

# RULES

## FOR THE CLASSIFICATION AND CONSTRUCTION OF SEA-GOING SHIPS

### PART I CLASSIFICATION

ND No. 2-020101-174-E



**St. Petersburg**  
**2023**

# **RULES FOR THE CLASSIFICATION AND CONSTRUCTION OF SEA-GOING SHIPS**

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Rules for the Classification and Construction of Sea-Going Ships 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 2023.

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

The procedural requirements, unified requirements, unified interpretations and recommendations of the International Association of Classification Societies (IACS) and the relevant resolutions of the International Maritime Organization (IMO) have been taken into consideration.

The Rules are published in the following parts:

Part I "Classification";

Part II "Hull";

Part III "Equipment, Arrangements and Outfit";

Part IV "Stability";

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 "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships";

Part XVIII "Additional Requirements for Structures of Container Ships and Ships, Dedicated Primarily to Carry their Load in Containers". The text of the Part is identical to IACS UR S11A "Longitudinal Strength Standard for Container Ships" (June 2015) and S34 "Functional Requirements on Load Cases for Strength Assessment of Container Ships by Finite Element Analysis" (May 2015);

Part XIX "Additional Requirements for Cargo Ships of Less Than 500 Gross Tonnage";

Part XX "Additional Requirements for Yachts";

Supplement to Rules and Guidelines of Russian Maritime Register of Shipping "IACS Procedural Requirements, Unified Requirements, Unified Interpretations and Recommendations".

# REVISION HISTORY<sup>1</sup>

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

Amended paras/chapters/ sections	Information on amendments	Number and date of the Circular Letter	Entry-into-force date
<a href="#">Para 1.1.1</a>	Definition "Place of refuge" has been specified. New definition "Sea coastal ship" has been introduced. Editorial amendment (for the English version only): term "Pilot boat" is replaced by the term "Pilot ship"	312-10-1885c of 17.01.2023 311-09-1920c of 11.04.2023 —	01.02.2023 01.05.2023 01.05.2023
<a href="#">Para 1.2.2</a>	Editorial amendment: reference to the Rules for the Classification and Construction of Nuclear Ships and Nuclear Support Vessels has been specified	—	01.03.2023
<a href="#">Table 2.2</a>	In Note 7, requirements for indicating operation conditions of berth-connected ships have been specified. Editorial amendment: Preamble has been specified; in item 8, the requirement regarding sequence of other distinguishing marks in the class notation has been specified	312-10-1885c of 17.01.2023 —	01.02.2023 01.03.2023
<a href="#">Para 2.2.2.2</a>	Editorial amendment: requirements for assignment to ships and offshore installations of class notation with the character of classification <b>KM ★</b> or <b>KE ★</b> or <b>K ★</b> have been specified	—	01.05.2023
<a href="#">Para 2.2.2.3</a>	Editorial amendment: requirements for assignment to ships and offshore installations of class notation with the character of classification <b>(KM) ★</b> or <b>(KE) ★</b> or <b>(K) ★</b> have been specified	—	01.05.2023
<a href="#">Para 2.2.3.2</a>	References to Parts II "Hull" — IX "Machinery" of these Rules, Part III "Signal Means" of the Rules for Equipment of Sea-Going Ships have been specified. Descriptive notation <b>Icebreaker</b> has been introduced	312-10-1885c of 17.01.2023	01.02.2023

<sup>1</sup> Amendments and additions introduced at re-publication or by new versions based on circular letters or editorial amendments.

Amended paras/chapters/ sections	Information on amendments	Number and date of the Circular Letter	Entry-into-force date
<a href="#">Para 2.2.3.3.1</a>	Reference to Part III "Equipment, Arrangements and Outfit" of these Rules has been specified	312-10-1885c of 17.01.2023	01.02.2023
<a href="#">Para 2.2.3.3.4</a>	Descriptive notation <b>Icebreaking vessel</b> has been introduced	312-10-1885c of 17.01.2023	01.02.2023
<a href="#">Para 2.2.5.4</a>	New para has been introduced containing requirements for assignment of distinguishing marks <b>RN(SCI)</b> and <b>RN(SCII)</b> for areas of navigation of sea coastal ships	311-09-1920c of 11.04.2023	01.05.2023
<a href="#">Para 2.2.7</a>	Para has been amended regarding the description of distinguishing mark <b>OMBO</b> . Reference to the applicable requirements has been specified	312-10-1895c of 15.02.2023 311-09-1920c of 11.04.2023	01.03.2023 01.05.2023
<a href="#">Para 2.2.42.2</a>	Para has been supplemented with the requirements regarding conditions for assignment of mandatory distinguishing mark <b>COMF(N – S)</b>	312-09-1853c of 16.01.2022	01.01.2023
<a href="#">Para 2.2.54</a>	New para containing requirements for assignment of distinguishing mark <b>ETW</b> (Effective Tank Washing) has been introduced. Reference to the applicable requirements has been specified	312-09-1873c of 01.12.2022 311-09-1920c of 11.04.2023	01.01.2023 01.05.2023
<a href="#">Chapter 2.5</a>	Editorial amendment: Preamble has been specified; Table 2.5 has been completely reformatted and references to the Rules for the Equipment of Sea-Going Ships have been specified	—	01.03.2023
<a href="#">Table 2.5</a>	In item 1.4, new distinguishing marks <b>RN(SCI)</b> and <b>RN(SCII)</b> for areas of navigation of sea coastal ships have been introduced. In item 1.18, for descriptive notation <b>Berth-connected ship</b> , brief description has been specified. In item 1.18, new descriptive notations <b>Icebreaker</b> and <b>Icebreaking vessel</b> have been introduced. In item 1.18, new descriptive notation <b>Battery system</b> has been introduced.	311-09-1920c of 11.04.2023 312-10-1885c of 17.01.2023 315-22-1894c of 14.02.2023	01.05.2023 01.02.2023 01.03.2023

Amended paras/chapters/sections	Information on amendments	Number and date of the Circular Letter	Entry-into-force date
	New item 1.33 containing requirements for assignment of mandatory distinguishing mark <b>COMF (N – S)</b> has been introduced.	312-09-1853c of 16.01.2022	01.01.2023
	In item 2.24, for distinguishing mark <b>COMF (N – 1 or 2, or 3)</b> , the references to the RS requirements have been specified.	312-09-1853c of 16.01.2022	01.01.2023
	In item 2.4 for distinguishing mark <b>OMBO</b> , the brief description and references to the RS requirements have been specified.	312-10-1895c of 15.02.2023	01.03.2023
	In item 2.4, reference to the applicable requirements has been specified.	311-09-1920c of 11.04.2023	01.05.2023
	New item 2.30 containing description of distinguishing mark <b>ETW</b> (Effective Tank Washing) has been introduced.	312-09-1873c of 01.12.2022	01.01.2023
	In item 2.30, reference to the applicable requirements has been specified	311-09-1920c of 11.04.2023	01.05.2023
<a href="#">Para 3.1.2</a>	Para has been amended regarding the scope of documentation to be submitted	312-10-1898c of 17.02.2023	01.03.2023
<a href="#">Para 3.1.5</a>	Para has been amended regarding results of technical documentation review	312-10-1898c of 17.02.2023	01.03.2023
<a href="#">Para 3.1.9</a>	New para containing requirements for operational documentation has been introduced	312-10-1898c of 17.02.2023	01.03.2023
<a href="#">Chapters 3.2 — 3.5</a>	Chapter 3.2 has been completely revised and presented in a tabular form. Existing Chapters 3.2, 3.3 and 3.4 have been deleted. New Chapter 3.3 containing requirements for the scope of design documentation on ship's equipment has been introduced. Existing Chapter 3.5 has been renumbered 3.4	312-10-1898c of 17.02.2023	01.03.2023
<a href="#">Para 3.2.8</a>	Requirements for the scope of documentation to be submitted have been specified. Editorial amendment: harmonization of terminology	311-09-1922c of 12.04.2023  —	01.06.2023  01.06.2023

Amended paras/chapters/ sections	Information on amendments	Number and date of the Circular Letter	Entry-into-force date
<a href="#">Para 3.2.14</a>	Editorial amendment of 05.12.2023: misprint in Circular letter No. 312-10- 1898c of 17.02.2023 has been corrected — stamp "Agreed" has been replaced by the stamp "For information"	—	01.03.2023
<a href="#">Para 4.2.2.1</a>	Editorial amendment: requirements for assignment to refrigerating plants of class notation with the character of classification <b>REF ★</b> or <b>(REF)★</b> have been specified	—	01.05.2023
<a href="#">Para 4.3.1.1</a>	Para has been amended regarding results of technical documentation review	312-10-1898c of 17.02.2023	01.03.2023

## 1 GENERAL

### 1.1 DEFINITIONS AND EXPLANATIONS

Definitions and explanations pertinent to the general terminology used in the normative documents of the Register are given in Part I "General Regulations for Technical Supervision" of the Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships.

For the purpose of the Rules for the Classification and Construction of Sea-Going Ships<sup>1</sup> the following definitions and explanations have been adopted (unless expressly provided otherwise in particular parts of these Rules).

#### 1.1.1 Definitions.

**Barge** is a non-self-propelled cargo ship designed to be towed or pushed.

**Barge carrier (lighter carrier)** is a dry cargo ship carrying cargo in shipborne barges (lighters).

**Unmanned non-self-propelled barge (UNSP barge)** is a barge that is not propelled by mechanical means, carries no oil, has no machinery fitted that may use oil or generate oil residue (sludge), has no oil fuel tank, lubricating oil tank, oily bilge water holding tank and oil residue (sludge) tank, is not used for holding sewage during transport, has no arrangements that could produce sewage, has no systems, equipment and/or machinery fitted that may generate emissions, has no crew on board and is not intended for the carriage of persons and/or living animals.

**Tug** is a ship specially intended for the towage and pushing of other ships and floating facilities.

**Displacement of a light ship** means the displacement of a ship without cargo, fuel oil, lubricating oil, ballast, fresh and boiler feed water in its tanks, provisions, consumable stores, and also without passengers, crew and their effects.

**Cargo ship** is any ship which is not a passenger ship (dry cargo ship, tanker, refrigerated cargo ship, icebreaker, tug, pusher, salvage ship, vessel of dredging fleet, cable laying vessel, special purpose ship and another non-passenger ship).

**Hopper barge** is a self-propelled or non-self-propelled ship intended for the carriage of spoil and slurry (mixture of liquid and spoil or rock formation).

**Reid vapour pressure** is the pressure of liquid vapour established by standard procedure in the Reid tester at the temperature of 37,8 °C and at the gas to liquid volume ratio of 4:1.

**Deadweight** is the difference between the displacement of a ship at the load waterline corresponding to the summer freeboard assigned for the water with a density of 1,025 t/m<sup>3</sup> and the displacement of a light ship.

**Standby vessel** is a supply vessel intended to carry out rescue and standby services in offshore areas of hydrocarbon production.

**Dredger (suction dredger)** is a self-propelled or non-self-propelled ship intended for extraction of spoil using dredging gear (buckets, suction pipes, grabs, etc.) and having no holds for the storage or carriage of spoil. They include trailing suction hopper dredger (non-self-propelled trailing suction dredgers), multi-bucket dredgers, dipper dredgers, grab dredgers, rock dredgers, floating river-training technical units.

**Historical ship (traditional craft)** is a ship which, based on its age, its technical nature or construction, its rarity, its meaning for the preservation of traditional principles of seamanship or techniques of inland navigation or its significance for a period from a historic viewpoint, is worthy of being preserved, and is operated for demonstration purposes in particular, or a replica thereof.

**Cable laying barge** is a non-self-propelled barge intended for cable laying on the sea bottom.

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<sup>1</sup> Hereinafter referred to as "these Rules".

Cable laying vessel is a self-propelled vessel intended for cable laying on the sea bottom.

Catamaran is a ship with two hulls connected by means of deck or truss centrebody.

Combination carrier is a ship intended for the carriage of crude oil and petroleum products in bulk, as well as bulk cargoes (by these ships are meant ore/oil carriers, oil/bulk dry cargo carriers and similar ships).

Container ship is a ship intended for the carriage of goods in containers of the international standard and provided with the cellular guides in the holds.

Replica of a historical ship is a ship which was largely built from original materials, using an appropriate construction method according to plans or templates as a historical ship.

Crane ship is a construction similar to the floating crane, but on a floating hull with ship lines or lines of a similar shape.

Ice breaker is a self-propelled ship intended for various types of icebreaking operations to maintain navigation in the freezing seas (for details refer to [2.2.3.1.1](#)).

Timber carrier is a dry cargo ship intended for the carriage of deck timber cargo.

Pilot ship is a boat intended for transportation and safe embarkation/disembarkation of pilots from one board to another.

Buoy vessel is a vessel intended for laying of floating aids to navigation (navigation marks) in the port approaches and in the harbour, their maintenance in the harbour and retrieval as well as to perform a range of auxiliary functions.

Place of refuge is any naturally or artificially sheltered aquatorium which may be used as a shelter by a ship under conditions likely to endanger the safety of the ship.

The Register establishes maximum allowable distances from the places of refuge, availability and accessibility of which for different types of ships and offshore installations are determined by the Maritime Administration of the state to which area of responsibility these places of refuge relate and/or by duly authorized competent bodies (refer to IMO resolution A.949(23) as amended).

Bulk carrier is a ship which is intended primarily to carry dry cargoes in bulk, including such types as ore carriers and combination carriers. To apply the term "bulk carrier" correctly, one should be guided by the provisions of IMO resolution MSC.277(85).

Roll-on/roll-off (ro-ro) ship is a ship which has one or more decks either closed or open and cargo spaces intended for loading and unloading the cargo by roll-on/roll-off (ro-ro cargo spaces), subdivided in any way and extending to either a substantial length or the entire length of the ship, spaces in which motor vehicles with fuel in their tanks for their own propulsion, and/or goods packaged (in tare or in bulk, on rail or road cars, vehicles (including road or rail tanks), trailers, containers, pallets, demountable tanks or similar enlarged units, or other tanks) are normally loaded and unloaded in a horizontal direction.

Note. At transportation of road vehicles it is also recommended to follow the provisions of IMO resolution MSC.479(102) "Revised Guidelines for Securing Arrangements for the Transport of Road Vehicles on Ro-Ro Ships".

Tanker is a ship intended for the carriage of liquid cargoes in bulk, including:

special tanker is a ship intended for the bulk carriage of liquid cargoes other than oil, petroleum products and noxious liquid substances. Such ships include wine tankers, water tankers, fruit juice tankers, etc. The precise purpose of the special tanker is stated by the descriptive notation in the class notation in accordance with [2.5](#);

NLS tanker is a ship constructed or adapted to carry a cargo of noxious liquid substances (NLS) in bulk and includes an "oil tanker" as defined in Annex I to MARPOL 73/78 when certified to carry a cargo or part cargo of noxious liquid substances in bulk;



oil tanker is a ship constructed or adapted primarily to carry oil in bulk in its cargo spaces and includes combination carriers, any NLS tanker and any gas carrier as defined in regulation 3.20 of Chapter II-1 of SOLAS-74 (as amended), when carrying a cargo or part cargo of oil in bulk.

Note. Oil means petroleum in any form including crude oil, fuel oil, sludge, oil refuse and refined products (other than those petrochemicals which are subject to the provisions of Annex II of MARPOL 73/78) and, without limiting the generality of the foregoing, includes the substances listed in Appendix I to Annex I of MARPOL 73/78;

oil tanker (>60 °C) is a sea-going ship intended for the carriage of petroleum products having a flash point over 60 °C in bulk;

oil tanker (>55 °C) is a ship of inland navigation intended for the carriage of petroleum products having a flash point over 55 °C in bulk;

oil recovery ship is a ship intended for recovery of crude oil and petroleum products having a flash point of 60 °C or below from the sea surface;

oil recovery ship (>60 °C) is a ship intended for recovery of crude oil and petroleum products having a flash point above 60 °C from the sea surface;

bilge water removing ship is a ship designed to remove the bilge water from the machinery spaces of ships.

Buoyance vessels are multi-purpose vessels, sounding vessels, trawlers, buoy tenders, environmental monitoring vessels, boom-laying boats. Buoyance vessels assist in maintenance of fairway conditions in waterways and fairway aids to navigation (navigation marks), study of channel and hydrological regimes for identification of sources and reasons of drifts, development of proposals on improvement of navigational conditions, provision of real-time technical documentation for all types of engineering channel works (monitoring of fairway condition in inland waterways and in the harbours, monitoring of fairway aids to navigation (navigation marks), control of navigation lights, positioning and retrieval of aids to navigation (navigation marks) as well as their relocation when changing the fairways boundaries; maintenance of fairway marking and repair of light and signal means).

Passenger is every person other than the master and the members of the crew or other persons employed or engaged in any capacity on board a ship (special personnel) on the business of that ship, and a child under one year of age.

Passenger ship is a ship intended for or carrying more than 12 passengers.

Roll-on/roll-off passenger ship (ro-ro passenger ship) is a passenger ship with enclosed or open cargo spaces which are loaded/unloaded in a horizontal direction, or with special category spaces as defined in 1.5.4.3 and 1.5.9 of Part VI "Fire Protection".

Classed among passenger ro-ro ships are also ferries, i.e. ships loaded/unloaded in the horizontal direction which regularly carry passengers and which carry vehicles with fuel in their tanks and/or railway carriages on open and/or enclosed decks at ferry crossings.

Floating crane is a crane structure on a floating hull of pontoon or similar type, which is intended for cargo handling or other working operations (mounting, undersea, hydraulic engineering, salvage, pipe laying, etc.) and may be also used for the carriage of cargoes on deck and/or in the hold.

Lightship is a non-self-propelled ship having special equipment (light appliances, fog signaling arrangements, radar beacons, etc.) intended for bounding navigational hazards and ships orientation to ensure safety of navigation.

Floating museum is a non-self-propelled floating facility, which has been moored at a quay for extended period of time, used for cultural purposes and not engaged in any carriage.

Semi-submersible ship (Docklift ship) is a dry cargo ship designed for the carriage of heavy and/or bulky cargoes for loading/unloading of which the docking method (FLO/FLO — float-on/float-off) is used.

