

Approval of Manufacturing Processes for Rolled Steels

Amended Guidance

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

Reason for Amendment

The requirements related to the selection of test samples and the range of approval for the manufacturing process tests of rolled steels specify that test samples are generally to be selected for each grade and kind as well as for each charge of rolled steel whose deoxidation practice, grain refining elements, heat treatment, steel making process and steel casting process are treated as the same. In addition, the requirements specify that the range of approval is to be in accordance with the grade of steel being used.

The above requirement only considers the elements added for the purpose of grain refinement are with respect to the chemical composition of the steel. Material properties, however, also vary when micro-alloying elements, in addition to grain refining elements, are also intentionally added to give the steel specific properties. Therefore, the effects of these elements should also be considered.

Accordingly, relevant requirements are amended to specify that consideration should be given to the effects of micro-alloying elements in addition to grain refining elements when selecting test samples. Furthermore, requirements related to the range of approval and test details were amended in the same way.

Outline of Amendment

- (1) Added micro-alloying elements, excluding those also being used as grain refining elements, to the conditions to be considered when determining whether rolled steels are part of the same charge in requirements related to the selection of test samples.
- (2) Added micro-alloying elements, excluding those also being used as grain refining elements, to the conditions to be considered when determining whether rolled steels are being made using the same manufacturing process in requirements related to the range of approval test.