

PART 9 Fire Protection, Detection and Extinction

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SECTION 1 General

1.1 Application

1.1.1 Cargo ships of 500 gross tons or more, all passenger ships and gas and chemical tankers on international voyages, where provision is made within International Conventions, are to be provided with the fire safety measures required by the International Convention for the Safety of Life at Sea, 1974, as amended (SOLAS 74). Fishing vessels of 45 m freeboard length and over are to be provided with the fire safety measures required by the Torremolinos Protocol of 1993 relating to the Torremolinos International Convention for the Safety of Fishing Vessels, 1977 (Torremolinos Protocol).

1.1.2 Cargo ships of 500 gross tons or more, all passenger ships, and gas and chemical tankers, employed on national voyages are to comply with the fire safety measures prescribed and approved by the Government of the flag state.

1.1.3 It is the responsibility of the Government of the Flag State to give effect to the fire protection, detection and extinction requirements of 1.1.1 and 1.1.2. However, the Society will undertake to do this in cases where contracting Governments have authorized LHR to apply the requirements of SOLAS 74 or the Torremolinos Protocol and issue the appropriate certification on their behalf.

1.1.4 The requirements of [Part 9, Chapter 2](#), are applicable to cargo ships of less than 500 gross tons, (where not covered by International Conventions), fishing vessels of 12 m registered length and over but less than 45 m freeboard length, and ships not fitted with propelling machinery.

1.1.5 Consideration will be given to the acceptance of fire safety measures prescribed and approved by the Government of the flag state in lieu of 1.1.4.

1.1.6 Special consideration, consistent with the fire hazard involved, will be given to construction or arrangement features not covered by this Chapter.

1.1.7 Cargo ships of less than 500 gross tons intended for the carriage of dangerous goods are to comply with SOLAS 1974 as amended II-2/G, 19.

CHAPTER 2 Fire protection of ships less than 500 GRT

SECTION 1 Fire protection, detection and extinction

SECTION 1 Fire protection, detection and extinction**1.1 General provisions**

1.1.1 The provisions of these requirements are intended to apply to new and, as far as reasonable and practicable, or as found necessary by the relevant Administration, to existing cargo ships of less than 500 GT.

1.1.2 It should be remembered that the International Codes for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk and Liquefied Gases in Bulk are applicable to such ships regardless of size including those of less than 500 GT.

1.1.3 In lieu of the requirements of the present Chapter, consideration will be given to the acceptance of fire safety measures prescribed and approved by the Government of the Flag State.

1.2 Surveys and maintenance

1.2.1 The hull, machinery and all equipment required for safety aspects of every ship should be constructed and installed so as to be capable of being regularly maintained to ensure that they are at all times, in all respects, satisfactory for the ship's intended service.

1.2.2 A competent authority should arrange for appropriate surveys of the required equipment relating to fire safety aspects during construction and, at regular intervals after completion, generally as prescribed within Chapter I of SOLAS 1974 (as amended). Such surveys should be carried out by the Society classing the ship or the Flag State.

1.2.3 The condition of the structural fire protection and fire safety related equipment shall be maintained to conform with the provisions of the requirements to ensure that the ship in these respects, will remain fit to proceed to sea without danger to the ship or persons on board. The hull structure and machinery do not form part of these requirements but should be similarly surveyed and maintained.

1.3 Requirements

1.3.1 Table 2.1.1 details the various minimum fire protection, detection and extinction arrangements that are required depending on the vessel's intended service area.

Table 2.1.1: General fire detection, protection and extinction requirements

Fire-fighting equipment	Unrestricted Service	Restricted Service (RIS and CS notations)	Sheltered water service (SW and ESW notations)
1. FIRE PUMPS			
Ships greater than 150 GT			
~ Independently driven power pumps	1	1	1
~ Power pumps	1	1	—
~ Hand pumps	—	—	1
Ships less than 150 GT			
~ Independently driven power pumps	—	—	—
~ Power pumps	1	1	1
~ Hand pumps	1	1	—
2. FIRE HYDRANTS			
Sufficient number and so located that at least one powerful water jet can reach any normally accessible part of ship	X	X	X
3. FIRE HOSES (Length > 15 m)			
With couplings and nozzles	≥ 3	≥ 3	≥ 2
4. FIRE NOZZLES			
Dual purpose (spray/jet) with 12 mm jet and integral shut-off. Jet may be reduced to 10mm and shut-off omitted for hand pump hoses.	X	X	X
5. PORTABLE FIRE EXTINGUISHERS			
~ Accommodation and service spaces.	≥ 3	≥ 3	≥ 2
~ Boiler rooms, etc.	≥ 2	≥ 2	≥ 2
~ Machinery spaces (one extinguisher per 375 kw of internal combustion engine power)	≥ 2, ≤ 6	≥ 2, ≤ 6	≥ 2, ≤ 6
~ Cargo pump rooms (capacity 9 l. fluid or equivalent)	≥ 2	≥ 2	≥ 2
6. NON-PORTABLE FIRE EXTINGUISHERS IN MACHINERY SPACES			
~ Ships greater than 150 GT	1	1	—
~ Ships greater than 350 GT (capacity 45l fluid or equivalent)	—	—	1
7. FIXED FIRE EXTINGUISHING SYSTEMS SHIPS GREATER THAN 350 GT			
Category A machinery spaces	X	X	—
Cargo pump rooms	X	X	—
8. CARGO TANK PROTECTION			
Mobile foam appliances	X	X	X
9. FIREMAN'S OUTFIT			
Ships greater than 150 GT			
~ complete outfit	≥ 2	≥ 2	≥ 2
Ships less than 150 GT			
~ complete outfit	≥ 1	≥ 1	—
Fireman's axe	—	—	1
10. MEANS OF ESCAPE			
Accommodation and service spaces	2	2	2
Machinery spaces	≥ 1	≥ 1	≥ 1
Cargo pump rooms	1	1	1

Fire-fighting equipment	Unrestricted Service	Restricted Service (RIS and CS notations)	Sheltered water service (SW and ESW notations)
11. STRUCTURAL FIRE PROTECTION WHEEL HOUSE AND MACHINERY SPACES Separation from adjacent spaces of negligible fire risk Separation from other adjacent spaces Escape routes	A-0 A-60 B-0	A-0 A-30 B-0	A-0 A-0 B-0