Polar waters — includes both Arctic waters and the Antarctic area:

.1 Arctic waters are those waters which are located north of a line from the latitude  $58^{\circ}00',0$  N and longitude  $042^{\circ}00',0$  W to latitude  $64^{\circ}37',0$  N, longitude  $035^{\circ}27',0$  W and thence by a rhumb line to latitude  $67^{\circ}03',9$  N, longitude  $026^{\circ}33',4$  W and thence by a rhumb line to the latitude  $70^{\circ}49',56$  N and longitude  $008^{\circ}59',61$  W (Sørkapp, Jan Mayen) and by the southern shore of Jan Mayen to  $73^{\circ}31',6$  N and  $019^{\circ}01',0$  E by the Island of Bjørnøya, and thence by a great circle line to the latitude  $68^{\circ}38',29$  N and longitude  $043^{\circ}23',08$  E (Cap Kanin Nos) and hence by the northern shore of the Asian Continent eastward to the Bering Strait and thence from the Bering Strait westward to latitude  $60^{\circ}$  N as far as Il'pyrskiy and following the 60th North parallel eastward as far as and including Etolin Strait and thence by the northern shore of the North American continent as far south as latitude  $60^{\circ}$  N and thence eastward along parallel of  $0^{\circ}$  N, to longitude  $056^{\circ}37',1$  W and thence to the latitude  $58^{\circ}00',0$  N, longitude  $042^{\circ}00',0$  W (refer to [Fig. 1.1.1-1](#));



Fig. 1.1.1-1  
Maximum extent of Arctic waters application<sup>1</sup>

.2 Antarctic area is the sea area south of latitude  $60^{\circ}$  S (refer to [Fig. 1.1.1-2](#)).

<sup>1</sup> It should be noted that this Figure is for illustrative purposes only.

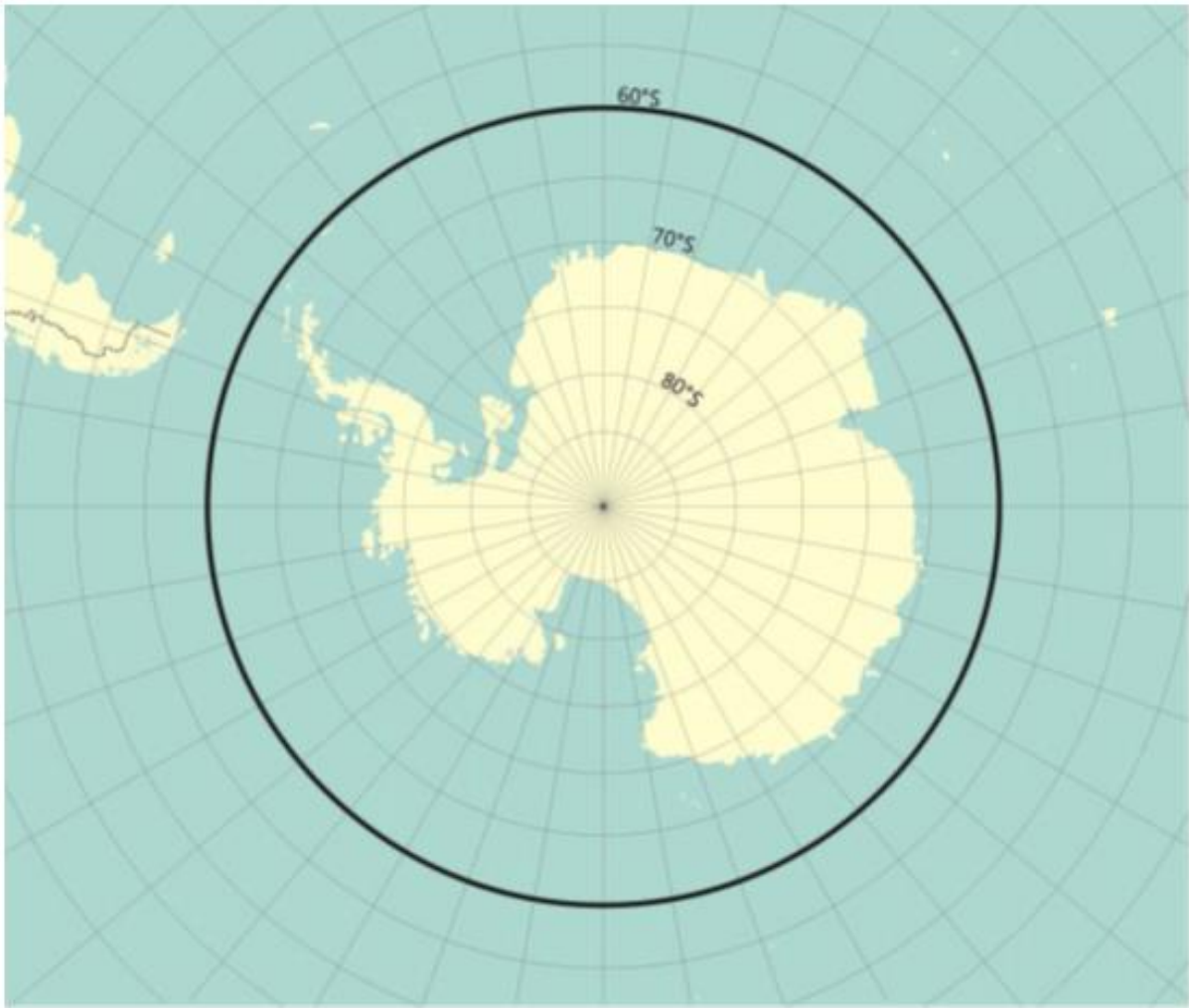


Fig. 1.1.1-2  
Maximum extent of Antarctic area application<sup>1</sup>

Crew boat is a boat intended for travelling and for the carriage of not more than 12 passengers and which is not a passenger ship or a pleasure craft.

Ore carrier is a ship primarily designed for the carriage of ore, the structure of which includes longitudinal bulkheads separating the central double bottom ore hatches from the side ones.

Fishing vessel is a vessel used directly for catching or for catching and processing the catch (fish, whales, seals, walrus or other living resources of the sea).

Self-propelled ship is a ship fitted with an operating propulsion plant.

Salvage ship is a self-propelled ship intended for rendering assistance to ships in distress at sea.

Special personnel means all persons who are not passengers or members of the crew or children of under one year of age and who are carried on board in connection with the special purpose of that ship or because of special work being carried out aboard that ship. Special personnel include the following:

scientists, technicians and expeditionaries on ships engaged in research, non-commercial expeditions and survey;

<sup>1</sup> It should be noted that this Figure is for illustrative purposes only.

personnel engaged in training and practical marine experience to develop seafaring skills suitable for a professional career at sea;

personnel who process the catch of fish, whales or other living resources of the sea on factory ships not engaged in catching;

salvage personnel on salvage ships, cable-laying personnel on cable laying vessels, seismic personnel on seismic survey ships, diving personnel on diving support ships, pipe-laying personnel on pipe laying vessels and crane operating personnel on floating cranes and crane ships;

other personnel similar to those referred to above who, in the opinion of the Flag State Maritime Administration, may be referred to this group.

**Berth-connected ship** is a ship or floating facility, which is in operation when lying at anchor at a water area distanced from the shore or aground or when moored at quay. These ships include floating docks, floating power plants, floating warehouses, floating oil storages, floating facilities with not more than 12 passengers on board as well as passenger floating facilities designed to take more than 12 passengers (such as for example floating hotels, hostels, restaurants, museums, workshops and the like), etc.

**LNG bunkering ship** is a gas carrier engaged in transportation of liquefied natural gas (LNG) and intended to ensure the transfer of LNG on board the ships using LNG as a fuel.

**Anchor handling vessel** is a supply vessel equipped for servicing (handling, heaving up and shifting) anchors.

**Deck carrier** is a ship designed for the carriage of general cargoes on the open deck.

**Sea coastal ship** is a self-propelled or non-self-propelled ship designed for operation in coastal sea areas and on inland waterways, taking into account the restrictions on the navigation conditions (boundaries of the navigation area, navigation season, permissible wave height with 3 % probability of exceeding level).

**Supply vessel** is a vessel designed basically for the carriage of supplies and cargoes to the mobile and fixed offshore units intended for the different purposes, and fitted generally with a forward superstructure and an after weather cargo deck for processing of the cargo at sea. The ship may be used for towing operations provided the appropriate requirements of the RS rules are complied with.

**General dry cargo ship** is a dry cargo ship intended primarily for the carriage of different package cargoes and goods (products) that are carried in packages. Such ships may periodically (i.e. not primarily) carry cargoes in bulk provided the applicable provisions of the RS rules for the carriage of bulk cargoes and, if applicable, IMO resolution MSC.277(85), as amended, are met. The ships in which the cargo loading operations are performed preferably in a horizontal direction, shall also comply with the requirements applied for a roll-on/roll-off ship (ro-ro ships). The ships in which the cargo loading operations are performed preferably in a vertical or combined direction (lo-lo ships (lift on/lift off ships), lo-ro ships) shall comply with the requirements of the RS rules, IACS and IMO normative documents related to bow, side, stern doors, ramps and inner doors and relevant requirements for ro-ro ships (as applicable). Such ships are multipurpose ships.

**Ship intended primarily to carry dry cargo in bulk** is a ship classified as a bulk carrier and her loading conditions are primarily related to bulk cargoes transportation (carriage, loading and discharge).

**Waste disposal collector vessel (collector ship, surface debris collector, etc.)** is a ship intended for reception from other ships oil residues, oily bilge waters, sewage, dry garbage and other waste for their subsequent discharge into the shore-based reception facilities.

**Ship of river-sea navigation** is a ship intended for navigation at sea and on inland waterways.

Special purpose ship is a mechanically self-propelled ship which, by reason of its function, carries on board more than 12 special personnel, including passengers (the latter shall not exceed 12 passengers, otherwise such ship should not be considered a special purpose ship as it is a passenger ship). Such ships include research, expedition, hydrographic, training ships; whale and fish factory ships, factory ships and other ships engaged in processing of living resources of the sea and not engaged in catching; salvage ships, cable laying vessels, seismic survey ships, diving support ships, pipe laying vessels, floating cranes and crane ships.

Technical and auxiliary fleet vessel is a ship designed for maintenance of ships and waterways, port facilities, underwater mining etc. (dredgers, suction dredgers, rock dredgers, snag boats and river-training ships, hopper barges, multicats, buoy vessels, buoyance vessels and crew boats designed for navigation support, ecological monitoring and analysis of water environment, bottom soil and ambient air).

Shipborne barge (lighter) is a non-self-propelled cargo ship unmanned and appropriated for transportation in specially equipped ships (barge and lighter carriers) and for towing (pushing) within the specified restricted area of navigation.

Dry cargo ship is a ship intended for the carriage of different cargoes (general cargoes, containers, timber, bulk cargoes, etc.), except for the liquid bulk cargoes.

Pontoon for technological services is a non-self-propelled unmanned ship intended for working operations and having no hatches on deck, except for small manholes for access into the hull, which are closed by covers with seal gaskets.

Refrigerated cargo ship is a ship intended for the carriage of perishable commodities which require temperature control in cargo spaces and/or thermally insulated containers. Types of carried goods are fruit (bananas, etc.), meat, fish, vegetables, dairy products and other items.

Pontoon is a non-self-propelled unmanned ship intended for the carriage of deck cargo and having no hatches on deck, except for small manholes for access into the hull, which are closed by covers with seal gaskets.

Pipe laying barge is a non-self-propelled barge intended for laying the pipelines on the seabed.

Pipe laying vessel is a self-propelled vessel intended for laying the pipelines on the seabed.

Hopper dredger is a self-propelled or non-self-propelled ship intended for the extraction of spoil using dredging gear (buckets, suction pipes, grabs, etc.) and having holds for the storage or carriage of spoil.

Crew means all persons carried on board the ship to provide navigation and maintenance of the ship, its machinery, systems and arrangements essential for propulsion and safe navigation or to provide services for other persons on board.

Crew of a fishing vessel means persons engaged in any business on board a ship connected with its purpose.

Environmental monitoring vessel is a ship intended for monitoring of coastal zone of water basins.

Escort tug is a tug intended for escort service (steering, braking and otherwise controlling the assisted ship).

Definitions of particular types of ships (nuclear ships and offshore installations, nuclear support vessels, high-speed craft, dynamically supported craft, small WIG craft, gas carriers, chemical tankers, pleasure craft, drilling ships, mobile offshore drilling units and fixed offshore platforms, floating offshore oil-and-gas product units, manned submersibles and diving systems, small craft, sport sailing vessels) are given in the relevant RS rules for such types of ships.

The list of the RS rules is given in 1.3 of the General Regulations for the Classification and Other Activity.

### **1.1.2 Explanations.**

For the purpose of these Rules classification means development, publication and application of the rules continuous compliance with which will, along with the proper maintenance of the ship by the owner or by the operator, ensure:

structural strength and integrity of the hull and its elements including structural fire protection; seaworthiness (stability) of the ship under all specified loading conditions and under particular sea-and-wind conditions;

safe and reliable operation of its propulsion plant, systems and devices for ship control, other systems, auxiliary machinery and equipment including fire-fighting equipment, and thereby permit safe operation of the ship in accordance with its purpose.

**Date of contract for construction of a ship (series of ships):**

**.1** the date of "contract for construction" of a ship is the date on which the contract to build the ship is signed between the prospective owner and the shipbuilder. This date and the construction numbers (i.e. hull numbers) of all the ships included in the contract shall be declared to the Register by the party applying for the assignment of class to a newbuilding;

**.2** the date of "contract for construction" of a series of ships, including specified optional ships for which the option is ultimately exercised, is the date on which the contract to build the series is signed between the prospective owner and the shipbuilder.

Ships built under a single contract for construction are considered a "series of ships" if they are built to the same approved plans for classification purposes. However, ships within a series may have design alterations from the original design provided:

**.2.1** such alterations do not affect matters related to classification; or

**.2.2** if the alterations are subject to classification requirements, these alterations shall comply with the classification requirements in effect on the date on which the alterations are contracted between the prospective owner and the shipbuilder or, in the absence of the alteration contract, comply with the classification requirements in effect on the date on which the alterations are submitted to the Register for approval.

The optional ships will be considered part of the same series of ships if the option is exercised not later than 1 year after the contract to build the series was signed;

**.3** if a contract for construction is later amended to include additional ships or additional options, the date of "contract for construction" for such ships is the date on which the amendment to the contract, is signed between the prospective owner and the shipbuilder. The amendment to the contract shall be considered as a "new contract" to which the above explanations apply;

**.4** if a contract for construction is amended to change the ship type, the date of "contract for construction" of this modified ship or ships is the date on which revised contract or new contract is signed between the shipowner, or shipowners and the shipbuilder.

**Notes:** 1. By optional ships, ships are meant, which are included in the contract with the condition of the additional confirmation of their construction (order) by a prospective owner.

2. This explanation became effective on 1 July 2009.

**Additional requirements** are the requirements caused by the item features or its operational conditions, which are not stipulated by the rules imposed by the Register in writing to ensure the safety of items of technical supervision.

**Measurement of distances** — unless explicitly stipulated otherwise in the text of the regulations in SOLAS Convention, International Convention on Load Lines and MARPOL Convention and any of their mandatory Codes, as well as in the text of the RS rules and guidelines, distances (such as tank length, height, width, ship (or subdivision or waterline) length, etc.) shall be measured by using moulded dimensions.

**Register class (class)** is a combination of conventional characters and descriptive notations assigned to the ships, other floating facilities, as well as to fixed offshore platforms, which define their structural features, purpose and operational conditions stipulated by the RS rules.

**Operator** is a physical person or legal entity operating a ship on the basis of a contract concluded with an owner or shipowner.

**Rules (the RS rules)** are the set of the regulating and technical requirements for objects under technical supervision.

The RS rules are listed in 1.3, General Regulations for the Classification and Other Activity.

**Recognized standards** are national and international standards referred to in the appropriate parts of the RS rules.

**Owner** is a physical person or legal entity having proprietary rights to a ship irrespective of the fact whether he (she) or it operates the ship on his (her) or its own, or has placed it in the operation of another person or entity whether on the fiduciary or some other legal basis.

**Dual class** is a class of a ship classed with two societies entered into Dual Classification Agreement.

**Agreed standards** are national and international standards, as well as standards of firms (organizations) specified in the Register approved technical documentation on materials and products, and agreed upon by the Register in compliance with the requirements of Part II "Technical Documentation" of the Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships.

**Special consideration** is the determination of the extent, to which an object under technical supervision meets the additional requirements.

**Ship under construction** is a ship during a period from the keel laying date till the date of issuing the documents for a ship.

**Keel laying date** means: the date (day, month, year) on which the installation at the building berth of a base section or block (island) in section or block (island) construction respectively, or such a stage of construction at which construction identifiable with a specific ship begins and assembly of that ship has commenced comprising at least 50 or 1 % of the estimated mass of all structural materials, whichever is less.

For fiber-reinforced plastic (FRP) ships, the keel laying date shall be interpreted as the date that the first structural reinforcement of the complete thickness of the approved laminate schedule is laid either in or on the mould.

**Ship in service** is a ship which is not under construction.

**Shipowner** is a physical person or legal entity operating a ship on his (her) or its own behalf irrespective of the fact whether he (she) or it is the owner or is operating the ship on some other legal basis.



## **1.2 APPLICATION**

**1.2.1** Rules for the Classification and Construction of Sea-Going Ships apply to:

- .1** self-propelled passenger and cargo ships with the main engines of output 55 kW and upwards;
- .2** non-self-propelled ships of 80 gross tonnage and upwards, and in case of availability of machinery and equipment of total power output of prime movers 100 kW and upwards — irrespective of their gross tonnage;
- .3** materials and products that shall be installed on the above ships (lists of relevant materials and products are given in the appropriate parts of these Rules);
- .4** ship refrigerating plants stated in [4.1.1](#) of this Part.

**1.2.2** These Rules also apply to the following types of ships and offshore installations to the extent specified in the relevant rules for their classification and construction:

- .1** nuclear ships and floating facilities (refer to the Rules for the Classification and Construction of Nuclear Ships and Nuclear Support Vessels);
- .2** nuclear support vessels (refer to the Rules for the Classification and Construction of Nuclear Ships and Nuclear Support Vessels);
- .3** gas carriers (refer to the Rules for the Classification and Construction of Ships Carrying Liquefied Gases in Bulk and Rules for the Classification and Construction of Ships Carrying Compressed Natural Gas);
- .4** chemical tankers (refer to the Rules for the Classification and Construction of Chemical Tankers);
- .5** mobile offshore drilling units and fixed offshore platforms (refer to the Rules for the Classification, Construction and Equipment of Mobile Offshore Drilling Units and Fixed Offshore Platforms);
- .6** high-speed craft (refer to the Rules for the Classification and Construction of High-Speed Craft);
- .7** type A WIG craft (refer to the Rules for the Classification and Construction of Type A WIG Craft);
- .8** manned submersibles, ship's diving systems (refer to the Rules for the Classification and Construction of Manned Submersibles and Ship's Diving Systems);
- .9** pleasure craft (refer to the Rules for the Classification and Construction of Pleasure Craft);
- .10** small sea fishing vessels (refer to the Rules for the Classification and Construction of Small Sea Fishing Vessels);
- .11** floating offshore oil-and-gas product units (refer to the Rules for the Classification and Construction of Floating Offshore Oil-and-Gas Product Units (hereinafter referred to as the "FPU Rules ") and the Rules for the Equipment of Floating Offshore Oil-and-Gas Product Units (hereinafter referred to as the "FPU Equipment Rules"))).

