Maintenance and Survey of Watertight Cable Penetrations

Amended Rules and Guidance

Rules for Approval of Manufacturers and Service Suppliers Rules for the Survey and Construction of Steel Ships Part B Rules for the Survey and Construction of Passenger Ships Guidance for the Survey and Construction of Steel Ships Parts B, and H Guidance for the Survey and Construction of Passenger Ships

Reason for Amendment

SOLAS II-1/13 and 13-1 specify that arrangements are to be made to maintain the watertight integrity in cases where penetrations of watertight bulkheads and decks are necessary for electrical cables, etc. The Society also specifies requirements related to this in its Rules; for example, penetrations of bulkheads and decks that are required by 2.9.15-1 of Part H of the Rules to have some degree of strength and tightness are to be provided with means to ensure their strength and tightness are not impaired, and penetrations of watertight bulkheads and decks are required by 3.2.2 of Part B of the Rules to be confirmed by surveyors at class periodical surveys.

Despite the above-mentioned requirements, however, there were no unified or international requirements related to methods for confirming that the water integrity of cable penetrations is maintained properly. IACS, therefore, established IACS UR Z28 in October 2020 to specify the procedure for recording the details of watertight cable penetrations, such as the locations, materials, and survey requirements, etc.

In conjunction with UR Z28, IACS also revised UR Z23 and adopted this revision as UR Z23(Rev.7) to require that a record of the details of watertight cable penetration be included in the Ship Construction File

Furthermore, IACS adopted UR Z17(Rev.15) to add procedures related to the approval of firms engaged in cable penetration inspection.

Accordingly, all relevant requirements were amended based upon the above-mentioned URs.

Outline of Amendment

- (1) Specified recording procedures for the details of watertight cable penetrations and survey requirements for such penetrations.
- (2) Specified requirements for the approval of firms engaged in watertight cable penetration inspection.

Amended Requirements

Rules for Approval of Manufacturers and Service Suppliers Part 3: 1.1.1, Chapter 17 Rules for the Survey and Construction of Steel Ships Part B: 2.1.3, 2.1.6, Table B3.1, 5.2.2 Rules for the Survey and Construction of Passenger Ships Part 2: 2.1.3, 2.1.7 Guidance for the Survey and Construction of Steel Ships Part B: B2.1.6 Part H: H2.9.15 Guidance for the Survey and Construction of Passenger Ships Part 2: 2.1.3