

# RULES

## FOR THE CLASSIFICATION AND CONSTRUCTION OF SMALL SEA FISHING VESSELS

### PART XII REFRIGERATING PLANTS

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# **RULES FOR THE CLASSIFICATION AND CONSTRUCTION OF SMALL SEA FISHING VESSELS**

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Rules for the Classification and Construction of Small Sea Fishing Vessels of Russian Maritime Register of Shipping (RS, the Register) have been approved in accordance with the established approval procedure and come into force on 1 January 2022.

The present edition of the Rules is based on the 2021 edition taking into account the amendments and additions developed immediately before publication.

The Rules are published in the following parts:

Part I "Classification";

Part II "Hull";

Part III "Equipment, Arrangements and Outfit";

Part IV "Stability and Freeboard";

Part V "Subdivision";

Part VI "Fire Protection";

Part VII "Machinery Installations";

Part VIII "Systems and Piping";

Part IX "Machinery";

Part X "Boilers, Heat Exchangers and Pressure Vessels";

Part XI "Electrical Equipment";

Part XII "Refrigerating Plants";

Part XIII "Materials";

Part XIV "Welding";

Part XV "Automation";

Part XVI "Structure and Strength of Fiber-Reinforced Plastic Ships";

Part XVII "Radio Equipment";

Part XVIII "Navigational Equipment".

**REVISION HISTORY**

(purely editorial amendments are not included in the Revision History)

For this version, there are no amendments to be included in the Revision History.

## **1 GENERAL**

**1.1** Refrigerating plants installed on the Register-classed ships are subject to technical supervision in the following cases:

- .1** when the refrigerating plants operate on Group II refrigerant;
- .2** when the compressors with theoretical suction volume of 125 m<sup>3</sup>/h and above comprise the part of the refrigerating plants operated on Group I refrigerants (refer to Part XII "Refrigerating Plants" of the Rules for the Classification and Construction of Sea-Going Ships<sup>1</sup>);
- .3** when the refrigerating plant provides operation of the systems affecting the ship's safety.

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<sup>1</sup> Hereinafter referred to as "the Rules for the Classification".

## **2 GENERAL REQUIREMENTS**

**2.1**       Unclassified refrigerating plants shall comply with the requirements of 1.3.2.1, 1.3.2.5–1.3.2.7, 1.3.4.2, 1.3.4.3, 1.3.4.5, 1.3.4.7, 1.3.4.8, 2.2.1, 3.1.1, 3.1.4–3.1.7, 7.1.2, 7.2.1, 7.2.2, 7.2.3.2–7.2.3.4, 7.2.4.2, 7.2.4.3, 7.2.6, 7.2.7, 8.2.3, 12.2.2, 12.2.3, 12.2.6 of Part XII "Refrigerating Plants" of the Rules for the Classification.

### **3 ARRANGEMENT OF EQUIPMENT OF REFRIGERATING PLANTS**

**3.1** Equipment of the refrigerating plants may be installed in the common machinery space in case the following conditions are met:

- .1** independent ventilation system shall be provided ensuring 10 air changes per hour;
- .2** emergency ventilation shall be provided ensuring 20 air changes per hour when Group I refrigerant is used, or 30 air changes per hour when Group II refrigerant is used;
- .3** when Group II refrigerant is used, at the exit from the machinery space the water-screen system shall be provided, which shall be operated outside the space in immediate proximity to the exit;
- .4** not less than two breathing apparatus shall be provided corresponding to the type of refrigerant at the exit from the space;
- .5** the space shall be fitted with gas detection panel and refrigerant leakage alarm in compliance with 7.2.7, Part XII "Refrigerating Plants" of the Rules for the Classification.

Russian Maritime Register of Shipping

**Rules for the Classification and Construction of Small Sea Fishing Vessels**  
**Part XII**  
**Refrigerating Plants**

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