

RULES

FOR THE CLASSIFICATION AND CONSTRUCTION OF CHEMICAL TANKERS

PART III

CARGO CONTAINMENT

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RULES FOR THE CLASSIFICATION AND CONSTRUCTION OF CHEMICAL TANKERS

Rules for the Classification and Construction of Chemical Tankers of Russian Maritime Register of Shipping (RS, the Register) have been approved in accordance with the established procedure and come into force on 1 January 2023.

The present edition of the Rules is based on the 2022 edition taking into account the amendments developed immediately before publication.

The provisions of the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code) with relevant amendments thereto implemented by resolutions MSC.460(101) and MEPC.318(74) of the International Maritime Organization (IMO) have been taken into consideration in the Rules.

The Rules establish requirements, which are specific for ships carrying dangerous chemicals in bulk, and supplement the Rules for the Classification and Construction of Sea-Going Ships and Rules for the Equipment of Sea-Going Ships of Russian Maritime Register of Shipping.

The Rules are published in the following parts:

Part I "Classification";

Part II "Structure of Chemical Tanker";

Part III "Cargo Containment";

Part IV "Stability, Subdivision and Freeboard";

Part V "Fire Protection";

Part VI "Systems and Piping";

Part VII "Electrical Equipment";

Part VIII "Instrumentation";

Part IX "Materials of Construction";

Part X "Personnel Protection";

Part XI "Summary of Technical Requirements";

Part XII "Special Requirements";

The Annexes to the Rules are published separately.

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 DEFINITIONS

1.1 The cargo tank types are identified as follows:

.1 according to design:

integral tank means a cargo-containment envelope which forms part of the ship's hull and which may be stressed in the same manner and by the same loads which stress the contiguous hull structure;

independent tank means a cargo-containment envelope which is not contiguous with, or part of, the hull structure and is installed so as to eliminate its stressing or motion of the adjacent hull structure;

.2 according to design pressure:

gravity tank means a tank designed for carriage of cargo at design pressure not greater than 0,07 MPa gauge at the top of the tank. Such tanks may be either integral or independent;

pressure tank means a tank designed for carriage of cargo at design pressure greater than 0,07 MPa gauge. Such tanks shall be independent.

2 GENERAL REQUIREMENTS

2.1 Gravity tanks shall be designed for strength at design pressure which shall not be greater than 0,07 MPa gauge. When cargo with higher vapour pressure is carried a cooling system will be required.

2.2 Pressure tanks shall be designed for strength corresponding to design pressure. Their design and test methods shall comply with the requirements of Part X "Boilers, Heat Exchangers and Pressure Vessels" of the Rules for the Classification and Construction of Sea-Going Ships¹.

2.3 Attachment of independent tanks shall eliminate or minimize its stressing because of stressing or motion of the adjacent hull structures. The weight of independent tanks and the loads generated by them shall be distributed uniformly over the hull structures.

2.4 Maximum dimensions of cargo tanks shall be consistent with limit volumes of cargo specified in 1.2.1 of Part I "Classification" of the Rules for the Classification and Construction of Chemical Tankers².

2.5 Material used for tank construction shall be inert towards cargo or cargo tanks shall have protective coating which application is agreed with the Register.

2.6 Cargo tank hatch and manhole covers shall be tight and approved by the Register. Their design shall comply with the requirements of Part III "Equipment, Arrangements and Outfit" of the Rules for the Classification, as far as applicable to the dangerous cargoes.

¹ Hereinafter referred to as "the Rules for the Classification".

² Hereinafter referred to as "these Rules".

3 TANK TYPE REQUIREMENTS FOR INDIVIDUAL PRODUCTS

3.1 Tanks designed for carriage of a product which for its preservation requires heating or cooling, shall be equipped with a system to maintain the required product temperature approved by the Register. If necessary, such tanks or compartments where these tanks are located shall be segregated.

3.2 Tanks designed for carriage of incompatible products shall be separated by cofferdams, void spaces, empty tanks or tanks with mutually compatible products.

3.3 Tank types for individual products are shown in Part XI "Summary of Technical Requirements".

Russian Maritime Register of Shipping

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Part III
Cargo Containment

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