Capacity of Fire Pumps in Ships Equipped with Mobile Water Monitors

Amended Guidance

Guidance for the Survey and Construction of Steel Ships Part R

Reason for Amendment

SOLAS Regulation II-2/10 (as amended by MSC.365(93)) specifies that ships designed to carry five or more tiers of containers on or above the weather deck, whose keels are laid or which are at similar stage of construction on or after 1 January 2016, are to be provided with mobile water monitors capable of spraying the upper tiers of containers with water for fire-fighting purposes.

Although SOLAS Regulation II-2/10.2.2.4.1.2 had originally specified that the total capacity of fire pumps supplying fire main systems need not exceed 180 m^3/h for cargo ships, MSC.365(93) amended this to specify that the 180 m^3/h limit on maximum water capacity does not apply to ships equipped with mobile water monitors.

After discussing the implementation of the aforementioned amendment, IACS was of the opinion that the IMO's intent was not to simply increase the total capacity of the fire pumps of cargo ships beyond 180 m^3/h, but rather to allow main fire pumps to also be used to supply mobile water monitors and to ensure sufficient water capacity for simultaneous operation of the mobile water monitors and other fire-fighting equipment. IACS, therefore, decided to clarify that, even for ships equipped with mobile water monitors, the total capacity of main fire pumps to fire main systems need not exceed 180 m^3/h. This, however, is contingent upon the relevant fire pumps being capable of providing a sufficient amount of water to a separate pump and piping system for the mobile water monitors. As a result of the above, IACS adopted UI SC 270 in January 2015.

In addition to the above, Chapter 12 of the FSS Code specifies that the capacities of emergency fire pumps are to be not less than 40% of the total capacity of the fire pumps (main fire pumps) required by Regulation 10.2.2.4.1.2 of the same code. IACS, therefore, also decided to clarify that the total capacity of emergency fire pumps need not be more than 180 m^3/h multiplied by 40% (72 m^3/h) regardless of whether a separate pump and piping system for mobile water monitors is installed because emergency fire pumps are only intended to be used to protect spaces where main fire pumps are located and are not expected to be used to supply water to mobile fire monitors located on deck.

Accordingly, all relevant requirements were amended based upon IACS UI SC 270.

Outline of Amendment

(1) Specified that the total capacity of main fire pumps for ships equipped with mobile water monitors need not exceed 180 m^3/h as long as the monitors are supplied by separated pump and piping systems.

(2) Specified that the total capacity of a fire emergency pump need not be more than 72 m^3/h, regardless of whether the ship is equipped with mobile water monitors.