

CIRCULAR LETTER	No. 313-14-1908c	date	d 09.03.2023		
Re: amendments to the Rules ND No. 2-020101-174-E	for the Classification and	Construction of	Sea-Going	Ships,	2023,
Item(s) of supervision: ships under construction					
Entry-into-force date: refer to Appendix 1					
Cancels / amends / adds Circu	lar Letter No.		dated		
Number of pages: 1 + 6					
Appendices: Appendix 1: information on am Appendix 2: text of amendmen	endments introduced by the ts to Part VI "Fire Protection"	Circular Letter			
Acting Director General	Sergey A. Kulikov	I			
Text of CL: We hereby inform that in cor (Corr.2 Aug 2022), SC218 MSC.1/Circ.1387/Corr.1, the F amended as specified in the Ap	nection with implementation (Rev.1 July 2022), SC2 Rules for the Classification a opendices to the Circular Let	n of IACS Unified 19 (Rev.1 July and Construction o ter.	Interpretatior 2022) and f Sea-Going	ns (UI) IMO d Ships s	SC217 circular hall be

It is necessary to do the following:

1. Bring the content of the Circular Letter to the notice of the RS surveyors, interested organizations and persons in the area of the RS Branch Offices' activity.

2. Apply the provisions of the Circular Letter during review and approval of the technical documentation on ships contracted for construction or conversion on or after the dates specified in Appendix 1, in the absence of a contract, during review and approval of the technical documentation on ships requested for review on or after the dates specified in Appendix 1.

List of the amended and/or introduced paras/chapters/sections:

Part VI: para 2.1.3.3, Table 3.1.2.1, paras 3.8.4.3, 3.8.5, 3.9.2, 3.11.1.3, 3.11.5.2, 3.12.2, 3.12.6, Table 5.1.2, paras 6.4.1 and 6.4.14

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Nos.	Amended	Information on amendments	Number	Entry-into-force
	paras/chapters/ sections		and date of the Circular Letter	date
1	Part VI, para 2.1.3.3	Types of ships have been specified to which the procedure for type approval of pipe penetrations and cable transits where heat-sensitive materials are used given in Appendix 1 to Section 4 of Part IV "Technical Supervision during Manufacture of Products" of the Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships applies	313-14-1908c of 09.03.2023	01.04.2023
2	Part VI, Table 3.1.2.1	Texts of Footnotes 4 and 7 have been specified regarding application of fixed fire extinguishing systems using medium and high expansion foam	313-14-1908c of 09.03.2023	01.04.2023
3	Part VI, para 3.8.4.3	Requirements have been specified for installation of by-pass valve located across the time-delay device of fixed carbon dioxide extinguishing systems	313-14-1908c of 09.03.2023	01.04.2023
4	Part VI, para 3.8.5	Requirements have been specified for local carbon dioxide fire extinguishing stations	313-14-1908c of 09.03.2023	01.04.2023
5	Part VI, para 3.9.2	Requirements have been specified for type approval of fixed water-mist fire extinguishing systems in connection with implementation of IACS UI SC218 (Rev.1 July 2022) and SC219 (Rev.1 July 2022)	313-14-1908c of 09.03.2023	01.07.2023
6	Part VI, para 3.11.1.3	Requirements have been specified for calculation of mass of the aerosol generating agent for spaces protected by aerosol fire extinguishing system	313-14-1908c of 09.03.2023	01.04.2023

Information on amendments introduced by the Circular Letter (for inclusion in the Revision History to the RS Publication)