**1.2.3** With the Register consent, these Rules may be applied for the classification of ships not specified in [1.2.1](#) and [1.2.2](#).

**1.2.4** These Rules apply to special purpose ships of not less than 500 gross tonnage. On agreement with the Register, the requirements of these Rules may also apply as far as reasonable and practicable to special purpose ships of less than 500 gross tonnage.

**1.2.5** These Rules set down the requirements regulating the assignment of class to a ship or a shipboard refrigerating plant.

**1.2.6** Confirmation of compliance with the requirements of the RS rules is the Register prerogative and is carried out in accordance with the procedure established by it.

Any statements to the effect a supervised item complies with the RS rules requirements, which are made or documentally supported by a body other than the Register and which are not confirmed by the latter in accordance with the established procedure, cannot be considered as evidence of such a compliance.



### **1.3 COMPLIANCE WITH STATUTORY REQUIREMENTS**

**1.3.1** As far as practicable, the RS rules consider the requirements of international conventions and codes coming within the Register terms of reference (refer to 2.5, General Regulations for the Classification and Other Activity). Some of them are directly incorporated in the text of the RS rules, while others are referred to in the text of the RS rules.

## **2 CLASS OF A SHIP**

### **2.1 GENERAL**

**2.1.1** Assignment of the Register class to a ship means confirmation by the Register that the ship construction complies with the applicable requirements of the RS rules and its technical condition complies with the conditions of the ship operation; the ship is registered with the Register for a specified period with performing the surveys stipulated by the Rules for the Classification Surveys of Ships for this period.

**2.1.2** The Register may assign a class to a ship proceeding from the results of survey during its construction, as well as assign or renew a class to a ship in service.

**2.1.3** Renewal of a ship's class means confirmation by the Register that the ship and her technical condition comply with the provisions based on which a class has been previously assigned as well as issuance of the Register documents for a period as required by the Rules for the Classification Surveys of Ships in Service.

**2.1.4** Class of a ship is, generally, assigned or renewed by the Register for 5 years, however, in sound cases the Register may assign or renew a class for a lesser period.

**2.1.5** If a ship has the valid Register class, this means that the ship's technical condition in full measure or to a degree considered adequate by the Register complies with the requirements of the RS rules, which apply to it according to its purpose, operating conditions and class notation. The validity of the ship's class shall be confirmed by the valid Classification Certificate or the Statement of Laid-up Ship (in case the ship is laid up in compliance with the requirements of 4.10 of Part II "Survey Schedule and Scope" of the Rules for the Classification Surveys of Ships in Service) available on board.

**2.1.6** Classification Certificate becomes invalid and classification is automatically suspended in the following cases:

**.1** when the ship as whole or her separate elements have not been subjected to scheduled periodical or occasional surveys in specified terms (if the special survey has not been completed or the ship is not under attendance for completion prior to resuming trading, by the due date);

**.2** if the annual survey has not been completed within three (3) months of the due date of the annual survey;

**.3** if the intermediate survey has not been completed within three (3) months of the due date of the third annual survey in each periodic survey cycle;

**.4** unless the ship is under attendance for completion of the relevant survey if in the RS rules it is not required otherwise;

**.5** after an accident (the ship shall be submitted for occasional survey at port where the accident took place or at the first port of call, if the accident took place at sea);

**.6** when alterations not agreed with the Register have taken place in the ship structure, equipment and outfit and her arrangements;

**.7** when repair, modernization/conversion of a ship or ship's elements have been performed without approval and technical supervision by the Register;

**.8** when a ship navigates with a draught exceeding that specified by the Register for specific conditions as well as in case of operation of a ship in conditions which do not comply with the requirements for assigned class of a ship or the restrictions specified by the Register;

**.9** when the prescribed specific requirements, which during previous survey of the ship were the conditions for assignment or retainment of the Register class, have not been fulfilled within the specified period;

**.10** when the process of surveying the ship by the Register has been suspended on the shipowner's initiative or through his (her) or its fault;

**.11** when the ship has been taken out of service for a long period (more than 3 months) for fulfilment of the Register requirements (except the case when a ship is under repair for these purposes);

- .12 in case of the ship's seizure by pirates;
- .13 after the ship was abandoned by the crew.

The Register shall specially notify the shipowner of suspension of a ship's class and Classification Certificate.

**2.1.7** Ship class and Classification Certificate may be suspended following a decision made by the Register when the commitments to the Register (including those on payment for its services) fail to be performed or are improperly performed as well as in other cases specified in the RS rules.

**2.1.8** Suspended (as stated in [2.1.6](#)) class of a ship may be reinstated on the basis of satisfactory results of the appropriate periodical or occasional survey carried out by the Register in the case of ship to be submitted for survey. In so doing when the ship is taken out of service for a long period (more than 3 months), the scope of survey for reinstatement of a ship's class shall be specially established by the Register taking into account the age and condition of the ship as well as the period for which she is taken out of service.

During the period from suspension of class to its reinstatement or renewal, the ship is considered to have been lost the Register class. In case of class suspension, the Classification Certificate becomes invalid. The class may be suspended for a period of no more than six months unless expressly provided otherwise by the RS rules and normative documents.

**2.1.9** The class of a ship is withdrawn by the Register in the following cases:

- .1 upon expiration of the maximum term of class suspension;
- .2 when the Register and/or shipowner consider reinstatement of the class suspended as stated in [2.1.6](#) to be impossible;
- .3 upon transfer of the ship to the class of another classification body;
- .4 at the request of the shipowner;
- .5 due to ship's loss or her decommissioning as well as in case of obtaining information from the shipowner on the ship demolition or selling for scrapping.

Withdrawal of the ship's class means termination of technical supervision by the Register and invalidation of the Classification Certificate.

**2.1.10** After assignment of class, the Register introduces the sea-going self-propelled ships of 100 gross tonnage and upwards into the Register of Ships and excludes them in case of withdrawal of class.

## 2.2 CLASS NOTATION OF A SHIP. MANDATORY AND OPTIONAL DISTINGUISHING MARKS AND DESCRIPTIVE NOTATIONS IN THE CLASS NOTATION ASSIGNED BY RUSSIAN MARITIME REGISTER OF SHIPPING

Ships and offshore installations, complying fully or to a degree considered adequate by the Register with the relevant requirements of the RS rules, are assigned the RS class with the class notation as specified below.

The class notation assigned by the Register to a ship or offshore installation consists of the character of classification, descriptive notations and mandatory/optional distinguishing marks defining structure and purpose of a ship or offshore installation.

The character of classification, descriptive notations and mandatory distinguishing marks stipulate requirements for the following:

- availability of main functions and the safety of installations supporting the main functions;
- structural strength and integrity of essential parts of the ship's hull and the offshore installation;
- safety of machinery installations, systems, mechanisms and equipment supporting non-main functions that constitute possible hazards to personnel and ship.

Optional distinguishing marks include requirements to safety levels and availability of equipment beyond those of the character of classification and mandatory distinguishing marks and descriptive notations.

The sequence of descriptive notations as well as mandatory and optional (if any) distinguishing marks being added in the class notation of a ship is set down by the provisions of this Chapter as well as by relevant provisions concerning the class notation included in rules for the classification and construction of ships of special types, as listed under [1.2.2](#), with account of [Table 2.2](#).

The summary information on distinguishing marks and descriptive notations is given in [2.5](#).

Table 2.2

Example of class notation

Sequence of indication of distinguishing marks and descriptive notations in class symbol	RS distinguishing marks and descriptive notations
1. Character of classification	<b>KM</b>
2. Construction symbol of ship classed with the Register, ACS <sup>1</sup> or without supervision by a CS <sup>2</sup>	⊗ ★ ⊗★
3. Ice class mark (if any). Distinguishing mark for double acting ships DAS, if applicable	<b>Arc4 (hull; machinery)</b> <b>DAS (&lt;ice class mark&gt;)</b>
4. Baltic ice class or IACS polar class (if any)	<b>IA Super</b>
5. Subdivision distinguishing mark	<b>1</b> <b>2</b>
6. Distinguishing mark for restricted areas of navigation (if any)	<b>R1</b>
7. Distinguishing automation mark (if any)	<b>AUT2</b>
8. Other distinguishing marks in a specific sequence (as applicable and in order according to 2.2 and Table 2.5, taking into account the Notes to Table 2.2)	<b>FF3WS</b> <b>DYNPOS-2</b> <b>COMF(N – 3; V – 3)</b>
9. Descriptive notation (as applicable)	<b>Oil recovery ship</b> <b>Supply vessel (OS)</b> <b>Tug</b>
10. Distinguishing marks related to survey arrangement	<b>(ESP), TMS</b> etc.
Notes: 1. If ships or offshore installations are fitted with a nuclear power unit and comply with the requirements of the Rules for the Classification and Construction of Nuclear Ships and Nuclear Support Vessels and these Rules, the symbol ☒ is added before the character of classification.	

Sequence of indication of distinguishing marks and descriptive notations in class symbol	RS distinguishing marks and descriptive notations
<p>2. If the scope of the RS rules requirements which a ship complies with allows, two and more descriptive notations may be stated in the class notation of a ship (e.g. <b>Supply vessel, Salvage ship, Tug</b>), or the descriptive notation may be written as a combination of descriptive notations (e.g. <b>Oil/bulk carrier, Oil/bulk/ore carrier</b>, etc.).</p> <p>3. For self-propelled ships, when adding descriptive notations to the character of classification such as <b>Chemical tanker, Oil tanker, Bulk carrier, Self-unloading bulk carrier, Ore carrier</b> or their combinations (<b>Oil/bulk carrier, Oil/ore carrier</b>, etc.), the distinguishing mark (<b>ESP</b>) shall be mandatory added after the descriptive notation. This means the necessity to survey these ships based on the Enhanced Survey Programme. For example: <b>Oil/ore carrier (&gt; 60 °C) (ESP)</b>.</p> <p>4. For oil tankers and bulk carriers fully complying with the requirements of the Common Structural Rules for Bulk Carriers and Oil Tankers<sup>1</sup>, the distinguishing mark <b>CSR</b> shall be mandatory added after descriptive notation.</p> <p>5. When particular scope of the RS rules requirements, serving as the basis for introduction of the appropriate distinguishing marks in the class notation, is met only under limitations specified by the Register, the limitations, exceeding which these distinguishing marks will become invalid, shall be indicated in the class notation in brackets after such distinguishing marks, e.g. <b>KM ⊕ Arc7 (hull at <math>d \leq 8,44</math> m; machinery) <sup>2</sup> (at <math>d \leq 8,4</math> m) AUT2 Ro-ro ship</b>.</p> <p>At the shipowner's discretion, at the assignment of ice class limitation for ships, maximum draught in fresh water, at which the RS requirements for the specified ice class are complied with, may be additionally indicated, e.g. <b>Arc7 (hull at <math>d/d_f \leq 11,0</math> m/11,265 m; machinery)</b>, where <math>d_f</math> is the maximum draught in fresh water at which the requirements for ice class are met and which is determined as the sum of draught <math>d</math> and fresh water allowance in accordance with Formula (4.5.5.1) of the Load Line Rules for Sea-Going Ships.</p> <p>6. In the class notations of nuclear ships and offshore installations, nuclear support vessels, gas carriers, chemical tankers, high-speed craft, type A WIG craft, small sea fishing vessels, mobile offshore drilling units, fixed offshore platforms, floating offshore oil-and-gas product units, manned submersibles and diving systems, sea-going pleasure craft, the distinguishing marks and descriptive notations shall be inserted in conformity with the provisions of rules for the classification and construction of the relevant types of ships (refer to <a href="#">1.2.2</a>).</p> <p>7. For ships with descriptive notation <b>Berth-connected ship</b>, operation conditions (one of the following conditions: aground (<b>G</b>) — ground or moored at quay (<b>S</b>) — shore, or when at a water area distanced from the shore (<b>W</b>) — waters) are indicated in brackets, and the descriptive notation <b>Berth-connected ship</b> is followed by the statement of ship or offshore installation purpose from those listed in the definition "Berth-connected ship" (refer to <a href="#">1.1.1</a>), or otherwise. If the berth-connected ship complies with the relevant requirements of these Rules for different operation conditions, the operation conditions are listed in brackets after the descriptive notation and separated by comma, for example: (<b>W, S</b>). Descriptive notation <b>Berth-connected ship (operation condition) floating oil storage</b> may be added in each particular case upon agreement with the Register Head Office (RHO) and, if necessary, upon agreement with the Flag State Maritime Administration in the class notation of a ship complying with the requirements for an oil tanker, which cannot be classified as FSO in accordance with the Rules for the Classification and Construction of Floating Offshore Oil-and-Gas Product Units (FPU) (refer also to FSU according to IMO resolution MEPC.311(73)), and intended only for loading/unloading and storage of oil and petroleum products. Previously assigned descriptive notation (e.g. <b>oil tanker (ESP)</b>) may be retained at the shipowner's discretion provided the RS requirements relating to such descriptive notation or distinguishing mark are complied with.</p> <p>8. Floating museums are assigned descriptive notation <b>Berth-connected floating museum (operation condition)</b>, and additionally, operation conditions: moored at quay (<b>S</b>) — shore, is indicated in brackets.</p> <p>9. Classification of small craft consists in establishing a category of navigation in accordance with the Rules for the Classification and Survey of Small Craft.</p>	

<sup>1</sup> Hereinafter referred to as "the Common Structural Rules".

Sequence of indication of distinguishing marks and descriptive notations in class symbol	RS distinguishing marks and descriptive notations
10. Classification of sailing racing yachts consists in establishing a category of navigation in accordance with the Rules for the Classification and Survey of Sailing Racing Yachts (approved by Government Decree of Russian Federation No. 820 dated September 18, 2013), the Rules for the Design, Construction, Repair and Operation of Sailing Racing Yachts, Manufacture of Materials and Products for Installation on Board Sailing Racing Yachts.	
<sup>1</sup> ACS — another classification society.	
<sup>2</sup> CS — classification society.	

**2.2.1** The character of classification assigned by the Register to a ship or floating facility consists of distinguishing marks:

**KM** ⚙, **KM** ★, **(KM)** ★ — for self-propelled ships and offshore installations;

**KE** ⚙, **KE** ★, **(KE)** ★ — for non-self-propelled ships and offshore installations with total power output of prime movers 100 kW and upwards;

**K** ⚙, **K** ★, **(K)** ★ — for other non-self-propelled ships and offshore installations.

**2.2.2** Depending on the rules on the basis of which a ship or an offshore installation was surveyed, and the classification society which carried out the survey, the character of classification is established as follows:

.1 ships and offshore installations built according to the rules of and surveyed by the Register are assigned a class notation with the character of classification: **KM** ⚙ or **KE** ⚙ or **K** ⚙ (refer to [2.2.1](#));

.2 ships and offshore installations built according to the rules of ACS — IACS member and surveyed by that society during their construction, when classed by the Register are assigned a class notation with the character of classification: **KM** ★ or **KE** ★ or **K** ★ (refer to [2.2.1](#)). For classification of such ships and offshore installations the provisions of 1.2.2 of Part II "Survey Schedule and Scope" of the Rules for the Classification Surveys of Ships in Service shall apply;

.3 ships and offshore installations which were as a whole (or their hull or machinery installation, or machinery, or equipment) built and/or manufactured without being surveyed by ACS — IACS member or without being surveyed by any classification society, when classed by the Register are assigned a class notation with the character of classification: **(KM)** ★ or **(KE)** ★ or **(K)** ★ (refer to [2.2.1](#)). For classification of such ships and offshore installations the provisions of 1.2.3 of Part II "Survey Schedule and Scope" of the Rules for the Classification Surveys of Ships in Service shall apply;

.4 ships and offshore installations built according to the RS rules and the rules of ACS — IACS member, and classed with the Register along with ACS — IACS member (dual class), are assigned a class notation with the character of classification: **KM** ⚙ or **KE** ⚙ or **K** ⚙ (refer to [2.2.1](#)). Under the dual class arrangement, each classification society acts on behalf of the other classification society in accordance with the Dual Classification Agreement taking into account the requirements of Section 16, Part I "General Regulations for Technical Supervision" of the Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships. The scope of work and the authority of each society during approval of design documentation, certification of materials and products, survey during construction, initial survey after construction, including issuance of statutory certificates (if applicable) are regulated by the Dual Classification Agreement.

**2.2.3 The Register ice class marks, the IACS polar class notations and the Baltic ice class notations.**

**2.2.3.1** Ice class marks are assigned to icebreakers and ice class ships in compliance with the requirements of [2.2.3.2 — 2.2.3.5](#) of this Part.

The IACS polar class notations are assigned to polar class ships in accordance with the requirements of Section 1 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships".

The Baltic ice class notations are assigned to the Baltic ice class ships in compliance with the requirements of Section 10 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships".

The IACS polar class notations and the Baltic ice class notations are assigned at the shipowner's discretion. At the same time, for the RS-classed icebreakers ice class marks are assigned in compliance with the requirements of [2.2.3.2](#).

At the shipowner's discretion the IACS polar class notations and the Baltic ice class notations may be applied simultaneously with the Register ice class marks (double or triple ice class), provided such ships comply with the requirements for the IACS polar class ships and/or the Baltic ice class ships, and the Register ice class ships.

**2.2.3.1.1** Icebreakers are specialized ships intended for all kinds of icebreaking operations: escort of ships in ice, surmount of ice ridges, breaking of a navigable channel, towing, breaking of ice and rescue operations. There are two main regimes of ice navigation while performing icebreaking operations: continuous motion and ramming.

**2.2.3.1.2** Ice class ships are ships intended for independent ice navigation including motion in fractures between floes, surmounting of ice isthmuses and portions of relatively thin compact ice, or navigation in ice with icebreaker escort.

