

# **Approval Testing Methods for Rolled Steels**

## **Amended Guidance**

Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use

## **Reason for Amendment**

The Class NK Rules specifies that microscopic examinations for non-metallic inclusions are to be carried out as part of the approval of rolled steel manufacturing processes. The Rules further specify that method used for such testing is to be the one specified in JIS G 0555 “Microscopic Testing Method for the Non-metallic Inclusions in Steel” or be equivalent thereto.

In order to ensure that the above-mentioned examinations are properly carried out, the Rules explicitly specify the direction such specimens are to be taken in. Some of the directions specified, however, are different from what is specified in JIS G 0555. Therefore, relevant requirements were amended accordingly to eliminate inconsistencies with JIS G 0555.

In addition to the above, requirements related to austenite grain size and ferrite grain size specify that such tests may be carried out according to JIS G 0552 “Methods of Ferrite Grain Determination Test for Steel”. JIS G 0552, however, has since been consolidated into JIS G 0551 “Steels – Micrographic Determination of the Apparent Grain Size”. Therefore, relevant requirements were amended accordingly to remove any references to JIS G 0552,

## **Outline of Amendment**

- (1) Amended the length direction of test specimens for microscopic examinations for non-metallic inclusions from “transverse” to “parallel”.
- (2) References to “JIS G 0552” had been deleted from requirements related to austenite grain size and ferrite grain size.