SC 270

(Jan 2015) (Corr.1 Mar 2015) (Corr.2 Sept 2015) (Rev.1 Dec 2015) Fire pumps in ships designed to carry five or more tiers of containers on or above the weather deck (Res. MSC.365(93), SOLAS II-2/10.2.1.3, II-2/10.2.2.4.1.2, II-2/10.7.3.2.3, II-2/19.3.1 and IMO

Regulation

SOLAS II-2/10.2.1.3, as per MSC.365(93)

FSS Code Ch. 12.2.2.1.1)

The diameter of the fire main and water service pipes shall be sufficient for the effective distribution of the maximum required discharge from two fire pumps operating simultaneously, except that in the case of cargo ships, other than those included in paragraph 7.3.2, the diameter need only be sufficient for the discharge of 140 m³/h.

SOLAS II-2/10.2.2.4.1.2, as per MSC.365(93)

pumps in cargo ships, other than any emergency pump, the quantity of water is not less than four thirds of the quantity required under regulation II-1/35-1 to be dealt with by each of the independent bilge pumps in a passenger ship of the same dimension when employed in bilge pumping, provided that in no cargo ship, other than those included in paragraph 7.3.2, need the total required capacity of the fire pumps exceed 180 m³/h.

SOLAS II-2/10.7.3.2.3, as per MSC.365(93)

The mobile water monitors may be supplied by the fire main, provided the capacity of fire pumps and fire main diameter are adequate to simultaneously operate the mobile water monitors and two jets of water from fire hoses at the required pressure values. If carrying dangerous goods, the capacity of fire pumps and fire main diameter shall also comply with regulation 19.3.1.5, as far as applicable to on-deck cargo areas.

NOTE:

- This Unified Interpretation is to be uniformly implemented by IACS Societies on ships contracted for construction on or after 1 January 2016.
- 2. Rev.1 of the Unified Interpretation is to be uniformly implemented by IACS Societies on ships contracted for construction on or after 1 January 2017.
- 23. The "contracted for construction" date means the date on which the contract to build the vessel is signed between the prospective owner and the shipbuilder. For further details regarding the date of "contract for construction", refer to the IACS Procedural Requirement (PR) No. 29.

SC 270 (cont.)

SOLAS II-2/19.3.1, as per MSC.365(93)

- 3.1.2. The quantity of water delivered shall be capable of supplying four nozzles of a size and at pressures as specified in regulation 10.2, capable of being trained on any part of the cargo space when empty. This amount of water may be applied by equivalent means to the satisfaction of the Administration.
- 3.1.3. Means shall be provided for effectively cooling the designated underdeck cargo space by at least 5 l/min per square metre of the horizontal area of cargo spaces, either by a fixed arrangement of spraying nozzles or flooding the cargo space with water.
- 3.1.5. The total required capacity of the water supply shall satisfy paragraphs 3.1.2 and 3.1.3, if applicable, simultaneously calculated for the largest designated cargo space. The capacity requirements of paragraph 3.1.2 shall be met by the total capacity of the main fire pump(s), not including the capacity of the emergency fire pump, if fitted.

IMO FSS Code Ch. 12.2.2.1.1

- 2.2.1 Emergency fire pumps
- 2.2.1.1 Capacity of the pump

The capacity of the pump shall not be less than 40% of the total capacity of the fire pumps required by regulation II-2/10.2.2.4.1 of the Convention and in any case not less than the following:

- .1 for passenger ships less than 1,000 gross tonnage and for cargo ships of 2,000 gross tonnage and upwards $25 \text{ m}^3/\text{h}$; and
- .2 for cargo ships less than 2,000 gross tonnage 15 m³/h.

Interpretation

- 1. On board cargo ships designed to carry five or more tiers of containers on or above the weather deck:
 - in cases where the mobile water monitors are supplied by separate pumps and piping system, the total capacity of the main fire pumps need not exceed 180 m³/h and the diameter of the fire main and water service pipes (hereinafter referred to "the pipework diameter") need only be sufficient for the discharge of 140 m³/h. in cases where the mobile water monitors are supplied by separate pumps and piping system.
 - in cases where the mobile water monitors are supplied by the main fire pumps; the total capacity of required main fire pumps and the pipework diameter shall be sufficient for simultaneously supplying both the required number of fire hoses and mobile water monitors. However, the total capacity shall not be less than the following .1 or .2, whichever is smaller:
 - .1 four thirds of the quantity required under regulation II-1/35-1 to be dealt with by each of the independent bilge pumps in a passenger ship of the same dimension when employed in bilge pumping; or
 - <u>.2</u> <u>180 m³/h.</u>

SC 270 (cont.)

- in cases where the mobile water monitors and the "water spray system" (fixed arrangement of spraying nozzles or flooding the cargo space with water) required by SOLAS regulation II-2/19.3.1.3 are supplied by the main fire pumps, the total capacity of the main fire pumps and the pipework diameter need only be sufficient to supply whichever of the following is the greater:
 - <u>.1</u> <u>the mobile water monitors and the four nozzles required by SOLAS regulation II-2/19.3.1.2; or </u>
 - <u>.2</u> the four nozzles required by SOLAS regulation II-2/19.3.1.2 and the water spray system required by SOLAS regulation II-2/19.3.1.3.

The total capacity, however, is not to be less than 1.2.1 or 1.2.2, whichever is smaller.

<u>2.</u> On board cargo ships designed to carry five or more tiers of containers on or above the weather deck, the total capacity of the emergency fire pump need not exceed 72 m³/h.

End of Document