**2.2.3.1.3** The following definitions are used for the description of ice navigation conditions:

ice concentration is a measure of ice continuity, which is characterized by the ratio of the area covered by ice to the total water area using 10 number scale;

open floating ice is ice of concentration 4 — 6, where most of the floes do not touch each other;

close floating ice is ice of concentration 7 — 8 where most of the floes touch each other forming ice isthmuses;

very close floating ice is ice of concentration 9 or over, but less than 10; compact ice is ice of concentration 10;

multi-year ice is ice of thickness more than 3,0 m, which has survived at least two summers' melt;

second-year ice is ice of thickness from 2,0 to 3,0 m, which has survived only one summer's melt;

first-year ice is ice of thickness from 0,3 to 2,0 m, of not more than one winter's growth;

ice cake is any relatively flat piece of sea ice less than 20 m across.

**2.2.3.2** If an icebreaker complies with the requirements of Parts II "Hull" — IX "Machinery" of these Rules as well as 3.1.3.3 of Part III "Signal Means" of the Rules for the Equipment of Sea-Going Ships, one of the following ice class marks: **Icebreaker6**, **Icebreaker7**, **Icebreaker8**, **Icebreaker9** and descriptive notation **Icebreaker** are added to the character of classification.

Icebreakers of the above ice classes have the following tentative service characteristics:

**Icebreaker6** — intended for ice breaking operations in harbour and roadstead water areas as well as in freezing seas where the ice is up to 1,5 m thick. Continuous motion capability in unbroken ice up to 1 m thick;

**Icebreaker7** — intended for ice breaking operations in the arctic seas on coastal routes during winter/spring navigation in ice up to 2,0 m thick and summer/autumn navigation in ice up to 2,5 m thick; in non-arctic freezing seas and mouths of rivers flowing into arctic seas in ice up to 2,0 m thick. Continuous motion capability in unbroken ice up to 1,5 m thick. The total shaft power not less than 11 MW;

**Icebreaker8** — intended for ice breaking operations in the arctic seas on coastal routes during winter/spring navigation in ice up to 3,0 m thick and summer/autumn navigation without restrictions. Continuous motion capability in unbroken ice up to 2,0 m thick. The total shaft power not less than 22 MW;

**Icebreaker9** — intended for ice breaking operations on coastal routes in arctic seas during winter/spring navigation in ice up to 4,0 m thick and summer/autumn navigation without restrictions. Continuous motion capability in unbroken ice over 2,0 m thick. The total shaft power not less than 48 MW.



**2.2.3.3 Register ice classes.**

**2.2.3.3.1** If a self-propelled ice class ship complies with the relevant requirements of these Rules, one of the following ice class marks is added to its character of classification: **Ice1**, **Ice2**, **Ice3**, **Arc4**, **Arc5**, **Arc6**, **Arc7**, **Arc8**, **Arc9**, and compliance of hull (**hull**) and machinery installation (**machinery**) with the requirements of these Rules in full scope is indicated in brackets, e.g. **KM** Ⓢ **Arc4 (hull; machinery)**.

In case the ship hull corresponds to one ice class and the machinery installation corresponds to another ice class, the applicable ice classes shall be specified separately, e.g. **KM** Ⓢ **Arc4 (hull) Ice3 (machinery)**. In such case, a ship with mark (**hull**) in the class notation shall comply with the applicable requirements of Part III "Equipment, Arrangements and Outfit" of these Rules and 3.1.3.3 of Part III "Signal Means" of the Rules for the Equipment of Sea-Going Ships, in addition to the requirements of Part II "Hull". A ship with mark (**machinery**) in the class notation shall comply with the applicable requirements of Part VI "Fire Protection" of Part VII "Machinery Installations" of Part VIII "Systems and Piping" and Part IX "Machinery" of these Rules.

Where a non-self-propelled ship complies with the requirements for ice class, a mark (**hull**) shall be added to its character of classification.

**2.2.3.3.2** Register ice classes and their descriptions are given in [Table 2.2.3.3.2](#).

Table 2.2.3.3.2

Ice class	Description
<b>Arc9</b>	Year-round operation in all areas of the oceans
<b>Arc8</b>	In summer/autumn navigation — voyage in all areas of the World Ocean. In winter/spring navigation in Arctic — voyage in close floating second-year ice up to 2,5 m thickness and in freezing non-arctic seas without restrictions
<b>Arc7</b>	In summer/autumn navigation — voyage in all areas of the World Ocean. In winter/spring navigation in Arctic — voyage in close floating first-year ice up to 2,1 m thickness and in freezing non-arctic seas without restrictions
<b>Arc6</b>	In summer/autumn navigation in Arctic — voyage in open floating first-year ice up to 1,5 m thickness. In winter/spring navigation in Arctic — voyage in open floating first-year ice up to 1,3 m thickness. Year-round voyage in freezing non-arctic seas
<b>Arc5</b>	In summer/autumn navigation in Arctic — voyage in open floating first-year ice up to 1,2 m thickness. In winter/spring navigation in Arctic — voyage in open floating first-year ice up to 0,9 m thickness. Year-round voyage in freezing non-arctic seas
<b>Arc4</b>	In summer/autumn navigation in Arctic — voyage in open floating first-year ice up to 0,9 m thickness. In winter/spring navigation in Arctic — voyage in open floating first-year ice up to 0,7 m thickness. Year-round voyage in freezing non-arctic seas in light ice conditions
<b>Ice3</b>	Regular voyage in open floating ice-cake ice of non-arctic seas up to 0,7 m thickness
<b>Ice2</b>	Regular voyage in open floating ice-cake ice of non-arctic seas up to 0,5 m thickness
<b>Ice1</b>	Episodical voyage in open floating ice-cake ice of non-arctic seas up to 0,4 m thickness
Notes:	
1 The possibility of operation of a vessel in a particular area is determined depending on the season, current weather conditions, actual ice conditions, presence of assistance for navigation in ice and this is the responsibility of the shipowner.	
2 For ships having distinguishing mark <b>DAS</b> in class symbol ice conditions are assigned on the basis of the descriptions of ice classes.	

**2.2.3.3.3** For tugs, depending on their compliance with the requirements of these Rules for ice class, one of the following ice class marks is added to the character of classification: **Ice2**, **Ice3**, **Arc4**, **Arc5**, **Arc6** taking into account the provisions of [2.2.3.3.1](#).

Determination of possible periods and areas of navigation as well as regimes of navigation with icebreaker escort is within the shipowner's.



**2.2.3.3.4** If an ice class ship which is not an icebreaker in accordance with [2.2.3.1.1](#), but occasionally is involved in icebreaking operations and complies with the relevant requirements of these Rules, one of the following ice class marks: **Icebreaker6** or **Icebreaker7** with descriptive notation **Icebreaking vessel** may be added to the character of classification.

**2.2.3.3.5** Double acting ships (DAS) are ice navigation ships fitted with active means of the ship's steering (refer to 1.2 Part VII "Machinery Installations") and designed for both bow-first operation and stern-first operation in ice condition.

If double acting ships comply at least with the requirements of Section 19, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", the distinguishing mark **DAS (ice class mark)** may be added to the character of classification, where the RS ice class is indicated in brackets according to [2.2.3.3.1](#) or [2.2.3.3.4](#) in case of stern-first operation.

When the RS ice class in case of stern-first operation differs from that in case of bow-first operation, the appropriate limitation is introduced to the RS ice class assigned according to [2.2.3.3.1](#) or [2.2.3.3.4](#), for example: **Arc4 (hull at  $d \leq 11$  m; ahead) DAS (Arc6 hull at  $d \leq 11$  m) Arc6 (machinery)**.

**2.2.3.3.6** If berth-connected ships operated when lying at anchor at a water area distanced from the shore as well as ships operated in accordance with their intended purpose allowing for periodical drifting in ice-covered waters comply with the requirements of these Rules, one of the following ice class marks **I1(Hull)**, **I2(Hull)** or **I3(Hull)** may be added to the character of classification of such ships:

**I1(Hull)** — applicable to ships operating in the East Siberian Sea, the Chukchi Sea;

**I2(Hull)** — applicable to ships operating in the Barents Sea, the Sea of Okhotsk, the Kara Sea, the Laptev Sea, the Bering Sea;

**I3(Hull)** — applicable to ships operating the Baltic Sea, the Caspian Sea, the Sea of Azov.

#### **2.2.4 Subdivision distinguishing marks.**

Ships complying with the applicable requirements of Part V "Subdivision" and fully complying with the requirements of Section 3 of the above Part in the case of flooding of any one compartment or any two adjacent compartments over complete length of the ship in the case of design side damage specified in 3.2 of Part V "Subdivision" are assigned subdivision distinguishing mark [1](#) or [2](#) added to the character of classification, respectively.

#### **2.2.5 Distinguishing marks for restricted areas of navigation.**

**2.2.5.1** Ships complying with these Rules requirements provided for ships operating only in restricted areas of navigation are assigned one of the following distinguishing marks: **R1**, **R2**, **R2-RSN**, **R2-RSN(4,5)**, **R3-RSN** or **R3** added to the character of classification to clarify restrictions of the ship navigation as follows:

**.1 R1** — navigation in sea areas at seas with a wave height of 8,5 m with 3 % probability of exceeding level and with the ships proceeding not more than 200 miles away from the place of refuge and with an allowable distance between the places of refuge not more than 400 miles;

**.2 R2** — navigation in sea areas at seas with a wave height of 7,0 m with 3 % probability of exceeding level with ships proceeding not more than 100 miles away from the place of refuge and with an allowable distance between the places of refuge not more than 200 miles;

**.3 R2-RSN** — river-sea navigation at seas with a wave height of 6,0 m with 3 % probability of exceeding level with ships proceeding from the place of refuge:

in open seas up to 50 miles and with an allowable distance between the places of refuge not more than 100 miles;

in enclosed seas up to 100 miles and with an allowable distance between the places of refuge not more than 200 miles;

**.4 R2-RSN(4,5)** — river-sea navigation at seas with a wave height of 4,5 m with 3 % probability with ships proceeding from the place of refuge:

in open seas up to 50 miles and with an allowable distance between the places of refuge not more than 100 miles;

in enclosed seas up to 100 miles and with an allowable distance between the places of refuge not more than 200 miles;

**.5 R3-RSN** — river-sea navigation at seas with a wave height of 3,5 m with 3 % probability of exceeding level with due regard for particular restrictions on the area and conditions of navigation resulting from the wind and wave conditions of the basins with determination of a maximum allowable distance from the place of refuge which in no case shall be more than 50 miles;

**.6 R3** — harbor, roadstead and coastal navigation in a 20-mile coastal zone with a wave height up to 2,5 m with 3 % probability of exceeding level with ships proceeding from the place of refuge in accordance with [Table 2.2.5.1.6](#) or with restrictions imposed on the distance from the places of refuge and the height of the wave with 3 % probability based on the justifications submitted to the Register taking into account the wind and wave conditions in specific restricted sea areas.

Particular restrictions for operation of floating cranes (cargo-handling operations and navigation with carriage of cargoes on deck and/or in the hold) shall be imposed by the Register in each particular case.

Table 2.2.5.1.6

Nos.	Basin, geographical restrictions	Permissible distance from place of refuge, in miles <sup>1</sup>
<b>1</b>	The Adriatic Sea, the Sea of Azov, the White Sea, the East Siberian Sea, the Black Sea, the Laptev Sea	50
<b>2</b>	The Baltic Sea	20 (50)
<b>3</b>	The Barents Sea (except para 3.1)	(20)
<b>3.1</b>	The Barents Sea to the south of 70°30'N, to the east of 45°E	(30)
<b>4</b>	The Bering Sea (except para 4.1)	(10)
<b>4.1</b>	The Bering Sea to the north of 63°N, to the west of 173°40'W	10 (25)
<b>5</b>	The Ionian Sea, the Aegean Sea	15 (45)
<b>6</b>	The Kara Sea	35 (50)
<b>7</b>	The Caspian Sea	20 (50)
<b>8</b>	The Sea of Okhotsk (except paras 8.1 and 8.2)	(25)
<b>8.1</b>	The Sea of Okhotsk to the west of 142°E	10 (40)
<b>8.2</b>	The Sea of Okhotsk to the north of 56°N, to the west of 147°30'E	10 (50)
<b>9</b>	The Mediterranean Sea	
<b>9.1</b>	The Mediterranean Sea to the east of 28°30'E	30 (50)
<b>9.2</b>	Northwestern part of the Mediterranean Sea to the north of 39°30'N, to the west of 9°30'E	(45)
<b>10</b>	The Tyrrhenian Sea	10 (45)
<b>11</b>	The Sea of Japan	(40)

<sup>1</sup> Permissible distances from the place of refuge assigned subject to confirmation of the stability of a ship of restricted area of navigation **R3** under weather criterion in accordance with the requirements of Part IV "Stability" for river-sea navigation ships **R3-RSN** are given in brackets.

**2.2.5.2** The restrictions provided for by [2.2.5.1](#) define the allowable conditions of ship's navigation resulting from ship's stability and strength which are indicated in the Seaworthiness Certificate and in the Classification Certificate (if issued on behalf of the Flag State MA).

**2.2.5.3** Particular restrictions on the area and conditions of navigation for ships of river-sea navigation **R3-RSN** are determined as the geographical place names of basins or their parts with the indication, where necessary, of the geographical boundary of the navigation area within the basin, the restrictions on proceeding from the place of refuge and the restrictions of ship navigation by calendar periods, or an indication of voyage between the terminal ports. In this case, the restrictions with due regard to the wind and wave conditions of the basins shall be determined by using the data of [Table 2.2.5.3](#) or the data from the submitted to the Register justifications of possibility of ship's navigation in the certain area or passage, made in accordance with the procedure approved by the Register.

Table 2.2.5.3

Basin	Geographical restrictions	Navigation season
The Adriatic Sea	To the south of 42°N, 20-mile coastal area along the eastern and western coasts, crossing the sea in the Strait of Otranto in the area of the port of Brindizi (the port of Bari) — the port of Bari, as well as in the area of Cape San Francesco — Lastovo Island; 40-mile coastal area to the north of 42°N, along the eastern coast with calling at ports of the western coast	Throughout the year
The Sea of Azov	No restrictions	Throughout the year
The Baltic Sea	No restrictions, including the Gulf of Bothnia, the Gulf of Finland and the Gulf of Riga; the Strait of Zund, the Great Belt and the Little Belt Straits, the Kattegat Strait to the south of 57°45'N	Throughout the year
The Barents Sea	10-mile coastal area to the east of Cape Kanin Nos along the coast of the Kanin Peninsula, and to the south of 68°00'N	June — August
	20-mile coastal area along the southern coast from Cape Svyatoy Nos (Timansky) to Pechorskaya Guba bay with calls at Remenka bay on the southern coast of Kolguev Island	June — September
	20-mile coastal area along the southern coast from Pechorskaya Guba bay to the Yugorsky Shar Strait; Pechorskaya Guba bay; Khaypudyrskaya Guba bay; the Yugorsky Shar Strait	June — October
	Coastal area along the Kola Peninsula within the boundaries of established ship traffic from the line connecting the Lumbovsky Gulf with Cape Kanin Nos to Kola Bay;	May — September
The White Sea	The Gulf of Onega, the Gulf of Dvina and the Gulf of Kandalaksha; 20-mile coastal area to the south of 66°45'N	May — October
The Bering Sea	20-mile coastal area of the Gulf of Anadyr in the following areas: the sea port of Anadyr — the sea port of Beringovsky; the sea port of Anadyr — the sea port of Egvekinot — the sea port of Provideniya — the Gulf of Lavrentiya	July — September
The East Siberian Sea	Coastal area along the southern coast within the limits up to 15-meter isobath curve from the mouth of the Kolyma River to the sea port of Pevek with permissible distance from the coast up to 7 miles in the area of Letyatkina Cape, Bolshoy Baranov Cape, Malaya Baranikha Cape, the mouth of the Milkera River and the north-western coast of Ayon Island	August — September <sup>1</sup>
The Ionian Sea	The Gulf of Corinth; the Gulf of Patraikos; 20-mile coastal area from the Gulf of Patraikos to the Strait of Otranto; the Strait of Otranto	Throughout the year
The Kara Sea	10-mile coastal area from the Yugorsky Shar Strait to Kharasavey village; Baidaratskaya Guba bay	July — October
	The south-west part of the sea to the south of the line connecting Kharasavey village and the crossing point of 70°00'N with the eastern coast of the Vaygach Island	July — September
	20-mile coastal area along the western and northern coast of the Yamal Peninsula from Kharasavey village to Obskaya Guba bay through the Malygina Strait	August — October
	20-mile coastal area from Dickson Island to the mouth of Pyasina	July — September
The Caspian Sea	To the north of 44°30'N as well as to the south of 44°30'N within 20-mile coastal area along the eastern coast up to the port of Turkmenbashi (port of Bekdash) <sup>2</sup> and along the western coast up to the port of Makhachkala; 20-mile coastal area from the port of Baku to Anzali, with permissible distance from the coast up to 25 miles in the area from Shakhovaya Spit (39°50'N, 50°20'E) to Kurinskaya Spit (39°00'N, 49°44'E); sea crossing line from the eastern coast in the area of the port of Turkmenbashi (port of Bekdash) — southern extremity of the Krasnovodsky Gulf to the western coast in the area of Shakhovaya Spit	March — November
The Baltic Sea	No restrictions, including the Gulf of Bothnia, the Gulf of Finland and the Gulf of Riga; the Strait of Zund, the Great Belt and the Little Belt Straits, the Kattegat Strait to the south of 57°45'N	Throughout the year

