritime Authority in the years following years when the bottom survey has been held with the ship in dock or hauled up. It shall be possible to carry out the bottom survey plus/minus 3 months from the date of the certificate.

General practice is that the bottom survey is held by the classification society that has the ship on its register. Often, a lack of identical company survey periods and main survey periods gives rise to problems. In order to improve the flexibility and to avoid unnecessary surveys, the Danish Maritime Authority will in the future equate a valid class certificate to the bottom survey required in connection with the main survey, provided that the relevant company's regulations require the holding of an annual external bottom survey.

The Danish Maritime Authority is aware that the following recognised classification societies require annual bottom surveys of passenger ships in its regulations:

Bureau Veritas

Germanischer Lloyd

¹ Guidance no. 1 of 29 July 1988 issued by the Danish Maritime Authority.

As regards ships classed by the other recognised classification societies or ships that are not in class, the shipping company shall be aware that a bottom survey shall be held between the bottom surveys required by the class, as stated above.

A.

If the ship is classed, bottom surveys in the water may be held in accordance with the regulations on such surveys issued by the relevant classification society. When the holding of an annual bottom survey is not required by the classification society concerned to maintain the ship's class, a separate report on the survey shall be submitted by the classification society concerned to the Danish Maritime Authority. The report shall contain information about the holding of the survey, any defects identified as well as any other information that may shed light on the condition of the external bottom, the propeller arrangement, sea valves, etc.

B.

If the ship is not classed or if the shipping company of a classed passenger ship wants the bottom survey in the water to be included in the main survey held by the Danish Maritime Authority, this may take place under the following conditions and according to the following provisions:

Conditions

1. The ship shall not be older than 15 years, calculated from the keel-laying date.

According to a special assessment made by the Danish Maritime Authority and following an application from the shipping company, it shall in special cases be possible to grant exemptions from this requirement.

It shall, however, be a condition that, when the first survey with the ship in the water is held, the ship is less than 15 years old, and it shall only be possible to extend the arrangement until the ship is 30 years old from the keel-laying date as a maximum.

Marking and arrangement

2. The bottom hull shall be marked so that it is possible for the surveyor/diver to identify his position anywhere. The following marking shall be considered a minimum:

Transversal and longitudinal reference lines of a minimum length of each line section/intersection of 300 mm and a minimum breadth of 25 mm shall normally be placed off the subdivision of tank

bulkheads. In the centre line, the marking shall be made with a dotted line as given above from stem to stern.

Every tenth frame shall be marked with a number in the centre line and at the bilge.

Longitudinal bulkheads for the subdivision of tanks shall be marked.

At the ship's side and in the centre line, the position of transversal bulkheads shall be marked, but the marks need not extend for more than 12 metres from the base line or above the deepest operating waterline.

Openings in the plating for sea valves and overboard valves shall be marked externally.

Propeller blades shall be numbered.

Linings on shafts and pintles as well as bushings in rudders and sternposts shall be marked in such a way that it is possible to observe relative movements.

3. Gratings for sea connections shall be hinged or in any other way movable while the ship is floating so that it is possible to inspect the sea valve boxes internally.

All sea and overboard valves shall be inspected on board by the ship surveyor together with one of the ship's engineer officers. The functioning of the valves shall be tested and their watertightness shall be checked by opening mud boxes, draining valves or the like. If it is considered necessary to separate a valve for closer inspection, it shall be covered externally on the sea valve box.

4. Cedervall shields shall be fitted with inspection holes.

Identification

5. A set of coloured photographs taken after the ship's marking for a bottom survey shall, together with drawings, be available for the ship surveyor before initiating a bottom survey.

The photographs shall show:

The bottom marking system, sea valve boxes, rudders and propeller with details of the area where tolerances are measured, lock nuts for rudder stock and pintles, bow propellers, stabilizers, etc., if fitted, bilge keels, any anodes with the voltage imprinted as well as their fitting to the hull, anodes for cathodic protection and further individual parts that may be of interest.

Drawings

6. The first time, drawing and photographs shall be submitted to the Danish Maritime Authority together with the shipowner's request to have a bottom survey held while the ship is in the water. A set of drawings and photographs shall be kept on board as instruction material for the diver.

The drawing shall include:

Drawing of the plating with all weldings and joints as well as all openings in the plating. Stem. Stern/rudder post. Rudder and rudder shaft with bushings. Propeller as well as identification of every blade. Anodes and their fitting. Bilge keels. Drawing showing the marking of the bottom. All other drawings and instructions that are necessary in order for the diver to carry out his work.

Carrying out of survey

7. The external part of the bottom survey shall be carried out by a diving company which, before initiating the survey, shall be approved by the Danish Maritime Authority.

The diver shall be acquainted with ship structures.

8. Underwater bottom surveys shall be carried out in sufficiently clear and calm waters.

9. The ship shall be as light as possible, however it shall be observed that the permissible effects on the hull are not exceeded.

10. The hull below the waterline shall be clean.

11. During the inspection, the diver shall be in contact with the ship surveyor on the surface through a two-way communication system.

12. The transfer of information about the ship's condition shall be by means of a two-way communication system and, for example, by means of a video camera operated by the diver as well as a monitor where it is possible for the ship surveyor to follow and check the inspection.

Other ways of transferring information may be used if they have been approved by the Danish Maritime Authority beforehand.

13. The information received from the diver shall be of such clarity that they fully satisfy the ship surveyor of the Danish Maritime Authority.

The diver shall carefully examine:

14. Bottom and side plating, including openings and extensions, if any, the rudder and its bearings, sea connections, scuppers and overboard valves and their connections to the hull.

The propeller blades for any cracks or defects.

The propeller head for any defects and, in case of adjustable propellers, any signs of leakage at the sealing between the blades and the propeller head.

The cedervall shields shall be examined for any defects, loose bolts, etc.

Tolerances at the rear end of the propeller boss.

Nuts and securing hereof for shafts and pintles.

The stern tube gland shall be examined for any signs of leakage and any fishing nets, abnormal wear and tear, among other things through the inspection holes in the cedervall shields.

Furthermore, it shall be checked whether marks on propeller blades and propeller heads on adjustable propellers are above one when the engine-room telegraph shows nil.

The condition of other underwater parts, such as bow propellers and stabilizers, shall be examined and assessed in each individual case.

15. If considerable defects are identified, the ship surveyor may require that the ship is immediately after the end of the survey dry-docked and that the necessary repair work is carried out.