

required under subclause (1) of this clause shall be in accordance with the following scale:

Water or Foam	9 Litres
Carbon Dioxide	2 kg
Dry powder	1 kg

(4) The fire extinguishers required by subclause (1) of this clause shall be distributed so as to be readily available in the event of a fire in any of the accommodation spaces, service spaces or machinery spaces, and shall be located to the satisfaction of a Surveyor.

37. Machinery spaces containing oil-fired boilers or oil-burning equipment—(1) In every ship of Class IX of 24m in length or over except as provided in Clauses 6, 19 and 28 of this Code, every space containing any oil-fired boiler, oil-fuel settling tank, or oil-fuel unit shall be provided with:

- (a) Either
- (i) one of the following fixed fire-extinguishing installations:
- (1) A pressure water-spraying system complying with the requirements of the Performance Standard referred to in clause 22 of the general code;
 - (2) A fire-smothering gas installation complying with the requirements of the Performance Standard referred to in clause 24 of the general code;
 - (3) A high-expansion foam fire-extinguishing system complying with the requirements of the Performance Standard referred to in clause 25 of the general code, or
- (ii) At least 1 foam fire extinguisher of not less than 135 litres capacity or at least 1 carbon-dioxide extinguisher of not less than 45 kg capacity. The extinguishers shall be sited so as to be readily accessible in the event of fire, and shall be sufficient in number to enable foam or carbon dioxide to be directed on to any part of the boiler room or spaces containing any part of the oil fuel installation. If the engine and boiler rooms are not entirely separated from each other, or if fuel oil can drain from the boiler room into the engine room, the combined engine and boiler room shall for the purpose of this subclause be regarded as a single space; and
- (b) In each firing space and in each space which contains any part of any oil-fuel installation, at least 2 portable fire extinguishers suitable for use in oil fires; and
- (c) In each firing space, a receptacle containing at least 150 litres of sand or other dry material suitable for quenching oil fires, together with a scoop for its distribution, or, alternatively, an additional portable fire extinguisher.
- (2) In every ship of Class IX of less than 24m in length, every space containing any oil-fired boiler, oil-fuel settling tank, or oil-fuel unit, shall be provided with:
- (a) 1 or more foam fire extinguishers, each of at least 45 litres capacity, or carbon-dioxide extinguishers, each of at least 16kg capacity. The extinguishers shall be sited so as to be readily accessible in the event of fire and shall be sufficient in number to enable foam or carbon dioxide to be directed on to any part of the boiler room or spaces containing any part of the oil-fuel installation; and
- (b) In each firing space and in each space which contains any part of any oil-fuel unit, at least 1 portable fire extinguisher, suitable for use in oil fires; and
- (c) In each firing space, a receptacle containing at least 50 litres of sand or other dry material suitable for quenching oil fires, together with a scoop for its distribution, or, alternatively, an additional portable fire extinguisher.
- (3) If an auxiliary oil-fired boiler, oil-fuel settling tank, or oil-fuel unit is fitted in a space occupied by propelling or auxiliary machinery of internal-combustion type, the fire appliances required by subclauses (1) and (2) of this clause shall be

provided in addition to any fire appliances required by the provisions of clause 38 of this Code.

Provided that if the largest single area over which oil fuel may be spread in the event of a leakage is less than 9m² the provisions of subclause (1)(a) or, as the case may require, subclause (2)(a) of this clause shall be complied with by the provision of 1 foam fire extinguisher of at least 135 litres capacity or 1 carbon-dioxide fire extinguisher of at least 45kg capacity.

38. Machinery spaces containing internal-combustion type machinery—(1) In every ship of Class IX of 24m in length or over, except as provided in clauses 9, 20, and 29 of this Code, every space containing internal-combustion type machinery used for main-propulsion or auxiliary purposes shall be provided with:

(a) 1 foam fire extinguisher of at least 45 litres capacity or 1 carbon-dioxide fire extinguisher of at least 16 kg capacity.

Provided that such an extinguishers shall not be required if equivalent protection is provided in such spaces by a fixed fire extinguishing installation fitted in compliance with clause 37(1)(a)(i) of this Code. Provided also that such an extinguisher shall not be required in any machinery space containing only auxiliary machinery having an aggregate power of less than 375 kW; and

(b) Sufficient portable fire extinguishers, so located that a portable extinguisher is not more than 10m walking distance from any point in that space;

Provided that not less than 2 such extinguishers shall be required in any space containing main-propulsion machinery, and not less than 1 such extinguisher shall be required in any space containing, only auxiliary machinery.

(2) In every ship of Class IX of less than 24m in length, the spaces containing internal-combustion type propulsion or auxiliary machinery shall be protected by the portable extinguishers required by clause 36(2) of this Code.

(3) Except as provided in clause 29(2) of this Code every ship of Class IX fitted with internal-combustion propelling machinery which uses fuel having a flash point below 60°C shall be provided with a fixed installation for the discharge of fire-smothering gas into the space containing such propelling machinery and into any space containing the storage tanks of such fuel.

(4) The fixed installation required under subclause (3) of this clause shall have a capacity in accordance with the following:

(a) If discharging carbon dioxide—mass required.

Net Volume of Spaces to be Protected: Cubic Metres	Mass of Carbon Dioxide in Kilograms
0 to 5m ³	1.0 kg CO ₂ per 0.87m ³ space
5 to 15m ³	1.0 kg CO ₂ per 0.93m ³ space
15 to 45m ³	1.0 kg CO ₂ per 1.00m ³ space
45 to 125m ³	1.0 kg CO ₂ per 1.12m ³ space
125 and over	1.0 kg CO ₂ per 1.25m ³ space

(5) The fixed installation required under subclause (3) of this clause shall, if discharging fire-smothering gas other than carbon dioxide have a capacity approved by the Chief Surveyor. The fixed installation referred to above may be manually or automatically operated, provided any automatically operated installation is provided with an alarm giving audible warning to persons within the protected spaces.

(6) Where in the opinion of the Chief Surveyor the propelling machinery and fuel-storage tanks of any ship to which this clause applies are so open to the atmosphere as to make the fitting of a fixed fire-smothering gas installation ineffective, he may allow the requirements of subclause (3) of this clause to be dispensed with.

(7) Where a ship of Class IX of less than 24m in length fitted with propelling machinery which uses fuel having a flash point of less than 60°C is fitted with a fixed fire-smothering gas installation, the number of fire extinguishers required under