Basin	Geographical restrictions	Navigation season
The Barents Sea	10-mile coastal area to the east of Cape Kanin Nos along the coast of the Kanin Peninsula, and to the south of 68°00'N	June — August
	20-mile coastal area along the southern coast from Cape Svyatoy Nos (Timansky) to Pechorskaya Guba bay with calls at Remenka bay on the southern coast of Kolguev Island	June — September
	20-mile coastal area along the southern coast from Pechorskaya Guba bay to the Yugorsky Shar Strait; Pechorskaya Guba bay; Khaypudyrskaya Guba bay; the Yugorsky Shar Strait	June — October
	Coastal area along the Kola Peninsula within the boundaries of established ship traffic from the line connecting the Lumbovsky Gulf with Cape Kanin Nos to Kola Bay;	May — September
The White Sea	The Gulf of Onega, the Gulf of Dvina and the Gulf of Kandalaksha; 20-mile coastal area to the south of 66°45'N	May — October
The Bering Sea	20-mile coastal area of the Gulf of Anadyr in the following areas: the sea port of Anadyr — the sea port of Beringovsky; the sea port of Anadyr — the sea port of Egvekinot — the sea port of Provideniya — the Gulf of Lavrentiya	July — September
The East Siberian Sea	Coastal area along the southern coast within the limits up to 15-meter isobath curve from the mouth of the Kolyma River to the sea port of Pevek with permissible distance from the coast up to 7 miles in the area of Letyatkina Cape, Bolshoy Baranov Cape, Malaya Baranikha Cape, the mouth of the Milkera River and the north-western coast of Ayon Island	August — September <sup>1</sup>
The Ionian Sea	The Gulf of Corinth; the Gulf of Patraikos; 20-mile coastal area from the Gulf of Patraikos to the Strait of Otranto; the Strait of Otranto	Throughout the year
The Kara Sea	10-mile coastal area from the Yugorsky Shar Strait to Kharasavey village; Baidaratskaya Guba bay	July — October
	The south-west part of the sea to the south of the line connecting Kharasavey village and the crossing point of 70°00'N with the eastern coast of the Vaygach Island	July — September
	20-mile coastal area along the western and northern coast of the Yamal Peninsula from Kharasavey village to Obskaya Guba bay through the Malygina Strait	August — October
	20-mile coastal area from Dickson Island to the mouth of Pyasina	July — September
The Caspian Sea	To the north of 44°30'N as well as to the south of 44°30'N within 20-mile coastal area along the eastern coast up to the port of Turkmenbashi (port of Bekdash) <sup>2</sup> and along the western coast up to the port of Makhachkala; 20-mile coastal area from the port of Baku to Anzali, with permissible distance from the coast up to 25 miles in the area from Shakhovaya Spit (39°50'N, 50°20'E) to Kurinskaya Spit (39°00'N, 49°44'E); sea crossing line from the eastern coast in the area of the port of Turkmenbashi (port of Bekdash) — southern extremity of the Krasnovodsky Gulf to the western coast in the area of Shakhovaya Spit	March — November
The Laptev Sea	the Khatanga Gulf; the Vostochny and Severny straits; 20-mile coastal area along the northern and eastern coasts of Bolshoy Begichev Island and from the Nordvik Peninsula to Cape Terpyay-Tumsa; the Gulf of Anabar; the Olenek Gulf limited by the line 5 miles distant to the north from the line connecting Cape Terpyay-Tumsa and the northern extremity of the Aerosemki Islands; 5-mile area around the Aerosemki Islands; 25-mile area from the Aerosemki Islands to the sea port of Tiksi; 20-mile coastal area from Cape Bykovto the mouth of the Yana River, including the Guba Buor-Khaya bay	20 July — September

Basin	Geographical restrictions	Navigation season
The Laptev Sea and the East-Siberian Sea	20-mile coastal area along the southern coast from the mouth of the Yana River to the mouth of the Kolyma River; 20-mile coastal area along the southern and western coast of Bolshoy Lyakhovsky Island from Cape Shalaurov to Cape Vagin	20 July — September
	20-mile coastal area around Maly Lyakhovsky Island and along the southern and western coasts of Kotelny Island from the Malygintsev Bay to Stantsiy Lagoon; sea area between the northern coast of Bolshoy Lyakhovsky Island and south-western coast of Kotelny Island, and between 140°E and the western extremity of Kotelny Island	August — September
The Sea of Marmora	No restrictions from Bosphorus to Dardanelles Straits	Throughout the year
The Persian Gulf (the Arabian Sea)	Eastern part: from Ormus Strait to 54°E; central part: the coastal area along the western coast in the area restricted by 54°E, parallel 28°59'N and a line connecting islands Abu-Musa, Khalul, Al-Kharkus, Failaka; northern part: from parallel 28°59'N	Throughout the year
The North Sea	Kattegat to the south of parallel 57°45'N; Helgoland Bay to the south of parallel 54°02'N and to the east to 7°5'E	Throughout the year
	Coastal area along the southern coast in the zone of traffic separation from the Helgoland Bay to the port of Antwerp	March — October
	Skagerrak Strait to the east of the line of Cape of Skagen — Oslo-Fjord and to the south of parallel 59°N and also along the coast of Sweden in Sekken and Single-Fjord Straits	May — August
Eastern part of the Mediterranean Sea	20-mile coastal area along the eastern coast from Rhodes Strait to the ports of Izrael inclusive with calls at the ports of Cyprus Island	April — November
The Black Sea	20-mile coastal area along the northern, western and eastern coasts from the port of Batumi to the Strait of Bosphorus	Throughout the year
The Aegean Sea	From the Dardanelles to Karpathos and Kithira Straits to the north of 36°N; Passage to the Ionian Sea through the Gulf of Saronikos, Corinth Canal, Gulf of Corinth, Gulf of Patraikos	Throughout the year
The Sea of Japan and the Sea of Okhotsk	The Tatar Strait and the Amur Firth to the north of the line connecting the sea port of Sovetskaya Gavan and Uglegorsk to the line connecting Cape Menshikova and Cape Tamlayvo	June — October
	20-mile coastal area along the western coast from the port of Vladivostok to Preobrazhenia Bay	Throughout the year
<sup>1</sup> In the years of low and medium ice coverage to be determined by the position of Ayon ice massif. <sup>2</sup> For ships having the Register-approved area of navigation to the south of the port of Turkmenbashi (the port of Bekdash) within 20-mile coastal area along the eastern coast up to ports of Iran, from Cheleken Peninsula (at 39°26'N, 52°40'E) up to the southern extremity of Ogurchinsky Island (at 38°40'N, 53°00'E), the 20-mile coastal area shall be counted from the coast of Ogurchinsky Island.		

**2.2.5.4** Sea coastal ships flying the flag of the Russian Federation not engaged on international voyages and complying with the requirements of Section 26 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" are assigned the distinguishing mark **RN(SCI)** or **RN(SCII)** added to the character of classification to clarify restrictions of the ship navigation as follows:

**.1 RN(SCI)** — harbor, roadstead and coastal navigation, including inland waterways, with a wave height up to 3 m with 3 % probability of exceeding level with due regard for particular restrictions on the area and conditions of navigation resulting from the wind and wave conditions of the basins in accordance with [Table 2.2.5.4-1](#), or with restrictions imposed on the distance from the place of refuge and the height of the wave with 3 % probability of exceeding level based on the justifications submitted to the Register taking into account the wind and wave conditions in specific restricted sea areas (where **RN** — restricted navigation, **SC** — sea coastal);

**.2 RN(SCII)** — harbor, roadstead and coastal navigation, including inland waterways, with a wave height up to 2 m with 3 % probability of exceeding level with due regard to particular restrictions on the area and conditions of navigation resulting from the wind and wave conditions of the basins in accordance with [Table 2.2.5.4-2](#), or with restrictions imposed on the distance from the place of refuge and the height of the wave with 3 % probability of exceeding level based on the justifications submitted to the Register taking into account the wind and wave conditions in specific restricted sea areas (where **RN** — restricted navigation, **SC** — sea coastal).

Particular restrictions on the area and conditions of navigation for sea coastal ships **RN(SCI)** and **RN(SCII)** are determined as the geographical place names of basins or their parts with the indication, where necessary, of the geographical boundary of the navigation area within the basin, the restrictions imposed on the distance from the place of refuge and the restrictions on ship navigation by calendar periods, or an indication of voyage between the terminal ports. In this case, the restrictions with due regard to the wind and wave conditions of the basins shall be determined by using the data of [Tables 2.2.5.4-1](#) and [2.2.5.4-2](#) or the data from the submitted to the Register justifications of possibility of sea coastal ship's navigation in the certain area or passage, made in accordance with the procedure approved by the Register.

The allowable conditions of sea coastal ship's navigation resulting from ship's stability and strength are indicated in the Classification Certificate. Particular restrictions on the area and conditions of navigation of such ships with due regard to the wind and wave conditions of the basins specified in [Tables 2.2.5.4-1](#) and [2.2.5.4-2](#) or the data from the justifications approved by the Register are indicated in section "Permanent restrictions" of the Classification Certificate or in the Annex to the Classification Certificate.

Table 2.2.5.4-1

Basin, geographical restrictions for area of navigation <b>RN(SCI)</b>					
Nos.	Basin	Geographical boundaries of the basin	Additional $h_{3\%}$ restriction, in m	Navigation season	Restrictions on ship types
1	The Sea of Azov <sup>1</sup>	No restrictions <sup>1</sup>	—	March — November	—
2	The Black Sea <sup>2</sup>	10-mile coastal area from the Kerch Strait to the sea port of Novorossiysk	—	April — October	—
		10-mile coastal area around the Crimea peninsula from the Kerch Strait to 45°00'00,0" N at the western coast of the Crimea peninsula	—	April — September	—
		20-mile coastal area in the north-western part to the north of 45°00'00,0" N from the Kalamita Bay to the port of Chornomorsk (Illichivsk)	—	April — October	—
		10-mile coastal area from the port of Chornomorsk (Illichivsk) to Dunayskaya Prorva	—	April — October	—
		Coastal area between the lines connecting the point with coordinates 45°05'30,0" N, 36°35'30,0" E with Cape Panagiya and the Cape of Zhelezny Rog	2,0	March, November	Only for self-propelled cargo ships
3	The Sea of Azov and the Black Sea <sup>2</sup>	The Kerch Strait to the north of the line passing through the end of Tuzla Spit	—	March — November	—

Basin, geographical restrictions for area of navigation <b>RN(SCI)</b>					
Nos.	Basin	Geographical boundaries of the basin	Additional $h_{3\%}$ restriction, in m	Navigation season	Restrictions on ship types
		The Kerch Strait from the line passing through the end of Tuzla Spit to the line consequently connecting Takil Cape, anchorage with coordinates 45°05'30,0" N, 036°33'00,0" E, 45°05'30,0" N, 036°35'00,0" E and Panagiya Cape	—	April — 20 November	—
			2,0	March, 21 — 30 November	Only for self-propelled cargo ships
4	The Caspian Sea	To the north of 44°30'00,0" N	—	March — November	Except for self-propelled displacement passenger ships
5	The Baltic Sea <sup>2</sup>	The Gulf of Finland to the east of the line consequently connecting the Cape Piyytenina, Vigrund Island, Moshchny Island, Somers Island, southern edge of Cape Konek, the Gulf of Riga	—	April — November	—
		10-mile coastal area along the southern coast of the Gulf of Finland from the Cape Piyytenina to the Gulf of Riga	2,0	April — November	Except for towed non-self-propelled cargo ships and tugs, and self-propelled displacement passenger ships
6	The Barents Sea <sup>2</sup>	Pechorskaya Guba bay to the line consequently connecting Chernaya village, the Gulyaevskie Koshki Islands, Cape Russky Zavorot; Khaypudyrskaya Guba bay to the south of 68°45'00,0" N	—	July — September	—
		Kola Bay to the south of 69°11'30" N	—	Throughout the year	Except for self-propelled displacement passenger ships
7	The White Sea <sup>1</sup>	The Gulf of Onega to the south of the line consequently connecting Kem village, northern edge of the Solovetsky Islands, Zhizhginsky Island	—	May — October	—
		The Gulf of Dvina to the south of the line connecting Zhizhginsky Island and the northern edge of Mudyugsky Island	—		Except for towed non-self-propelled cargo ships and tugs
			2,0		For towed non-self-propelled cargo ships and tugs
		4-mile coastal area around Zhizhginsky Island	—		—
8	The Kara Sea <sup>1</sup>	Obskaya Guba bay to the north of the line consequently connecting the points with the following coordinates: 68°26'00,0" N, 073°35'00,0" E (Cape Kamenny); 68°25'00,0" N, 073°48'00,0" E; 69°04'00,0" N, 073°52'00,0" E (Cape Trekhubornyy)	—	July — October	—



Basin, geographical restrictions for area of navigation <b>RN(SCI)</b>					
Nos.	Basin	Geographical boundaries of the basin	Additional $h_{3\%}$ restriction, in m	Navigation season	Restrictions on ship types
		Gydansky and Enisey Gulfs to the south of the line consequently connecting the northern edge of Shokalsky Island, northern edge of Sibiryakova Island, Dikson Island; 3-mile coastal area around Shokalsky Island	—	July — September	—
		5-mile coastal area along the northern coast of the Yamal Peninsula from Cape Poelovo to Cape Khasalya; the Malygina Strait between the line connecting Cape Khasalya and Cape Shuberta and the line connecting Cape Golovina and Cape Malygina	—	July — October	Except for self-propelled displacement passenger ships
9	The Laptev Sea and the East Siberian Sea <sup>2</sup>	From the sea port of Tiksi to the mouth of the Yana River and 20-mile coastal area along the southern coast from the mouth of the Yana River to the mouth of the Kolyma River	—	20 July — September	—
10	The Sea of Okhotsk and the Sea of Japan <sup>2</sup>	The Tatar Strait to the north of the line connecting Chikhacheva Bay and Cape Uandi, and the Amur Firth to the south of the line connecting Cape Menshikova and Cape Tamlavo	—	June — October	—
11	The Sea of Okhotsk <sup>2</sup>	20-mile coastal area along the south-eastern coast of the Gulf of Sakhalin from Cape Tamlavo to the sea port of Moskalvo	—	June — October	—

Note.  $h_{3\%}$  — wave height of 3 % probability.

<sup>1</sup> The self-propelled displacement passenger ships designed for navigation on inland waterways and accepted to the RS class with the area of navigation extended to sea coastal areas, are assigned with the areas of navigation in Taganrog Bay of the Sea of Azov at the lines Azov — Taganrog — Yeysk, in the White Sea, in Gydansky and Enisey Gulfs of the Kara Sea (according to [item 8 of this Table](#)) and in 3-mile coastal area around Shokalsky Island.

<sup>2</sup> Except for self-propelled displacement passenger ships designed for navigation on inland waterways and accepted to the RS class with the area of navigation extended to sea coastal areas.

Table 2.2.5.4-2

Basin, geographical restrictions for area of navigation <b>RN(SCII)</b>					
Nos.	Basin	Geographical boundaries of the basin	Additional $h_{3\%}$ restriction, in m	Navigation season	Restrictions on ship types
1	The Sea of Azov <sup>1</sup>	Taganrog Bay to the line consequently connecting Dolgaya Spit, Berdyanskaya Spit, the port of Berdyansk and 20-mile coastal area along the eastern coast to 45°21'00,0" N	—	March — November	—
		20-mile coastal area along the north-western coast from the port of Berdyansk to the port of Genichesk	—	March — November	—



Basin, geographical restrictions for area of navigation <b>RN(SCII)</b>					
Nos.	Basin	Geographical boundaries of the basin	Additional $h_{3\%}$ restriction, in m	Navigation season	Restrictions on ship types
2	The Black Sea <sup>2</sup>	5-mile coastal area along the northern coast from the port of Skadovsk to the port of Odessa	—	March — November	—
		5-mile coastal area along the north-western coast from the port of Odessa to Dunayskaya Prorva	—	March — October	—
3	The Caspian Sea	To the north of the line consequently connecting Cape Suyutkina Spit, southern edge of Tyuleny Island, point with coordinates, 45°00'00,0" N, 048°35'00,0" E and thence passing along the parallel 45°00'00,0" N to the coast line; Mangyshlaksy Bay to the north of 44°45'00,0" N	—	April — November	—
		To the east of the line connecting the point with coordinates 45°00'00,0" N, 049°30'00,0" E and the point with coordinates 44°30'00,0" N, 050°15'00,0" E	—	April — November	Except for towed non-self-propelled cargo ships and tugs
			1,5		—
4	The Baltic Sea <sup>2</sup>	5-mile coastal area of the Gulf of Riga from the mouth of the Daugava River to the mouth of the Gauja River	1,5	April — October	—
		The Gulf of Finland to the east of the line connecting Kotlin Island and Zelenogorsk, Kronshadt ship channel and 10-mile coastal area along the northern coast from Zelenogorsk to the sea port of Vyborg	—	May — October	—
5	The White Sea <sup>1</sup>	The Gulf of Mezen: 5-mile coastal area from the mouth of the Mezen River to the mouth of the Kuloy River; the Gulf of Onega: 5-mile coastal area from Belomorsk to Kem; the Gulf of Dvina: 5-mile coastal area from the mouth of the Northern Dvina River to Severodvinsk	1,5	June — September	—
6	The Laptev Sea <sup>2</sup>	The Olenek Gulf: 10-mile coastal area from Olenek arm to the mouth of the Olenek River	1,5	August — September	Except for self-propelled displacement passenger ships
7	The Sea of Okhotsk <sup>2</sup>	The Gulf of Sakhalin from the line connecting Cape Menshikova and Cape Tamlayvo within the Nevelskoy channel and the Sakhalin channel, to the south of the point with coordinates 53°29'30,0" N, 141°22'48,0" E and coastal area limited with the line connecting the point with coordinates 53°29'30,0" N, 141°22'48,0" E and the entrance channel of the Baikal Bay	1,5	June — September	Except for self-propelled displacement passenger ships

Basin, geographical restrictions for area of navigation <b>RN(SCII)</b>					
Nos.	Basin	Geographical boundaries of the basin	Additional $h_{3\%}$ restriction, in m	Navigation season	Restrictions on ship types
<b>8</b>	The Sea of Okhotsk and the Sea of Japan <sup>2</sup>	The Amur Firth to the south of the line connecting Cape Menshikova and Cape Tamlavo and to the north of the line connecting Cape Yuzhny and Cape Tyk	—	June — September	—
		The Tatar Strait: 10-mile coastal area along the western coast from Cape Yuzhny to Chikhacheva Bay	1,5		Except for self-propelled displacement passenger ships.
<b>9</b>	The Sea of Azov and the Black Sea <sup>2</sup>	The Kerch Strait to the north of the line passing through the ends of Tuzla Spit	—	March — November	—
		The Kerch Strait from the line passing through the ends of Tuzla Spit to the line consequently connecting Cape Takil, anchorage with coordinates 45°06'00,0" N, 036°33'00,0" E and Cape Panagiya	1,5	April — 20 November	—
<b>10</b>	The Barents Sea	Kola Bay to the south of 69°06'36" N	—	Throughout the year	Except for self-propelled displacement passenger ships

Note.  $h_{3\%}$  — wave height of 3 % probability.

<sup>1</sup> The self-propelled displacement passenger ships designed for navigation on inland waterways and accepted to the RS class with the area of navigation extended to sea coastal areas, are assigned the areas of navigation in Taganrog Bay of the Sea of Azov at the lines Azov — Taganrog — Yeysk and in the White Sea.

<sup>2</sup> Except for self-propelled displacement passenger ships designed navigation on inland waterways and accepted to the RS class with the area of navigation extended to sea coastal areas.

