RULES
FOR THE CLASSIFICATION
AND CONSTRUCTION
OF CHEMICAL TANKERS

PART X
PERSONNEL PROTECTION

ND No. 2-020101-182-E

St. Petersburg
2023
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 PROTECTIVE EQUIPMENT

1.1 For the protection of crew members who are engaged in loading and discharging operations, the ship shall have on board protection equipment suitable to the products to be carried and consisting of the following:

- large aprons;
- special gloves with long sleeves;
- protective footwear;
- coveralls;
- tight-fitting goggles and/or face shields.

1.2 Protective equipment shall be used in any operation, which may entail danger to personnel.

1.3 In any case the number of protective equipment stored on board the chemical tanker is normally to be a minimum of three sets.

1.4 Work clothes and protective equipment shall be kept in easily accessible places and in special lockers. Such equipment shall not be kept within accommodation spaces.
2 SAFETY EQUIPMENT

2.1 Ships carrying toxic cargoes for which references to special requirements are listed in Part XI "Summary of Technical Requirements" of the Rules for the Classification and Construction of Chemical Tankers\(^1\) shall have on board sufficient (but not less than three) complete sets of safety equipment, each permitting personnel to enter a gas-filled compartment and perform emergency or repair work there for at least 20 min.

2.2 One complete set of safety equipment shall consist of the following:
   .1 one self-contained air-breathing apparatus, not using stored oxygen, of a type approved by the Register;
   .2 protective clothing, boots, gloves and tight-fitting goggles;
   .3 lifelines with a steel core and belt;
   .4 explosion-proof lamps.

2.3 For the safety equipment required in 2.1 all ships shall carry either:
   .1 one set of fully charged spare air bottles for each breathing apparatus;
   .2 a special air compressor suitable for the supply of high-pressure air of requirement purity;
   .3 a charging manifold capable of dealing with sufficient spare air bottles for the breathing apparatus or fully charged spare air bottles with a total free air capacity of 6000 l for each breathing apparatus.

2.4 CPR on ships carrying cargoes for which toxic-vapour detection equipment is required but not available shall have either:
   .1 a low-pressure line system with hose connections suitable for use with the breathing apparatus required by 2.2. This system shall provide sufficient high-pressure air capacity to supply, through pressurereduction devices, enough low-pressure air to enable two men to work in gas-dangerous space for at least 1h without using the air bottles of the breathing apparatus. Means shall be provided for recharging the fixed air bottles from a special air compressor; or
   .2 an equivalent quantity of spare bottled air in lieu of the low-pressure airline.

2.5 At least one set of safety equipment as required by 2.1 shall be kept in a suitable clearly marked locker in a readily accessible place near CPR. The other sets of safety equipment shall also be kept in suitable, clearly marked, easily accessible places.

2.6 A stretcher which is suitable for hoisting an injured person up from spaces such as CPR shall be placed in a readily accessible location.

2.7 The ship shall have on board medical first-aid equipment including oxygen resuscitation equipment and anti-dotes for cargoes carried.

2.8 Ships intended for the carriage of cargoes for which a reference to special requirements is indicated in Part XI "Summary of Technical Requirements"\(^1\) shall be provided with suitable respiratory and eye protection sufficient for every person on board for emergency escape purposes, subject to the following:
   .1 filter-type respiratory protection is acceptable, if only this filter is suitable for all cargoes the carriage of which is permitted on the ship concerned;
   .2 emergency escape respiratory protection shall have normally at least a duration of service of 15 min;
   .3 emergency escape respiratory protections shall not be used for fire-fighting or cargo-handling purposes and shall be marked to that effect.

2.9 Suitably marked decontamination showers and eyewashes shall be available on deck in convenient locations. The showers and eyewashes shall be operable in all ambient conditions expected during ship operation. Arrangement of starting shut-off valves in a heated

\(^1\) Hereinafter referred to as "these Rules".
space and drainage of liquid from piping on open deck are considered as adequate measures to ensure this requirement.