Refrigerant used in Refrigerating Installations

Amended Rules and Guidance

Rules for the Survey and Construction of Steel Ships Part D Rules for Marine Pollution Prevention Systems Rules for Cargo Refrigerating Installations Rules for High Speed Craft Guidance for the Survey and Construction of Steel Ships Part D Guidance for Marine Pollution Prevention Systems Guidance for Cargo Refrigerating Installations

Reason for Amendment

The installation of equipment containing the hydro-chlorofluorocarbon R22 is, in principle, going to be prohibited on ships the keels of which are laid or which are at a similar stages of construction on or after January 1, 2020 by Regulation 12 of Annex VI of MARPOL.

In addition to the above, the recent development of refrigerants considered to have low global warming potential (GWP) is expected to lead to an increase in plans to use such refrigerants in the future as means of helping to prevent the further spread of global warming; however, such refrigerants are not currently specified in the ClassNK Rules.

Accordingly, relevant requirements were amended to reflect the prohibition of the installation of equipment containing R22 on or after 1 January 2020 as well as to specify that the use of refrigerants with low GWP is allowed.

In addition, as part of a comprehensive review of the ClassNK Rules, the layouts of applicable parts of the ClassNK Rules were revised so they are consistent with that of Regulation 12 of Annex VI of MARPOL.

Outline of Amendment

The main details of the amendment are as follows:

- (1) Omitted R22 from the list of refrigerants which can be used in refrigeration equipment.
- (2) Added R407H and R449A to the list of refrigerants which can be used in refrigeration equipment, etc.
- (3) The layout of the Rules and Guidance for Marine Pollution Prevention Systems was revised so as to conform to the layout of Regulation 12 of Annex VI of MARPOL.

Amended Requirements

Rules for the Survey and Construction of Steel Ships Part D: 17.1.1, Table D17.1 Rules for Marine Pollution Prevention Systems Part 2 1.3.2 Part 8 1.1.2, 1.2.1 Rules for Cargo Refrigerating Installations 1.1.1, Table 1.1, 2.3.1, 3.1.1, 3.2.6 Rules for High Speed Craft Part 9 11.1.1 Guidance for the Survey and Construction of Steel Ships Part D: D17.1.1 Guidance for Marine Pollution Prevention Systems Part 8 1.2.1 Guidance for Cargo Refrigerating Installations 1.1.1