### 2.2.6 Distinguishing automation marks.

Ships and offshore installations fitted with automation equipment complying with the requirements of Part XV "Automation" are assigned one of the following distinguishing marks added to the character of classification, namely:

**.1 AUT1** — where the automation extent is sufficient for the machinery installation operation with unattended machinery spaces and the main machinery control room;

**.2 AUT2** — where the automation extent is sufficient for the machinery installation operation by one operator at the main machinery control room with unattended machinery spaces;

**.3 AUT3** — where the automation extent is sufficient for the machinery installation operation of a ship with the main machinery power output not more than 2250 kW with unattended machinery spaces and the main machinery control room;

**.4 AUT1-C, AUT2-C or AUT3-C** — where automation is based on computers or programmable logic controllers meeting the requirements of Section 7 of Part XV "Automation";

**.5 AUT1-ICS, AUT2-ICS or AUT3-ICS** — where automation is made with the use of a computerized integrated monitoring and control system meeting the requirements of Section 7 of Part XV "Automation".

### 2.2.7 Distinguishing mark for a ship equipped to enable one man bridge operation under normal conditions.

If a ship is equipped in compliance with the requirements of Section 28 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", the distinguishing mark **OMBO** may be added to the character of classification.

### **2.2.8 Distinguishing mark for a ship carrying equipment for fire fighting aboard other ships.**

If a ship carries supplementary systems, equipment and outfit for fire fighting aboard other ships, offshore drilling units, floating and shore facilities and if the ship is in full compliance with the relevant requirements of these Rules in respect to those appliances, the distinguishing mark **FF1WS**, **FF1**, **FF2WS**, **FF2**, **FF3WS** or **FF3** is added to the character of classification proceeding from the degree of the ship equipment with these appliances.

The degree of the ship equipment for fire fighting in other structures is determined on the basis of the list of fire fighting equipment and systems prescribed by 6.6 of Part VI "Fire Protection".

### **2.2.9 Distinguishing mark for ships fitted with a dynamic positioning system.**

If a ship is fitted with a dynamic positioning system complying with the requirements of Section 8 of Part XV "Automation", one of the following distinguishing marks: **DYNPOS-1**, **DYNPOS-2** or **DYNPOS-3** is added to the ship's character of classification, depending on the redundancy of the dynamic positioning system.

### **2.2.10 Distinguishing mark of availability of position-keeping/position mooring systems.**

Ships and offshore installations equipped with the position-keeping system/automated control system for power equipment of position mooring or thruster assisted position mooring systems, are assigned one of the following distinguishing marks added to the character of classification:

**.1 POSIMOOR-FIX** — if the position-keeping system meets the requirements of 21.1.1.1, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships";

**.2 POSIMOOR** — if the position mooring system meets the requirements of 21.1.1.2, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships";

**.3 POSIMOOR-TA** — if the position mooring system meets the requirements of 21.1.1.3, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships".

### **2.2.11 Distinguishing mark for a ship intended for carriage of refrigerated cargo.**

Ships intended for carriage or storage of refrigerated cargo or catch in ship's cargo spaces and/or in thermal containers with the use of a refrigerating plant available on board and classed in compliance with [Section 4](#) of this Part and meeting the requirements of Part XII "Refrigerating Plants" are assigned the distinguishing mark **REF** added to the character of classification.

Ships intended for carriage or storage of refrigerated cargo or catch in ship's cargo spaces and/or in thermal containers and using non-classed refrigerating plant for maintaining the required temperature, complying with the relevant requirements of Part XII "Refrigerating Plants", are assigned the distinguishing mark (**REF**) added to the character of classification.

### **2.2.12 Distinguishing mark for ships fitted with the main electric propulsion plant.**

If a ship is fitted with the main electric propulsion plant complying with the requirements of Section 17 of Part XI "Electrical Equipment", the distinguishing mark **EPP** is added to the character of classification.

### **2.2.13 Distinguishing mark for ships fitted with equipment for icing protection.**

If a ship is fitted with equipment providing effective icing protection in compliance with the requirements of Section 4 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", the distinguishing mark **ANTI-ICE** is added to the character of classification.

### **2.2.14 Distinguishing mark for a ship intended for carriage of packaged irradiated nuclear fuel, plutonium and high-level radioactive wastes (INF cargo).**

Ships intended for carriage of packaged irradiated nuclear fuel, plutonium and high-level radioactive wastes, which comply with the requirements of 7.3 of Part VI "Fire Protection", are assigned one of the following distinguishing marks added to the character of classification:

**INF1** for Class **INF1** ships;

**INF2** for Class **INF2** ships;

**INF3** for Class **INF3** ships.

**2.2.15 Distinguishing mark for ships fitted with a loading instrument/onboard software for stability calculations.**

**2.2.15.1** If a ship is equipped with a loading instrument complying with the requirements of 1.4.9.4 of Part II "Hull" of these Rules and 12.3 of Part II "Technical Documentation" of the Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships, the distinguishing mark **LI** is added to the character of classification.

**2.2.15.2** If a ship is provided with onboard software for stability calculations complying with the requirements of 1.4.12 of Part IV "Stability" of these Rules and 12.2 of Part II "Technical Documentation" of the Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships, the distinguishing mark **SI** is added to the character of classification.

**2.2.16 Distinguishing mark for ships fitted with a cargo vapour discharge system.**

If a ship is fitted with a cargo vapour discharge system complying with the requirements of 9.9 of Part VIII "Systems and Piping", the distinguishing mark **VCS** is added to the character of classification.

**2.2.17 Distinguishing mark for ships fitted with an inert gas system.**

If a ship is fitted with an inert gas system complying with the requirements of 9.16 of Part VIII "Systems and Piping", one of the following distinguishing marks is added to the character of classification:

**.1 IGS-IG** if a system uses an oil-burning inert gas generator as the inert gas source and the requirements of 9.16.9 of Part VIII "Systems and Piping" are complied with;

**.2 IGS-NG** if a system uses a nitrogen generator as the inert gas source and the requirements of 9.16.12 of Part VIII "Systems and Piping" are complied with;

**.3 IGS-Pad** if an inert gas system is only intended for forming an insulating pad in cargo tanks and the requirements of 9.16.11 of Part VIII "Systems and Piping" are complied with. This distinguishing mark may be used where systems with inert gas supplied from cylinders are installed as well as for systems using inert gas and nitrogen generators whose capacity is insufficient for assigning the distinguishing marks **IGS-IG** or **IGS-NG**.

**2.2.18 Distinguishing mark for ships fitted with a crude oil washing system.**

If a ship is fitted with a crude oil washing system complying with the requirements of 9.12 of Part VIII "Systems and Piping", the distinguishing mark **COW** is added to the character of classification.

**2.2.19 Distinguishing mark for ships fitted with a centralized cargo control system.**

If a ship is fitted with a cargo control room complying with the requirements of 3.2.11 of Part VII "Machinery Installations", the distinguishing mark **CCO** is added to the character of classification.

**2.2.20 Distinguishing marks for ships of high ecological safety.**

Ships complying with the requirements of Section 3 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" are assigned with one of the following distinguishing marks added to the character of classification:

**.1 ECO** — if a ship meets the requirements for controlling and limiting operational emissions and discharges, as well as requirements for prevention of environmental pollution in case of emergency, as specified in 3.5 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships";

**.2 ECO-S** — if a ship meets more stringent requirements than those for assignment of the distinguishing mark **ECO** in the class notation, as specified in 3.6 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships".

### 2.2.21 Distinguishing mark for a ship complying with ballast water management requirements.

If a ship performs ballast water management through ballast water exchange at sea and, as appropriate, carries the Guidelines for Safe Ballast Water Exchange at Sea, which complies with the requirements of 1.4.13 of Part IV "Stability" of these Rules and is a part of the approved Ballast Water Management Plan, which complies with the requirements of regulation B-1 of the International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM Convention), 2004, and the ship ballast system complies with the requirements of 8.7 of Part VIII "Systems and Piping" of these Rules, one of the following distinguishing marks is added to the character of classification: **BWM (E-S)**, **BWM (E-F)**, **BWM (E-D)**, **BWM (E-SF)**, **BWM (E-SD)**, **BWM (E-FD)** or **BWM (E-SFD)**. **BWM** means that the ship performs ballast water management; **E** means that ballast water management is performed through ballast water exchange at sea; **S** means that sequential method is used; **F** means that flow-through method is used; **D** means that dilution method is used; **SF**, **SD**, **FD** and **SFD** mean that combined ballast water exchange method is used being a combination of the above methods.

*Note.* Above mentioned distinguishing marks shall not be applied to ships the keels of which are laid or which are at a similar stage of construction on or after 8 September 2017 in accordance with the revised regulation B-3 of the BWM Convention, and may be applied to ships the keels of which are laid or which are at a similar stage of construction on or after 8 September 2017, and shall remain in the class notation of these ships until the date when the ship complies with the regulation D-2 of the BWM Convention but not later than 8 September 2024.

### 2.2.22 Distinguishing mark for ships fitted with ballast water treatment system.

If a ship performs ballast water management through the ballast water management system (BWMS) having the Type Approval Certificate of Ballast Water Management System issued in accordance with IMO resolution MEPC.174(58), MEPC.279(70) or Code for Approval of Ballast Water Management Systems (BWMS Code, IMO resolution MEPC.300(72)), as applicable, and carries the approved operations, maintenance and safety manual for the BWMS specific to the ship, a distinguishing mark **BWM (T)** is added to the character of classification. **BWM** means that the ship performs ballast water management in accordance with the approved Ballast Water Management Plan, which complies with the requirements of regulation B-1 of the BWM Convention, and **T** means that ballast water management through treatment of the ballast water within the BWMS is carried out in compliance with the ballast water performance standard in regulation D-2 of the BWM Convention.

### 2.2.23 Distinguishing marks for a ship fitted with a diving system permanently installed on the ship.

If ships are fitted with diving system installed permanently on ships that complies with the relevant requirements of the Rules for the Classification and Construction of Manned Submersibles and Ship's Diving Systems, one of the following distinguishing marks may be added to the character of classification:

- .1 **SDS < 12** for ships fitted with a diving system designed for diving operations at depths less than 12 m;
- .2 **SDS < 60** for ships fitted with a diving system designed for diving operations at depths less than 60 m;
- .3 **SDS ≥ 60** for ships fitted with a diving system designed for diving operations at depths of 60 m and over.

### 2.2.24 Distinguishing mark for ships fitted with manned submersible.

If ships are fitted with manned submersible complying with the relevant requirements of the Rules for the Classification and Construction of Manned Submersibles and Ship's Diving Systems, the distinguishing mark **MS** may be added to the character of classification.

### **2.2.25 Distinguishing mark for a ship to carry out cargo operations at offshore terminals.**

Oil tankers to carry out cargo operations at offshore terminals in compliance with the requirements of Section 5 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" are assigned one of the following distinguishing marks added to the character of classification:

**.1 BLS-SPM** — if a ship is fitted with the bow loading system and fully complies with the requirements for equipment of oil tankers to carry out cargo operations at offshore terminals;

**.2 BLS** — if a ship is fitted with the bow loading system and complies with the requirements for equipment of oil tankers to carry out cargo operations at offshore terminals, except for 5.6.2 — 5.6.9 and 5.6.12 — 5.6.14 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships";

**.3 SPM** — if a ship is not fitted with the bow loading system, though complies with the requirements of 5.6.2 — 5.6.9 and 5.6.12 — 5.6.14 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships".

This distinguishing mark may also be added to the character of classification of ships carrying liquefied gases in bulk.

### **2.2.26 Distinguishing mark for a ship fitted with helicopter facilities.**

If ships are fitted with helicopter facilities in compliance with the requirements of Section 6 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", one of the following distinguishing marks is added to the character of classification:

**.1 HELIDECK** — if a ship is fitted with a helideck and complies with the requirements of 6.2, 6.3, 6.4.1, 6.6 and 6.7 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships";

**.2 HELIDECK-F** — if a ship is fitted with helicopter refuelling facilities and, in addition to [2.2.26.1](#) of this Part, complies with the requirements of 6.4.2 (as far as applicable), 6.5.1 and 6.5.2 (as far as applicable) of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships";

**.3 HELIDECK-H** — if a ship is fitted with hangar facilities and fully complies with the requirements of Section 6 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships".

### **2.2.27 Distinguishing mark for a ship equipped to ensure long-term operation at low temperatures.**

If ships are equipped to ensure long-term operation at low temperatures in compliance with the requirements of Section 7 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", at the shipowner's discretion the distinguishing mark **WINTERIZATION(DAT)** is added to the character of classification, where design ambient temperature is indicated in brackets, in Celsius degrees, e.g. **WINTERIZATION(–40)**.

### **2.2.28 Distinguishing mark for propulsion plant redundancy.**

Where provision is made for the redundancy of propulsion plant components complying with the requirements of Section 8 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of the Ship", one of the following distinguishing marks is added to the character of classification: **RP-1**, **RP-1A**, **RP-1AS**, **RP-2** or **RP-2S**, depending on the redundancy arrangement.

### **2.2.29 Distinguishing mark for a ship equipped to use gas as fuel.**

Ships equipped for using gas as fuel in compliance with the requirements of Section 9 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of these Rules, as well as gas carriers carrying liquefied methane, using cargo as fuel and complying with the requirements of the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code) and the Rules for the Classification and Construction of Ships Carrying Liquefied Gases in Bulk, are assigned the distinguishing mark **GFS** (gas fuelled ships) added to the character of classification.

**2.2.30 Distinguishing mark for a planned maintenance scheme for machinery applied on board the ship.**

If a planned maintenance scheme for machinery (PMS) is applied on board the ship in compliance with the requirements of 2.7 of Part II "Survey Procedure and Scope" of the Rules for the Classification Surveys of Ships in Service, the distinguishing mark **PMS** may be added to the character of classification.

**2.2.31 Distinguishing marks for condition monitoring system and condition based maintenance system applied on board the ship.**

If a ship is fitted with an approved condition monitoring system (CM system) complying with the requirements of Section 10 of Part VII "Machinery Installations" of these Rules and requirements of 2.8.1.2 and 2.8.2 of Part II "Survey Schedule and Scope" of the Rules for the Classification Surveys of Ships in Service, the distinguishing mark **CM** (Condition Monitoring) may be added to the character of classification.

If a ship is fitted with an approved condition based maintenance system (CBM system) complying with the requirements of 2.8.1.3 and 2.8.2 of Part II "Survey Schedule and Scope" of the Rules for the Classification Surveys of Ships in Service, the distinguishing mark **CBM** (Condition Based Maintenance) may be added to the character of classification.

**2.2.32 Distinguishing mark for ships fitted for possible carriage of the international standard containers.**

If a ship without a descriptive notation **Container ship** in the class notation is fitted for carriage of cargo in international standard containers on deck and/or in appropriate holds, the distinguishing mark **CONT** is added to the character of classification and the container transportation area is specified in brackets (**deck**) (**cargo hold(s) No.**).

**2.2.33 Distinguishing mark for ships fit for carriage of dangerous goods.**

If a ship complies with the requirements of Section 7 of Part VI "Fire Protection" of these Rules, was duly surveyed according to 2.1.5 of Part III "Survey of Ships in Compliance with International Conventions, Codes, Resolutions and Rules for the Equipment of Sea-Going Ships" of the Guidelines on Technical Supervision of Ships in Service, and is recognized fit for carriage of dangerous goods, the distinguishing mark **DG** is added to the character of classification with the following specified in brackets depending on the type of dangerous goods: (**bulk**) — in bulk, (**pack**) — packaged.

If a ship is recognized fit for carriage of dangerous goods in bulk and packaged form, the distinguishing marks for carriage of dangerous goods are allowed to be combined **DG (bulk, pack)**.

**2.2.34 Distinguishing mark for implementation of modified survey of the shafting.**

If a modified survey of the shafting in compliance with the requirements of 2.11.2.7 of Part II "Survey Schedule and Scope" of the Rules for the Classification Surveys of Ships in Service is accepted for a ship, the distinguishing mark **TMS** (Tailshaft Modified Survey) is added to the character of classification.

**2.2.35 Distinguishing mark for ships prepared for in-water survey.**

For a ship built according to Section 12 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", the distinguishing mark **IWS** is added to the character of classification.

**2.2.36 Distinguishing mark for alternative method of reducing SO<sub>x</sub> emissions.**

If on board a ship, as an alternative, the exhaust gas (SO<sub>x</sub>) cleaning system of the fuel oil combustion unit approved by RS is fitted, considering IMO resolution MEPC.259(68), the distinguishing mark **SO<sub>x</sub> Cleaning** shall be added to the character of classification.

**2.2.37 Distinguishing mark for marine diesel engine to comply with Tier III limit according to Regulation 13 of Annex VI to MARPOL.**

If nitrogen oxides emissions from marine diesel engines comply with Tier III limit and Regulation 13 of Annex VI to MARPOL, which is endorsed by the Engine International Air Pollution Prevention Certificate (EIAPP Certificate), the distinguishing mark **DE-Tier III** is added to the character of classification.

### 2.2.38 Distinguishing mark for ships prepared for conversion for the use of gas fuel.

If a ship is prepared for conversion for the use of gas fuel and complies with the requirements of Section 14 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", at the shipowner's discretion, the distinguishing mark **GRS** (Gas Ready Ship) or one of the following distinguishing marks shall be added to the character of classification: **GRS-D**, **GRS-H**, **GRS-T**, **GRS-P**, **GRS-E** or, for example, **GRS-D-H-T**, depending on the ship's readiness for conversion to use gas fuel according to 14.2.2 of the above stated part.

### 2.2.39 Distinguishing mark for ships which are periodically grounded in operation.

If ships may lie aground in safety with partial or full hull baring in places fit for grounding the ships, and comply with the requirements of Section 15 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", at the shipowner's discretion, one of the following distinguishing marks may be added to the character of classification of a ship:

.1 **NAABSA1** — partial or full ship underwater hull baring is permitted on plane homogeneous sand-and-shingle or sand-and-mud seabeds with no motion in calm water as harbours or sheltered areas;

.2 **NAABSA2** — in addition to **NAABSA1** distinguishing mark requirements specified above, motion and ship bow impact contact with seabed at defined wave parameters are permitted;

.3 **NAABSA3** — in addition to **NAABSA2** distinguishing mark requirements specified above, hull baring of moored ship is permitted at specified distance from seashore line in rolling conditions with impact contact against the seabed in any point of the hull bottom.

### 2.2.40 Distinguishing mark for ships fitted with boiler plant monitoring system.

If ships are fitted with boiler plant monitoring system that allows to carry out internal surveys of steam boilers without participation of the RS surveyor, and that complies with the requirements of Section 16 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", at the shipowner's discretion, the distinguishing mark **BMS** (Boiler Monitoring System) may be added to the character of classification.