Nos.	Amended paras/chapters/ sections	Information on amendments	Number and date of the Circular Letter	Entry-into-force date
7	Part VI, para 3.11.5.2	Reference has been specified to IMO circular MSC.1/Circ.1270, as amended by IMO circular MSC.1/Circ.1270/Corr.1	313-14-1908c of 09.03.2023	01.04.2023
8	Part VI, para 3.12.2	Requirements have been specified for type approval of fixed local application fire extinguishing systems for use in machinery spaces in connection with implementation of IMO circular MSC.1/Circ.1387/Corr.1 and IACS UI SC 217 (Corr.2 Aug 2022)	313-14-1908c of 09.03.2023	01.04.2023
9	Part VI, para 3.12.6	Requirements have been specified for arrangement of nozzles of fixed local application fire extinguishing systems for use in machinery spaces in connection with implementation of IMO circular MSC.1/Circ.1387/Corr.1 and IACS UI SC 217 (Corr.2 Aug 2022)	313-14-1908c of 09.03.2023	01.07.2023
10	Part VI, Table 5.1.2	In items 4.4 and 6.1 requirements have been specified for provision of machinery spaces with mobile and portable foam fire extinguishers	313-14-1908c of 09.03.2023	01.04.2023
11	Part VI, para 6.4.1	Requirements have been specified for fire protection of oil recovery ships	313-14-1908c of 09.03.2023	01.04.2023
12	Part VI, para 6.4.14	Requirements have been specified for arrangement of tanks intended for storage of recovered oil in oil recovery ships	313-14-1908c of 09.03.2023	01.04.2023

RULES FOR THE CLASSIFICATION AND CONSTRUCTION OF SEA-GOING SHIPS, 2023,

ND No. 2-020201-174-E

PART VI. FIRE PROTECTION

2 STRUCTURAL FIRE PROTECTION

1 **Para 2.1.3.3** is replaced by the following text:

"2.1.3.3 If the "A" class divisions are penetrated, then such penetrations (cutouts) shall be tested in accordance with the FTP Code, considering the provisions of 2.2.1.4. The requirements of 12.1.12 and 12.1.13, Part VIII "Systems and Piping" are applied to ventilation ducts.

Tests may not be conducted if the pipes penetrations are made of steel or other equivalent material with a thickness of 3 mm or greater and a length of not less than 900 mm (preferably 450 mm at each side of the division) and do not have any openings. Such penetrations shall be insulated similar to the division itself.

In case where pipe penetrations and cable transits are constructed without structural sockets and consist of removable sleeves welded or bolted to the division and/or of soft or intumescent filling material, these sleeves shall be of minimum 3 mm thickness and of minimum 60 mm length and filling material shall be adequately secured by bonded materials or mechanical means in order to prevent damage or fall out. Such penetrations shall not impair fire integrity and structural strength of the divisions.

Type approval of pipe penetrations and cable transits where heat-sensitive materials are used and which are subject to fire integrity and water tightness requirements and which are designed to be fitted in bulkheads and decks of passenger ships and special purpose ships, which fire protection shall be arranged equivalent to that of passenger ships, shall include a prototype test of watertightness in accordance with the procedure specified in Appendix 1 to Section 4, Part IV "Technical Supervision during Manufacture of Products" of the Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships. Fire tests and tests of watertightness for such penetrations and transits designed to be fitted in bulkheads and decks of cargo ships and special purpose ships, which fire protection shall be arranged equivalent to that of cargo ships may be performed independently of each other.".

3 FIRE-FIGHTING EQUIPMENT AND SYSTEMS

2 **Table 3.1.2.1**. **Texts of Footnotes 4 and 7** are replaced by the following:

"4 A system using medium expansion foam shall be used.".

"⁷ A system using high expansion foam shall be used. The selected foam concentrate shall be suitable, depending on the protected ship's space, for extinguishing of fuel oil, aviation fuel, flammable liquids, combustible materials and carried cargoes applied on the ship.".

3 **Para 3.8.4.3** is replaced by the following text:

"3.8.4.3 The pipe supplying gas from pilot cylinder to the pneumatic actuator of main bottles through a time-delay device shall be fitted with by-pass valve located across this time-delay device which can be used in case the device goes defective. The by-pass valve is not required when the time-delay pneumatic device is used, except for the device being an integral part of a pneumo-electric time delay module.".

4 **Para 3.8.5** is replaced by the following text:

"3.8.5 Local carbon dioxide fire extinguishing stations.

For certain protected spaces placed at galleys and control stations (fire stations), local stations may be permitted where the total mass of carbon dioxide in the cylinders shall not exceed 7 kg.

