Arrangement, Connection and Protection, etc. of Piping Systems

Amended Rules Guidance

Rules for the Survey and Construction of Steel Ships Parts D and Q

Rules for High Speed Craft

Rules for the Survey and Construction of Passenger Ships

Guidance for the Survey and Construction of Steel Ships Parts D and N

Guidance for Marine Pollution Prevention Systems

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

Reason for Amendment

An incident involving a ship sinking due to damage sustained by the seawater pipes in its cargo holds, etc. was recently reported to IACS. In response, IACS began discussing the need to protect such pipes from damage.

As a result of said consideration, IACS developed a Unified Requirement (UR) which stipulates that seawater pipes which may be subject to impacts (e.g. impact from cargoes carried in cargo holds) are to be mechanically protected. This UR was adopted as IACS UR P2.13 in October 2018.

IACS also developed an amendment to IACS UR P2.7.4, which specifies requirements for mechanical joints including performance standards, so as to add the types of mechanical joints whose use is allowed. This UR was adopted as IACS UR P2.7.4(Rev.9) in October 2018.

Accordingly, relevant requirements were amended based upon IACS URs P2.13 and P2.7.4(Rev.9).

In addition, the configuration of requirements in the ClassNK Rules related to the testing of piping systems was amended for harmonization purposes so that all relevant requirements would be in line with IACS URs P2.6, P2.8, P2.9 and P2.10. This was being done as part of a comprehensive review of the ClassNK Rules.

Outline of Amendment

The main details of the amendment are as follows:

- (1) Added examples of spaces in which piping systems are to be protected from mechanical damage.
- (2) Added the types of mechanical joints whose use is allowed.
- (3) Moved requirements related to the arrangement of piping systems with mechanical joints from Chapter 12 of Part D of the Rules for the Survey and Construction of Steel Ships to Chapter 13 of said Part D.
- (4) Amended the configuration of the testing requirements specified in Chapters 11, 12 and 13 of the Rules for the Survey and Construction of Steel Ships and the Rules for High Speed Craft so that is in line with IACS URs P2.6, P2.8, P2.9 and P2.10.

Amended Requirements

Rules for the Survey and Construction of Steel Ships

Part D: 11.6.1, 11.6.5, 12.2.2, 12.3.3, Fig. D12.1, Table D12.8, Table D12.9, 12.6.1, 12.6.2,

13.2.1, 13.2.4, 13.17.2, 14.6.2

Part Q: 20.4.2

Rules for High Speed Craft Part 2 Table 2.2.1, Part 9 1.3.1, 1.3.2

Rules for the Survey and Construction of Passenger Ships Part 5 1.1.1

Guidance for the Survey and Construction of Steel Ships

Part D: D11.6.5, D12.3.3, D12.3.4, D12.6, D13.2.1, D13.2.4

Part N: N5.9.3

Guidance for Marine Pollution Prevention Systems Part 3 3.4.2

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

Part 6 9.1.1 Table 6.9-1