### 2.2.41 Distinguishing mark for ships fitted with hull strength and/or stability monitoring system.

If ships are fitted with hull strength and/or stability monitoring system complying with the requirements of Section 17 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", at the shipowner's discretion, the distinguishing mark **HMS(...)** may be added to the character of classification. The marks added in brackets (**STR**, **STAB** or **STR-STAB**) specify completeness of the system. Where the monitoring system is fitted with additional functions, the distinguishing mark shall be specified as **HMS(⟨system completeness⟩+⟨system function⟩)** with system function (**BS**, **C**, **DD**, **DM**, **N**, **RPM**, **SI**, **SW**, **TS**, **ThS**, **TVS** or **W**) indicated after the "+" sign. If several functions are provided, the system function marks may be combined and shall be specified without separation by commas.

### 2.2.42 Distinguishing marks for ships complying with the requirements for indoor hygiene and sanitary conditions.

2.2.42.1 If ships comply with the indoor climate requirements specified in 18.1 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", at the shipowner's discretion, the distinguishing mark **COMF(C)** may be added to the character of classification.

2.2.42.2 If ships comply with the requirements for noise level in ship's spaces specified in 18.2.1.1 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", the distinguishing mark **COMF(N – 1 or 2, or 3)** may be added to the character of classification, where grades **1**, **2**, **3** indicate the noise comfort level in ship's spaces (with grade **1** corresponding to the most comfortable level).



If ships of 1600 gross tonnage and upwards engaged on international voyages comply with the requirements for noise level in ship's spaces specified in 18.2.1.3 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", the distinguishing mark **COMF(N – S)** shall be mandatorily added to the character of classification, where "S" means compliance of the noise comfort level with the requirements of SOLAS-74.

**2.2.42.3** If ships comply with the requirements for sanitary vibration level in ship's spaces specified in 18.3 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", the distinguishing mark **COMF(V – 1 or 2, or 3)** may be added to the character of classification, where grades **1, 2, 3** indicate permissible sanitary vibration comfort level in ship's spaces (with grade **1** corresponding to the most comfortable level).

**2.2.42.4** If a ship simultaneously complies with the requirements of several Chapters of Section 18 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", distinguishing marks for ships complying with indoor hygiene and sanitary conditions may be combined, e.g.: **COMF(C), COMF(C, N – 1), COMF(N – 1, V – 1)**, etc.

**2.2.43 Distinguishing mark for ships fitted with a system of prompt access to computerized shore-based emergency response services (ERS) on damage stability and residual structural strength calculations.**

If a ship is fitted with a system of prompt access to computerized shore-based emergency response services (ERS) on damage stability and residual structural strength calculations, the distinguishing mark **ERS** may be added to the character of classification.

A system of prompt access to computerized shore-based emergency response service shall comply with the requirements of 12.2.4 of Part II "Technical Documentation" of the Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships.

**2.2.44 Distinguishing mark confirming fatigue life of a ship.**

Where design remaining life of a ship (fatigue life) exceeds 25 years, the distinguishing mark **FTL (years)** may be added to the character of classification, where design remaining life of a ship within the range of 25 — 40 years (at 5-year intervals) is indicated in brackets.

When performing verification by direct calculation with application of spectral method, the distinguishing mark **Spectral North Atlantic** is added after the distinguishing mark **FTL (years)**.

The method for fatigue assessment during the design stage is given in the Guidelines on Fatigue Assessment of Ships.

**2.2.45 Distinguishing mark for ships fitted with composite (hybrid) propulsive systems.**

If a ship is fitted with composite (hybrid) propulsive systems complying with the requirements of Section 24 of Part XI "Electrical Equipment", the distinguishing mark **CPS** is added to the character of classification.

**2.2.46 Distinguishing mark for ships fitted with steerable propellers (azimuth thrusters) being a part of the propulsion plant.**

If the propulsion plant includes a steerable propeller (azimuth thruster) with a podded drive, the distinguishing mark **A-Thruster(E)** is added to the character of classification.

If the propulsion plant includes a steerable propeller (azimuth thruster) with mechanical transmission of power to the propeller, the distinguishing mark **A-Thruster(M)** is added to the character of classification.

**2.2.47 Distinguishing mark for ship's fitness for long-term operation without dry-docking.**

**UWILD** (underwater inspection in lieu of dry-docking) — a distinguishing mark assigned to a berth-connected ship designed in such a way as to provide the possibility to replace surveys of the outside of the ship's bottom (bottom surveys) in dry dock with underwater inspection (in-water surveys using underwater television). For assignment of distinguishing mark **UWILD**,

the requirements specified in Section 20 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", except for provisions of 20.3.1.3.6, shall be complied with.

Where, for a berth-connected ship with distinguishing mark **UWILD**, a possibility of performing any types of maintenance and surveys is provided without interrupting the ship's normal operation for the intended purpose, in the class notation an entry — **S** (the possibility provided by the design for the ship to remain in operation during the maintenance of bottom and side valves, and for systems and mechanisms using temporarily isolated bottom and side valves, to remain operational using the redundancy of isolated components of sea water systems) is added after the distinguishing mark **UWILD**. For the assignment of distinguishing mark **UWILD-S**, the requirements specified in Section 20 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", including 20.3.1.3.6, shall be complied with.

#### **2.2.48 Distinguishing mark for Enhanced Survey Programme.**

The distinguishing mark (**ESP**) means the necessity to survey certain ship types based on the Enhanced Survey Programme in accordance with the International Code on the Enhance Programme of Inspections during Surveys of Bulk Carriers and Oil Tankers (if applicable) and Sections 1 — 6 of Part III "Additional Surveys of Ships Depending on Their Purpose and Hull Material" of the Rules for the Classification Surveys of Ships in Service. Such ships include bulk carriers, oil tankers, combination carriers, ore carriers, chemical tankers and self-unloading bulk carriers. To ensure a uniform and correct interpretation, the definitions of types of ships subject to Enhanced Survey Programme (**ESP**) are given in 2.2 of Part I "General Provisions" of the Rules for the Classification Surveys of Ships in Service.

#### **2.2.49 Distinguishing mark specifying the necessity for monitoring of critical structural areas.**

**CON-M** is a distinguishing mark which is added to the character of classification of the ship constructed in accordance with the Common Structural Rules (hereinafter referred to as "the CSR ship") complying with the requirements of Section 22 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships".

#### **2.2.50 Distinguishing mark for a ship equipped to use methanol and ethanol as fuel.**

Ships equipped to use methanol and ethanol as fuel in compliance with the requirements of Section 23 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", the distinguishing mark **LFLFS (Me)** or **LFLFS (Et)** (Low Flashpoint Liquid Fuelled Ship (Methanol) or (Ethanol)) may be added to the character of classification.

#### **2.2.51 Distinguishing mark for a ship complying with the requirements for stability under icing.**

**2.2.51.1** Ships whose stability has been checked at full ice weight allowance in compliance with the requirements of 2.4.6 of Part IV "Stability" are assigned the distinguishing mark **IcingSTAB(full)** added to the character of classification.

**2.2.51.2** Ships whose stability has been checked at ice weight allowance reduced by half in compliance with the requirements of 2.4.7 of Part IV "Stability" are assigned the distinguishing mark **IcingSTAB(half)** added to the character of classification.

#### **2.2.52 Distinguishing marks confirming application of protective coatings or utilization of alternative means of corrosion protection in ship's spaces.**

**COAT (PSPC)** is a distinguishing mark added to the character of classification of ships of all types of 500 gross tonnage and upwards as well as bulk carriers of 150 m in length and above covered by regulation II-2/3-2 of SOLAS 74 as amended by IMO resolution MSC.216(82), and on board which the protective coating is applied in accordance with IMO resolution MSC.215(82).

**COAT (PSPC-COT)** is a distinguishing mark added to the character of classification of crude oil tankers of 5000 t deadweight and above covered by regulation II-1/3-11 of SOLAS 74 as amended by IMO resolution MSC.291(87), and on board which the protective coating is applied in accordance with IMO resolution MSC.288(87).

**CORRES** is a distinguishing mark added to the character of classification of crude oil tankers of 5000 t deadweight and above covered by regulation II-1/3-11 of SOLAS 74 as amended by IMO resolution MSC.291(87), and on board which the alternative means of corrosion protection or corrosion resistant materials are utilized to maintain the required structural integrity for 25 years in accordance with IMO resolution MSC.289(87).

**COAT** is a distinguishing mark added to the character of classification of ships covered by regulation II-2/3-2 of SOLAS 74 as amended by IMO resolution MSC.47(66), and on board which the protective coating is applied in accordance with IMO resolution A.798(19).

**2.2.53 Distinguishing mark confirming application of ice-resistant coating for protection of shell plating of the ship's hull.**

**ICE-COAT** is a distinguishing mark that may be added to the character of classification of icebreakers and ice class ships when protection of shell plating with ice-resistant coating is provided in case of reduction of average annual diminution of shell plating as a result of corrosion wear and abrasion (25 % or 50 %). In other cases (when protection of shell plating with ice-resistant coating is provided without reduction of average annual diminution of shell plating as a result of corrosion wear and abrasion), may be added at the shipowner's discretion.

**2.2.54 Distinguishing mark for tankers and combination carriers equipped with an effective cargo tank washing system.**

If tankers with descriptive notation **Chemical tanker** and/or **Oil tanker** and combination carriers (**Oil/bulk/ore carrier** or **Oil/bulk carrier** or **Oil/ore carrier**) are equipped with an effective cargo tank washing system in compliance with the requirements of Section 27 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", the distinguishing mark **ETW** (Effective Tank Washing) may be added to the character of classification.

## **2.3 DESCRIPTIVE NOTATIONS IN THE CLASS NOTATION OF A SHIP**

Ships complying with a definite scope of requirements of the RS rules taking account of their structural particulars and service conditions are assigned the appropriate descriptive notation (designation of ship type and purpose) added to the character of classification of a ship.

The current RS rules cover certain requirements the fulfilment of which makes possible introducing of the descriptive notations specified in 2.5 in the class notation.

## **2.4 ADDITIONAL ENTRIES IN THE CLASSIFICATION CERTIFICATE**

**2.4.1** When complying with definite requirements of the RS rules stipulated by the structural features or operational characteristics of the ship the fulfilment of which is not reflected by distinguishing marks and descriptive notation in the class notation, the confirmation of compliance of the ship with such requirements is certified by the entry in Section "Other characteristics" of the Classification Certificate stating, for example, that the ship is equipped for occasional loading/unloading of cargoes in a horizontal direction — by a roll-on/roll-off; the ship is suitable for escort operations, towing and serving oil tankers and/or oil recovery ships; the ship may operate in oil harbour water areas; the ship may occasionally carry bulk cargoes; the ship may carry heavy bulk cargoes (with indication of bulk cargo density), and other entries stipulated by the RS rules (refer also to 1.1.4.8, 1.1.5.1, 1.1.5.2, 3.3.1.5, 3.10.4.1 and 3.12.1.4.3 of Part II "Hull", 1.1.1.2, 1.1.1.3, 1.1.1.6, 1.1.3.1, 2.4.3, 10.3.2.1 and 13.3.10.3 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of these Rules; 2.2.3.1, 3.2.4.1 and 4.2.3.2 of Part II "Life-Saving Appliances" of the Rules for the Equipment of Sea-Going Ships).

**2.4.2** Section "Other characteristics" of the Classification Certificate for supply vessels (OS) and other ships serving offshore oil and gas fields (except for mobile offshore drilling units, floating cranes, pipe laying barges and floating hotels), which comply with the requirements of the Code for the Transport and Handling of Hazardous and Noxious Liquid Substances in Bulk on Offshore Support Vessels (OSV Chemical Code), IMO resolution A.1122(30), shall have an entry reading as follows: "The ship is fit to carry hazardous and noxious liquid substances in bulk, as stated in the Certificate of Fitness".

**2.4.3** In section "Permanent restrictions" of the Classification Certificate, if necessary, the following information is recorded:

- instructions on strengthening for navigation in ice at a certain draught (record example: "For navigation in ice conditions, the ship's draught shall not exceed .... m");

- instructions on restrictive properties of ships determined in accordance with the RS rules under which the ships were constructed, and in accordance with the project approved by the Register;

- instructions on restricted speed ranges of the main machinery;

- restrictions on the area of navigation with explanations to them in accordance with the RS rules (for example, in accordance with [2.2.5](#) of this Part). For berth-connected ships, anchorage location coordinates and, if applicable, geographical service area according to Fig. 4.3.3.5 in Part IV "Stability" shall be indicated;

- instructions on impossibility of the ship to navigate in the water areas and seasonal periods specified in 2.4.1 of Part IV "Stability", for ships whose stability does not comply with the requirements of 2.4 of Part IV "Stability".

## 2.5 SUMMARY INFORMATION ON DISTINGUISHING MARKS AND DESCRIPTIVE NOTATIONS IN THE CLASS NOTATION OF A SHIP

[Table 2.5](#) contains distinguishing marks divided into mandatory and optional ones, descriptive notations and references to additional requirements of the RS rules that are relevant to a specific distinguishing mark, descriptive notation. On the whole, the ships shall comply with the general provisions of applicable RS rules (including requirements for survey of ships during construction and in service) relating to cargo and passenger ships, self-propelled or non-self-propelled, structures of steel or other materials, as applicable. The general provisions of the RS rules including requirements for survey during construction and in service are not separately given in [Table 2.5](#).

If the relevant requirements of the RS rules for descriptive notations and mandatory distinguishing marks are not met, the ship's class cannot be assigned, retained, confirmed or renewed.

If the relevant requirements of the RS rules for a specific optional distinguishing mark are not met, such an optional distinguishing mark cannot be assigned, retained, confirmed or renewed.

Table 2.5

**Summary information on distinguishing marks and descriptive notations  
in the class notation of a ship**

### 1 Mandatory distinguishing marks in the class notation

#### 1.1 Character of classification

Distinguishing mark	Brief description	References to RS requirements
<b>KM</b>	Refer to <a href="#">2.2.1</a>	Provisions of the RS rules applicable to self-propelled ships and offshore installations
<b>KE</b>	Refer to <a href="#">2.2.1</a>	Provisions of the RS rules applicable to specified non-self-propelled ships and offshore installations with total power output of prime movers 100 kW and upwards
<b>K</b>	Refer to <a href="#">2.2.1</a>	Provisions of the RS rules applicable to non-self-propelled ships and offshore installations
<b>KM</b> ⚙ <b>KE</b> ⚙ <b>K</b> ⚙	Refer to <a href="#">2.2.2.1</a>	Applicable provisions of the RS rules concerning classification and construction
<b>KM</b> ★ <b>KE</b> ★ <b>K</b> ★	Refer to <a href="#">2.2.2.2</a>	
<b>(KM)</b> ★ <b>(KE)</b> ★ <b>(K)</b> ★	Refer to <a href="#">2.2.2.3</a>	
<b>KM</b> ⚙ <b>KE</b> ⚙ <b>K</b> ⚙	Refer to <a href="#">2.2.2.4</a>	
<b>Note.</b> For inland navigation ships, the distinguishing mark <b>IN</b> is added after the character of classification — refer to 2.2.1 — 2.2.2 of Part I "Classification" of the Rules for the Classification and Construction of Inland Navigation Ships (for European Inland Waterways).		

**1.2 Distinguishing mark for a nuclear ship and nuclear floating facility**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
☒	A nuclear ship/floating facility is fitted with a nuclear power unit as the main power plant intended to perform the main functions	<b>Rules for the Classification and Construction of Nuclear Ships and Floating Facilities</b>



### 1.3 Subdivision distinguishing marks

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>1.3.1 Subdivision distinguishing mark 1</b>		
<b>1</b>	<p>Subdivision distinguishing mark with number one is added to the character of classification of ships complying with the applicable requirements for subdivision and damage stability when any single compartment is flooded at extent of side damage specified in the relevant RS rules.</p> <p>The distinguishing mark is mandatory for the following types of ships:</p> <ul style="list-style-type: none"> <li>icebreakers of 50 m in length and above;</li> <li>fishing vessels of 100 m in length and above carrying 100 persons or more;</li> <li>lightships;</li> <li>oil tankers of more than 150 m in length but not exceeding 225 m;</li> <li>chemical tankers <b>type 2</b> of 150 m in length or less;</li> <li>chemical tankers <b>type 3</b> of 125 m in length or more but not exceeding 225 m;</li> <li>gas carriers <b>type 2G</b> of 150 m in length or less;</li> <li>gas carriers <b>type 2PG</b>;</li> <li>gas carriers <b>type 3G</b> of 80 m in length or more;</li> <li>drilling ships;</li> <li><b>Arc7</b> to <b>Arc9</b> ice class ships;</li> <li><b>Arc5</b> and <b>Arc6</b> ice class ships of 120 m in length and above</li> </ul>	<p><b>Rules for the Classification and Construction of Sea-Going Ships</b></p> <p>Part I "Classification", 2.2.4</p> <p>Part III "Equipment, Arrangements and Outfit", 7.12.3.1, 7.12.7.1.1</p> <p>Part V "Subdivision", 1.1.2, 1.5.2, 1.5.3, 3.3.6, 3.4.2.1, 3.4.4.1, 3.4.5.4, 3.4.6.1, 3.4.7, 3.4.10.2, 3.4.10.7.</p> <p>Part VIII "Systems and Piping", 5.1.3, 7.1.5, 7.4.3, 7.6.12, 7.12.4, 10.2.3</p> <p><b>Rules for the Classification, Construction and Equipment of MODU/FOP</b></p> <p>Part I "Classification", 2.3.1</p> <p><b>Rules for the Classification and Construction of FPU</b></p> <p>Part I "Classification"</p> <p><b>Rules for the Classification and Construction of Inland Navigation Ships (for European Inland Waterways)</b></p> <p>Part I "Classification", 2.2.4</p>
<b>1.3.2 Subdivision distinguishing mark 2</b>		
<b>2</b>	<p>Subdivision distinguishing mark with number two is added to the character of classification of ships complying with the applicable requirements for subdivision and damage stability when any two adjacent compartments are flooded at extent of side damage specified in the relevant RS rules.</p>	<p><b>Rules for the Classification and Construction of Sea-Going Ships</b></p> <p>Part I "Classification", 2.2.4</p> <p>Part III "Equipment, Arrangements and Outfit", 7.12.3.1, 7.12.7.1.1</p> <p>Part V "Subdivision", 1.1.2, 1.5.2, 1.5.3, 3.3.6, 3.4.5.4, 3.4.6.1</p> <p>Part VIII "Systems and Piping", 5.1.3, 7.1.5, 7.4.3, 7.6.12, 7.12.4, 10.2.3</p> <p><b>Rules for the Classification, Construction and Equipment of MODU/FOP</b></p> <p>Part I "Classification", 2.3.1</p> <p><b>Rules for the Classification and Construction of FPU</b></p> <p>Part I "Classification"</p>