In a machinery space local stations may be permitted for fire protection of crankcases and silencers of the internal combustion engines, of smoke stacks and other enclosed compartments with the total mass of carbon dioxide in each cylinder not exceeding 16 kg.

The cylinders shall have safety devices preventing the pressure therein to rise above permissible limits. There shall be provided a checking device to indicate that the protective device has operated.

A larger mass of agent is permitted provided the requirements of 3.8.2.4 and 3.8.2.7 are complied with.

As a rule, equipment of the local stations shall be mounted outside the protected spaces. The cylinders shall be mounted in such a way that their serviceability is not impaired by the weather, vibration and other external factors and they shall not be placed in accommodation spaces.

The applicable requirements of 3.1.1, 3.1.2, 3.1.4 and 3.1.5 in view of the foregoing shall be met.

The requirements of 3.8.1.2 — 3.8.1.4, 3.8.1.7, 3.8.2.2 — 3.8.2.4, 3.8.2.6.2, 3.8.2.7, 3.8.3 and 3.8.4 for the above-mentioned systems may be waived except as specified in 3.8.5.".

5 **Para 3.9.2** is replaced by the following text:

"3.9.2 Fixed water-mist fire extinguishing systems shall be of an approved type complying with the provisions of IMO circular MSC/Circ.1165 "Revised Guidelines for the Approval of Equivalent Water-Based Fire-Extinguishing Systems for Machinery Spaces and Cargo Pump-Rooms", considering the amendments introduced by IMO circulars MSC.1/Circ.1237, MSC.1/Circ.1269 (considering IACS Unified Interpretations (UI) SC218 (Rev. 1 July 2022) and SC219 (Rev.1 July 2022)), MSC.1/Circ.1385 and MSC.1/Circ.1386.".

6 **Para 3.11.1.3** is replaced by the following text:

"**3.11.1.3** Design mass of the aerosol generating agent, in kg, shall be calculated for each protected space separately and shall be determined by the formula

$$G = ((V + \sum_{j=1}^{n} V_{arj} \cdot P_{arj} \cdot P_{a}^{-1}) \cdot k \cdot q)/f$$
(3.11.1.3)

where	V	=	c
			-

- design (net) volume of the protected space, in m³;
 volume of the j-th air receiver, in m³ refer to 3.1.2.5;
- V_{arj} = volume of the j-th air receiver, in m³ refer to 3 n = number of air receivers in the protected space;
- j = serial number of air receiver;
- P_{arj} = working pressure in the j-th air receiver, in MPa;
- P_a = atmospheric pressure, in MPa;
- q = normative fire extinguishing concentration of aerosol, in kg/m³;
- k = factor of safety equal to 1,3;
- f = efficiency coefficient, in %, is the percentage of fire extinguishing aerosol actually discharged from a specific aerosol generator (the coefficient is determined by comparing the mass loss of a generator after discharge to its beginning mass).".

7 **Para 3.11.5.2** is replaced by the following text:

"**3.11.5.2** Electric circuits connecting generators shall be duplicated and widely separated. Within the protected space, electric circuits essential for the release of the system shall be fire resistant according to IMO circular MSC.1/Circ.1270, as amended by IMO circular MSC.1/Circ.1270/Corr.1.".

8 **Para 3.12.2** is replaced by the following text:

"3.12.2 Machinery spaces of category A above 500 m³ in volume shall, in addition to the fixed fire extinguishing system required in Table 3.1.2.1, be protected by an approved type of fixed water-based or equivalent local application fire extinguishing system complying with the requirements of IMO Revised Guidelines (refer to IMO circular MSC.1/Circ.1387, as amended by IMO circular MSC.1/Circ.1387/Corr.1 and IACS UI SC217 (Corr.2 Aug 2022)). In the case of periodically unattended machinery spaces the fire extinguishing system shall have both automatic and manual release capabilities. In the case of continuously manned machinery spaces the fire extinguishing system capability.

Where automatic release is provided the availability of manual release is obligatory.

The manual release shall be located at easily accessible position inside and outside the protected space. The manual release inside the protected space shall not be liable to be cut off by a fire in the protected areas.

