

Semiconductor Converters for Power

Amended Rules and Guidance

Rules for the Survey and Construction of Steel Ships Part H
Rules for the Survey and Construction of Inland Waterway Ships
Guidance for the Survey and Construction of Steel Ships Parts B and H
Guidance for High Speed Craft
Guidance for the Survey and Construction of Inland Waterway Ships
Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use

Reason for Amendment

Although the requirements for semiconductor converters for power specified in 2.12, Part H of the Rules for the Survey and Construction of Steel Ships and 2.12, Part 8 of the Rules for the Survey and Construction of Inland Waterway Ships have been amended as necessary over the years, there were some parts of these requirements which have never been fundamentally reviewed over the years and remain unchanged since they were added to the Rules in 1966.

Accordingly, relevant requirements for semiconductor converters for power were amended in consideration of actual results from their application over the years as well as to recent technologies and knowledge. This is being done as part of a comprehensive review of the ClassNK Rules.

Outline of Amendment

The main contents of this amendment are as follows:

- (1) Specified requirements for type tests of semiconductor converters for power for those converters subject to such tests.
- (2) Amended requirements regarding maintainability of semiconductor converters for power so that the wording does not depend upon the type of converter.
- (3) Specified that it is necessary to take into consideration whether the failure of semiconductor converters for power affects other associated equipment.
- (4) Relocated the requirements regarding harmonic filters to the requirements for system design protection.

Effective Date and Application

Rules for the Survey and Construction of Steel Ships Part H: 1.2.1, 2.3.13, 2.12
Rules for the Survey and Construction of Inland Waterway Ships Part 8: 1.2.1, 2.3.12, 2.12
Guidance for the Survey and Construction of Steel Ships
Part B: B3.3.1
Part H: H2.12.5
Guidance for High Speed Craft Part 2: 3.6.1
Guidance for the Survey and Construction of Inland Waterway Ships
Part 2: 3.3.1
Part 8: 2.12.5
Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use
Part 8 1.1.2, 1.1.3, 1.3.2, Chapter 7