

Subject:

Additional Requirements to Classification
Survey during Construction and Periodical
Surveys of Bulk Carriers

NK TECHNICAL INFORMATION

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To Shipowners and Shipbuilders concerned

During the past few years heavy casualties reportedly took place on a number of older large bulk carriers. These casualties have raised grave concern of worldwide marine industries including classification societies.

This society organized the "Study Group on Bulk Carriers Loss" and in collaboration with major shipowners and builders, has engaged extensively in the investigation of bulk carrier losses and just finalized the study coming out with the report. Reflecting the results of the investigation, the following requirements are now being introduced in the Rules with regard to Classification Survey and Periodical Surveys of Bulk Carriers.

However, since immediate actions are to be taken to eliminate the recurrence of the bulk carrier losses, following requirements are, for the time being, applied to the bulk carriers until relevant requirements of the Rules have been revised.

[I] Additional Requirements for The Design of New Ships

1. Minimum Thickness of Webs and End Brackets of Hold Frames

Thickness of the web and the end brackets of hold frames is to be not less than the value given below in accordance with the length of ship

Ship's Length	$L < 100\text{m}$	$100\text{m} \leq L < 150\text{m}$	$150\text{m} \leq L < 200\text{m}$	$200\text{m} \leq L$
Minimum t	10mm	11mm	12mm	13mm

2. Coating

The following structural members and area are to be effectively coated by such material as tar epoxy paint, modified epoxy paint or other equivalent paint:

- (1) Hold frames together with their upper and lower brackets; and
- (2) Side shell plating, sloping plates of a top side tank and a bilge hopper tank between upper and lower brackets of hold frames.

3. Leg Length of Fillet Welds

The kinds of fillet welds for hold frames and brackets fitted to side shell platings and sloping plates of bilge hopper or topside tank are to be of F1 type stipulated in Part C, 1.2.8 of the Rules.



4. Fittings for Examination in Cargo Holds (only for Japanese flag Bulk Carriers)
Fittings for examination in cargo holds are to be arranged in accordance with Part C1.1.10-4(7) and -5(6) of the Guidance for the Rules (Japanese edition).

Please be advised that the above additional requirements are applied to only new bulk carriers, i.e., the bulk carrier for which the application of class registration as a new ship is submitted on or after 1st April, 1992.

Should you have any queries, please do not hesitate to contact with Hull Department of Head Office or our local offices.

[II] Additional Requirements for Periodical Surveys

At periodical surveys of bulk carriers, the following requirements are to be applied in addition to the current requirements of the Rules.

1. Special Surveys

At Each Special Survey a Close-Up Examination (survey within reach of hands) of sufficient extent is to be carried out to grasp the condition of shell frames and their end attachments in all cargo holds. Representative thickness measurements of not only the side framings but transverse bulkhead platings are to be effected to determine both general and local levels of corrosion have reached the limit for renewal. The thickness measurements may be dispensed with provided the surveyor is satisfied by the Close-Up Examination that there is no structural diminution and the protective coating remain efficient.

2. Intermediate Survey

In case of bulk carriers over 5 years of age, an internal examination of all cargo holds is to be carried out. A Close-Up Examination of sufficient extent to grasp the condition of the shell frames and their attachments is to be carried out in No. 1 cargo hold and one other selected cargo hold. Thickness measurements are also to be carried out to determine both general and local corrosion levels in these areas. Where this level of Close-Up Examination reveals the need for remedial measures, the survey is to be extended to include a Close-Up Examination of sufficient extent of other representative cargo holds. The thickness measurements may be dispensed with provided the surveyor is satisfied by the Close-Up Examination that there is no structural diminution and the protective coating remains efficient.

3. Annual Surveys

- (1) For bulk carriers over 10 years of age, an internal examination of a representative forward and after cargo hold is to be carried out at each Annual Survey. Where this level of survey reveals the need for remedial measures, the survey is to be extended to include an internal examination of all cargo holds.
- (2) For bulk carriers over 15 years of age, an internal examination of all cargo holds is to be carried out. A Close-Up Examination of sufficient extent to grasp the condition of the lower region of the shell frames and their end attachments is to be carried out in a forward cargo hold.

Where this level of survey reveals the need for remedial measures, the survey is to be extended to include a Close-Up Examination of all cargo holds.

4. Thickness Measurements

Where thickness measurements of the shell frames and their end attachments are required, the measurement points should be within 30mm from shell plate, bilge hopper tank or topside tank. Other points are also to be measured, if deemed necessary by the attending surveyor.

Please be advised that the above additional requirements are applied to all bulk carriers for which the relevant periodical survey is commenced on or after 1st April 1992. Your kind arrangement of stagings will be highly appreciated to facilitate the close-up examination.

Should you have any queries, please do not hesitate to contact with Survey Department of Head Office or our local offices.

Your good cooperation will be highly appreciated over the above all requirements for most effective countermeasures of bulk carrier losses.

Best Regards