The automatic release shall be activated by fire detection system, indicating fire risk areas. Besides it shall be so designed as to prevent accidental release of the local application fire extinguishing system.".

9 **Para 3.12.6** is replaced by the following text:

"3.12.6 Nozzles onboard shall be located in the same positions as during their testing carried out according to the IMO Revised Guidelines (refer to IMO circular MSC.1/Circ.1387, as amended by IMO circular MSC.1/Circ.1387/Corr.1 and IACS UI SC217 (Corr.2 Aug 2022)).".

5 FIRE-FIGHTING OUTFIT, SPARE PARTS AND TOOLS

10 **Table 5.1.2**. Item 4.4 is replaced by the following text:

"4 In machinery spaces nearby each boiler front of oil-fired boiler and in each space where any part of oil fuel unit is located, at least 2 foam fire extinguishers or equivalent shall be provided. In enclosed spaces with oil-fired inert gas generators, incinerators and waste disposal units, 2 foam fire extinguishers.".

Item 6.1 is replaced by the following text:

"1 In machinery spaces containing oil-fired boilers — one fire extinguisher per each space. In boiler rooms with domestic boilers of less than 175 kW and in case of boilers protected by fixed local application fire extinguishing systems, the fire extinguisher is not required.".

6 REQUIREMENTS FOR FIRE PROTECTION OF SPECIAL PURPOSE SHIPS AND SPECIAL FACILITIES ON SHIPS

11 **Para 6.4.1** is replaced by the following text:

"6.4.1 The fire protection of oil recovery ships shall be equivalent to that of oil tankers to the extent applicable for the individual ship project and, in addition, meet the requirements of 6.4.4 - 6.4.10.

On ships with tanks intended for storage of recovered oil and located forward of the superstructure in lieu of "A-60" class exterior boundaries of superstructures and deckhouses required in 2.4.3, "A-0" class constructions protected with a fixed water spraying system in accordance with 6.4.6 may be accepted.

Windows and portholes fitted with permanently hinged inside deadlights may be accepted in lieu of "A-0" class, provided that these deadlights are closed during oil recovery operations. Water-/weathertight doors constructed of steel may be accepted in lieu of "A-0" class. If these doors are fitted with portholes, deadlights shall be fitted.

The requirements of 2.4.3 for fire insulation of "A-60" class exterior boundaries, as well as the requirements of 2.4.4 and 2.4.5 for openings in these boundaries are applicable to the ships with tanks intended for storage of recovered oil aft of the superstructure, provided the exterior boundaries of superstructures and deckhouses enclosing accommodation, including any overhanging decks which support such accommodation, are situated 10 m and less of the nearest hazardous area (refer to Fig. 6.4.1 of the present Part and 19.2.3 of Part XI "Electrical Equipment") when the ship is outside the oil spill.

When exterior boundaries of superstructures and deckhouses enclosing accommodation and including any overhanging decks, which support such accommodation, are protected by a steel bulkhead screening them from the cargo area and installed at a distance of minimum 3 m from them from side to side, compliance with the requirements of 2.4.3, as well as of 2.4.4 and 2.4.5 is not required. Openings for free passage of people, ship systems piping, mooring and towing lines etc., the total area of which at each tier of a superstructure or a deckhouse shall not exceed 10 % of the area equal to the width of the side multiplied by the height of the tier of the superstructure or deckhouse, are permitted in the screening bulkhead.".

12 **New para 6.4.14** is introduced reading as follows:

"6.4.14 Requirements for arrangement of tanks intended for storage of recovered oil.

6.4.14.1 Tanks intended for storage of recovered oil shall be separated from the accommodation, service spaces as well as from machinery spaces of category A by means of: cofferdams:

fuel oil tanks;

ballast tanks or tanks for other purposes;

dry compartments, access openings to which are not located in control stations, accommodation or service spaces.

6.4.14.2 Tanks intended for storage of recovered oil (> 60 °C) adjacent to machinery space of category A may be accepted, provided the tank bulkhead is fully accessible for inspection from the side of machinery space.

6.4.14.3 Access openings to the tanks intended for storage of recovered oil and other openings leading thereto shall be located on open deck.".