

Review of IACS Unified Interpretation for Fire-fighting Systems and Exemption of Fire-extinguishing Arrangements for Cargo Spaces

Amended Guidance

Guidance for the Survey and Construction of Steel Ships Part R

Reason for Amendment

Requirements related to fire-fighting systems are specified in SOLAS, and these requirements have already been incorporated into the NK Rules. In addition, IACS and the IMO have respectively issued various unified interpretations (UI) and circulars clarifying these requirements and these too have also already been incorporated into the NK Rules.

SOLAS II-2/10.2.1.4 specifies that isolating valves for separating sections of fire mains within machinery spaces containing main fire pumps are to be provided. In addition, it also specifies that suction and discharge piping from emergency fire pumps may penetrate machinery spaces provided said piping is enclosed in either a substantial steel casing or is insulated to an “A-60” standard. IACS, in turn, issued UI SC121(Rev.1) and UI SC245 to clarify the arrangement of supply and discharge piping for emergency fire pumps.

Recently, IACS reviewed these UIs as part of a periodical review. As a result, IACS decided to adopt UI SC121(Rev.2) and UI SC245(Rev.1)

In addition to the above, SOLAS II-2/10.7 specifies that fixed fire-extinguishing arrangements for cargo spaces may be exempted for cargo ships if constructed and solely intended for cargoes which constitute a low fire risk (e.g. the cargoes listed by the IMO in MSC.1/Circ.1395/Rev.4). The IMO periodically reviews the cargoes listed in MSC.1/Circ.1395 and most recent revision of the list was approved by the IMO at the 105th session of its Maritime Safety Committee (MSC 105) held in April 2022.

Accordingly, relevant requirements are amended based on IACS UI SC121(Rev.2), UI SC245(Rev.1) and MSC.1/Circ.1395/Rev.5.

Outline of Amendment

- (1) Amends requirements for the arrangement of supply and discharge piping for emergency fire pumps.
- (2) Amends requirements for the cargoes for which fixed fire-extinguishing arrangements may be exempted.

“Rules for the survey and construction of steel ships” has been partly amended as follows:

Part R FIRE PROTECTION, DETECTION AND EXTINCTION

R10 Fire Fighting

R10.2 Water Supply Systems

R10.2.1 Fire Mains and Hydrants

Sub-paragraph -3 has been amended as follows.

3 With respect to the provisions of **10.2.1-4(1), Part R of the Rules**, any part of the fire main isolated by the isolating valves from the section of the fire main within the machinery space containing the main fire pump or pumps is to be routed outside such machinery space, except for short lengths of suction or discharge piping for emergency fire pumps complying with 10.2.1-4(1), Part R of the Rules. Such isolating valve is provided is to be a corridor within the accommodation space or the fire control station. In case where the valve is provided on open deck or other spaces, the position of the installation is to be such that the valve will be free from damage by cargo loaded on deck or free from mechanical damage, and that operation of the valve would not be impaired by such cargo loaded on deck or storage goods. In case where the valve is provided on open deck, means are to be provided to prevent the valve from freezing. When the valve is provided in a corridor, such corridor need not be dealt with the control station.

Sub-paragraph -5 has been amended as follows.

5 With respect to the provisions of **10.2.1-4(1), Part R of the Rules**, in cases where suction or discharge piping penetrates machinery spaces, it is not necessary for “distance pieces”, “sea inlet valves” and “sea-chests” to be enclosed in a substantial steel casing or to be insulated to “A-60” class standards. ~~For this purpose, “discharge piping” refers to the piping between the emergency fire pump and the isolating valve.~~ The method for insulating pipes to “A-60” class standards is that they are to be covered or protected in a practical manner by insulation material which is approved as a part of “A-60” class divisions in accordance with the *FTP Code* and is approved by the Society or organizations deemed appropriate by the Society.

R10.7 Fire-extinguishing Arrangements in Cargo Spaces

R10.7.1 Fixed Fire-extinguishing Systems for General Cargo

Sub-paragraph -5 has been amended as follows.

5 Vegetable oil, latex and molasses are regarded as “cargoes which constitute a low fire risk” referred in **10.7.1-2, Part R of the Rules**. For other cargoes carried in bulk, reference is to be made to the “*International Maritime Solid Bulk Cargoes (IMSBC) Code, appendix 1, entry for coal*” (as amended) and the latest version of “Lists of solid bulk cargoes for which a fixed gas fire-extinguishing system may be exempted or for which a fixed gas fire-extinguishing system is ineffective” (MSC.1/Circ.1395/Rev.4).