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
	<p>The distinguishing mark is mandatory for the following types of ships:</p> <p>oil tankers of more than 225 m in length;</p> <p>chemical tankers <b>type 1</b>;</p> <p>chemical tankers <b>type 2</b> of more than 150 m in length;</p> <p>chemical tankers <b>type 3</b> of more than 225 m in length;</p> <p>gas carriers <b>type 1G</b>;</p> <p>gas carriers <b>type 2G</b> of more than 150 m in length;</p> <p>ships designed for the transport of radioactive material</p>	<p><b>Rules for the Classification and Construction of Inland Navigation Ships (for European Inland Waterways)</b> Part I "Classification", 2.2.4</p> <p><b>Rules for the Classification and Construction of High-Speed Craft</b> Part I "Classification", 2.3</p> <p><b>Rules for the Classification and Construction of Type A WIG Craft</b> Part I "Classification", 2.6</p> <p><b>Rules for the Classification and Construction of Nuclear Ships and Floating Facilities</b> Part II "Classification", Section 1 Part V "Subdivision"</p> <p><b>Rules for the Classification and Construction of Nuclear Support Vessels</b> Part I "Classification", Section 2 Part III "Stability. Subdivision"</p>

### 1.4 Distinguishing marks for restricted areas of navigation or navigation conditions

(Distinguishing marks for restricted areas of navigation or navigation conditions are mandatory if a ship complies with the RS rules requirements applicable to a specific restriction)

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>No special distinguishing mark</b>	Unrestricted area of navigation is assigned to ships of unrestricted service which comply with the RS rules requirements for unrestricted area of navigation	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part II "Hull", applicable requirements without regard to provisions concerning ships of restricted service Part III "Equipment, Arrangements and Outfit", applicable requirements without regard to provisions concerning ships of restricted service Part XI "Electrical Equipment", applicable requirements without regard to provisions concerning ships of restricted service <b>Rules for the Equipment of Sea-Going Ships</b> (if applicable) Part III "Signal Means", applicable requirements without regard to provisions concerning ships of restricted service Part V "Navigational Equipment", 3.4.1.5 <b>Load Line Rules for Sea-Going Ships</b> (if applicable) Applicable requirements without regard to provisions concerning ships of restricted service
<b>R1</b>	Distinguishing mark for restricted area of navigation for sea-going ships: navigation in sea areas at seas with a wave height of 8,5 m with 3 per cent probability of exceeding level and the ships proceeding not more than 200 miles away from a place of refuge, with an allowable distance between places of refuge not more than 400 miles	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.5.1.1 Part II "Hull", 1.4.1, 1.4.4.3, 1.6.5.1, 1.6.5.2, 2.2.4.8, 2.4.4.4, 2.4.4.6, 2.12.4.1, 2.12.4.2, 3.1.3.6, 3.6.1.3 Part III "Equipment, Arrangements and Outfit", 3.1.3, 7.1.1, 9.2.4, 9.2.9 Part XI "Electrical Equipment", 4.3.3, 9.3.1, 19.1.2.1 <b>Rules for the Equipment of Sea-Going Ships</b> Part III "Signal Means", 2.1.1, 4.2.2.3 <b>Load Line Rules for Sea-Going Ships</b> 1.1.1.5, 1.1.1.6, 1.3.1.2, 1.1.1.11, 1.1.2.4, 6.1.1, 6.2.3.2, 6.3.2, 6.4.2, 6.5.2.1.2, 8.1.1 <b>Rules for the Classification and Construction of FPU</b> Part III "Equipment, Arrangements and Outfit"
<b>R2</b>	Distinguishing mark for restricted area of navigation for sea-going ships: navigation in sea areas at seas with a wave height of 7,0 m with 3 per cent probability of exceeding level and with the ships proceeding not more than 100 miles away from a place of refuge, with an allowable distance between places of refuge not more than 200 miles	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.5.1.2 Part II "Hull", 1.1.3, 1.1.4.6, 1.4.4.3, 1.6.4.6, 1.6.5.1, 1.6.5.2, 2.4.4.6, 2.10.4.1, 2.10.4.2, 2.10.4.6, 3.1.3.6, 3.6.1.3 Part III "Equipment, Arrangements and Outfit", 2.10.1.2, 3.1.3, 3.3.4, 7.1.1, 7.2.1.2, 7.2.1.3, 7.2.1.4, 7.2.1.5, 7.5.2.2, 7.6.4, 7.7.1.2, 7.8.1, 7.10.2.1, 7.10.4, 9.2.4 Part VII "Machinery Installations", 5.1.2, 6.2.1 Part VIII "Systems and Piping", 7.1.1, 7.2.1, 7.2.2, 7.4.6, 10.1.4, 11.1.5, 13.1.1, 13.8.3.2, 14.1.3, 14.5.3, 15.1.1.5, 15.2.1, 16.1.2, 16.2.3 Part XI "Electrical Equipment", 3.3.1, 4.3.3, 9.3.1, 13.7.1.2, 13.7.3.2, 19.1.2.1 <b>Rules for the Equipment of Sea-Going Ships</b> Part III "Signal Means", 2.1.1 <b>Load Line Rules for Sea-Going Ships</b> 1.1.1.5, 1.1.1.6, 1.1.2.4, 6.1.1, 6.2.3.2, 6.3.1.1, 6.3.1.3, 6.3.1.4, 6.3.2, 6.4.2, 6.5.2.1.2, 8.1.1, 8.3.1.1.2, 8.3.1.2, 8.3.1.3 <b>Rules for the Classification and Construction of FPU</b> Part III "Equipment, Arrangements and Outfit"

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>R3</b>	Distinguishing mark for restricted area of navigation for sea-going ships: harbor, roadstead and coastal navigation within the limits prescribed by RS in each particular case	<p><b>Rules for the Classification and Construction of Sea-Going Ships</b>  Part I "Classification", 2.2.5.1.6  Part II "Hull", 1.1.3, 1.1.4.6, 1.4.1, 1.4.4.3, 1.4.5.3, 1.6.4.6, 1.6.5.1, 1.6.5.2, 2.4.4.6, 2.10.4.1, 2.10.4.2, 2.10.4.6, 3.1.3.6, 3.6.1.3  Part III "Equipment, Arrangements and Outfit", 2.10.1.2, 3.1.3, 3.3.1, 3.3.4, 3.4.1, 7.1.1, 7.2.1.2, 7.2.1.3, 7.2.1.4, 7.2.1.5, 7.5.2.2, 7.6.4, 7.7.1.2, 7.8.1, 7.10.2.1, 7.10.4, 9.2.4, 9.2.8  Part XI "Electrical Equipment", 2.1.3.2, 3.1.7, 3.3.1, 4.3.3, 9.3.1, 13.7.1.2, 13.7.3.2, 19.1.2.1  <b>Rules for the Classification and Construction of FPU</b>  Part III "Equipment, Arrangements and Outfit"  Part VII "Machinery Installations", 5.1.2, 6.2.1, 8.1.3  Part VIII "Systems and Piping", 7.1.1, 7.2.1, 7.2.2, 7.4.6, 10.1.4, 11.1.5, 13.1.1, 13.8.3.2, 14.1.3, 14.5.3, 15.1.5, 15.2.1, 16.1.2, 16.2.2, 16.2.3  Part XI "Electrical Equipment", 2.1.3.2, 3.1.7, 3.3.1, 4.3.3, 9.3.1, 13.7.1.2, 13.7.3.2, 19.1.2.1  <b>Rules for the Equipment of Sea-Going Ships</b> (if applicable)  Part II "Life-Saving Appliances", 2.1.2, 4.1.1.10, 4.1.3.2  Part III "Signal Means", 2.1.1  <b>Load Line Rules for Sea-Going Ships</b>  1.1.1.5, 1.1.1.6, 1.1.1.11, 1.1.2.4, 6.1.1, 6.2.3.2, 6.3.1.2, 6.3.1.3, 6.3.1.4, 6.4.3, 6.5.2.1.3, 8.1.1, 8.3.1.1.2, 8.3.1.3, 8.3.1.5</p>
<b>R2-RSN</b> <b>R2-RSN(4,5)</b> <b>R3-RSN</b>	<p>Distinguishing marks for restricted area of navigation for ships of river-sea navigation:</p> <p><b>R2-RSN</b> — river-sea navigation at seas with a wave height of 6,0 m with 3 per cent probability of exceeding level and with the ships proceeding from the place of refuge: in open seas up to 50 mile, with an allowable distance between the places of refuge not more than 100 miles; in enclosed seas up to 100 miles and with an allowable distance between the places of refuge not more than 200 miles;</p> <p><b>R2-RSN(4,5)</b> — river-sea navigation at seas with a wave height of 4,5 m with 3 per cent probability of exceeding level and with the ships proceeding from the place of refuge: in open seas up to 50 miles and with an allowable distance between the places of refuge not more than 100 miles;</p>	<p><b>Rules for the Classification and Construction of Sea-Going Ships</b>  Part I "Classification", 2.2.5.1.3, 2.2.5.1.4, 2.2.5.1.5  Part II "Hull", 1.1.3, 1.1.4.6, 1.4.1, 1.4.4.3, 1.4.5.3, 1.6.4.6, 1.6.5.1, 1.6.5.2, 2.4.4.6, 3.1.3.6, 3.6.1.3  Part III "Equipment, Arrangements and Outfit", 2.10.1.2, 3.1.3, 3.3.1, 3.3.4, 3.5.1, 3.7.1, 6.1.3, 7.1.1, 7.2.1.2, 7.2.1.3, 7.2.1.4, 7.2.1.5, 7.4.2.3, 7.5.2.2, 7.6.4, 7.7.1.2, 7.8.1, 7.10.2.1, 7.10.4, 9.2.4  Part IV "Stability", 3.12 (for dry cargo ships of <b>R2-RSN</b> area of navigation)  Part VII "Machinery Installations", 2.1.8, 3.1.11, 6.2.1  Part VIII "Systems and Piping", 7.1.1, 7.2.1, 7.2.2, 7.4.6, 10.1.4, 10.4.7, 11.1.5, 13.1.1, 13.8.3.2, 14.1.3, 14.5.3, 15.1.1.5, 15.2.1, 16.1.2, 16.2.2, 16.2.3  Part XI "Electrical Equipment", 3.3.1, 4.3.3, 9.3.1, 19.1.2.1  <b>Rules for the Equipment of Sea-Going Ships</b> (if applicable)  Part II "Life-Saving Appliances", 2.1.2  <b>Load Line Rules for Sea-Going Ships</b>  1.1.1.5, 1.1.1.11, 1.1.2.4, 1.3.1.4, 1.3.1.5, 1.3.1.6, 6.1.1, 6.2.3.2, 6.3.1.3, 6.3.1.4, 6.3.2, 6.4.2, 6.5.2.1.2</p>

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
	in enclosed seas up to 100 miles and with an allowable distance between the places of refuge not more than 200 miles; <b>R3-RSN</b> — river-sea navigation at seas with a wave height of 3,5 m with 3 per cent probability of exceeding level, with due regard to particular restrictions on the area and conditions of navigation resulting from the wind and wave conditions of the basins, with determination of a maximum allowable distance from the place of refuge, which in no case shall be more than 50 miles	
<b>RN(SCI)</b> <b>RN(SCII)</b>	Distinguishing marks for restricted area of navigation for sea coastal ships	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.5.4 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", Section 26
<b>Zone 1</b> <b>Zone 2</b> <b>Zone 3</b> <b>Zone 4</b>	Distinguishing marks for restricted areas of navigation for inland navigation ships (for European inland waterways)	<b>Rules for the Classification and Construction of Inland Navigation Ships (for European Inland Waterways)</b> Part I "Classification", 2.2.5 <b>Rules for the Classification and Construction of Pleasure Craft</b> General Regulations, Section 5
<b>A</b> <b>A1</b> <b>A2</b> <b>B</b> <b>C</b> <b>C1</b> <b>C2</b> <b>C3</b> <b>D</b>	Design categories for pleasure craft	<b>Rules for the Classification and Construction of Pleasure Craft</b> General Regulations, 4.2 Part I "Classification", 2.2.2 Part VII "Electrical Equipment", 1.1.5, 2.2.1, 2.6.1.1, 3.1.2, 3.1.3, 3.3.1 Part VIII "Radio and Navigational Equipment", 3.1
<b>T0</b> <b>T1</b> <b>T2</b> <b>T3</b>	Distinguishing marks for seasonal navigation restriction for pleasure craft	<b>Rules for the Classification and Construction of Pleasure Craft</b> Part I "Classification", 2.2.5
<b>O</b>	Distinguishing mark for day time navigation restriction for pleasure craft	<b>Rules for the Classification and Construction of Pleasure Craft</b> Part I "Classification", 2.2.6

**1.5 GFS — distinguishing mark for a ship equipped to use gas as fuel**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>GFS</b> (Gas Fuelled Ship)	The mark is assigned if a ship is equipped for using gas as fuel, as well as to gas carriers carrying liquefied methane, using cargo as fuel and complying with the requirements of the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code) and the Rules for the Classification and Construction of Ships Carrying Liquefied Gases in Bulk	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.29 Part IX "Machinery", 8.10.2 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", Section 9

**1.6 RGU — distinguishing mark for a gas carrier fitted with a regasification unit  
for carried cargo**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>RGU</b> (Regasification unit)	A gas carrier is fitted with a regasification unit for cargo export to shore	<b>Rules for the Classification and Construction of Ships Carrying Liquefied Gases in Bulk</b> Part I "Classification", 2.2.9 Part V "Fire Protection", 2.4, 2.5, 3.3.1, 3.3.12 Part VI "Systems and Piping", 3.22, 8.3.4 Part VII "Electrical Equipment", 2.2.5.5 Part VIII "Instrumentation and Automation Systems", 6.15



**1.7 RLU — distinguishing mark for a gas carrier fitted with a reliquefaction unit  
for cargo vapours**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>RLU</b> (Reliquefaction unit)	A gas carrier is fitted with a reliquefaction unit for cargo vapours	<b>Rules for the Classification and Construction of Ships Carrying Liquefied Gases in Bulk</b> Part I "Classification", 2.2.10, 4.4 Part IV "Cargo Containment", 10.2 Part V "Fire Protection", 3.3.1 Part VI "Systems and Piping", 3.21, 4.2 Part VII "Electrical Equipment", 1.1.2, 5.1, 8.2.3 Part X "Special Requirements", 5.3

**1.8 GCU —distinguishing mark for a gas carrier fitted with a gas combustion unit**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>GCU</b> (Gas combustion unit)	A gas carrier is fitted with a gas combustion unit	<b>Rules for the Classification and Construction of Ships Carrying Liquefied Gases in Bulk</b> Part I "Classification", 2.2.11 Part VI "Systems and Piping", 3.21, 4.3

**1.9 EPP — distinguishing mark for ships fitted with the main electric propulsion plant**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>EPP</b>	A ship is fitted with the main electric propulsion plant	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.12 Part VIII "Systems and Piping", 7.4.9 Part XI "Electrical Equipment", Section 17 Part XV "Automation", 2.4.1.11 <b>Rules for the Classification, Construction and Equipment of MODU/FOP</b> Part I "Classification", 2.4.5, 4.1.12 Part X "Electrical Equipment", Section 17

**1.10 A-Thruster — distinguishing mark for ships fitted with steerable propellers (azimuth thrusters) being a part of the propulsion plant**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>A-Thruster(E)</b>	A ship is equipped with a propulsion plant that includes a steerable propeller (azimuth thruster) with a podded drive	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.46 Part VII "Machinery Installations", Section 7, 9.9 Part XI "Electrical Equipment", 17.3
<b>A-Thruster(M)</b>	A ship is fitted with a propulsion plant that includes a steerable propeller (azimuth thruster) with mechanical transmission of power to the propeller	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.46 Part VII "Machinery Installations", Section 7, 9.9

**1.11 CPS — distinguishing mark for ships fitted with composite (hybrid) propulsive systems**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>CPS</b> (Composite (hybrid) propulsion system)	Mandatory for ships fitted with composite (hybrid) propulsive system used in ship's main operation modes, such as running mode, manoeuvring mode	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.45 Part XI "Electrical Equipment", Section 24

**1.12 LI, SI — distinguishing marks for ships fitted with a loading instrument/  
onboard software for stability calculations**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>1.12.1 Distinguishing mark for ships fitted with a loading instrument</b>		
<b>LI</b>	A ship is fitted with a loading instrument. The distinguishing mark is mandatory for the following categories of ships of 100 m and above in length: ships with large deck openings; ships for which uneven loading, i.e. uneven distribution of cargo and/or ballast, is possible; chemical tankers and gas carriers	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.15.1 Part II "Hull", 1.4.9.4 <b>Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships</b> Part II "Technical Documentation", 12.3
<b>1.12.2 Distinguishing mark for ships fitted with onboard software for stability calculations</b>		
<b>SI</b>	A ship is fitted with onboard software for stability calculations. The distinguishing mark is mandatory for oil tankers, chemical tankers, ships carrying liquefied gases in bulk and bulk carriers of less than 150 m in length	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.15.2 Part IV "Stability", 1.4.12 <b>Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships</b> Part II "Technical Documentation", 12.2

**1.13 ERS — distinguishing mark for ships fitted with a system of prompt access to computerized shore-based emergency response services (ERS) on damage stability and residual structural strength calculations**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>ERS</b>	Ship is fitted with a system of prompt access to computerized shore-based emergency response services (ERS) on damage stability and residual structural strength calculations. The distinguishing mark is mandatory for oil tankers of deadweight exceeding 5000 t and for passenger ships of 120 m and above in length or having three or more main vertical zones	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.43 Part V "Subdivision" 1.4.8, 2.7.5.2 <b>Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships</b> Part II "Technical Documentation", 12.2.4



**1.14 CSR — distinguishing mark for ships constructed in compliance  
with the Common Structural Rules**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>CSR</b>	For oil tankers and bulk carriers fully complying with the requirements of the Common Structural Rules. The distinguishing mark is added after descriptive notation	<b>Common Structural Rules for Bulk Carriers and Oil Tankers</b>

**1.15 Distinguishing mark for bulk carriers complying with the requirements specified in 3.3, Part II "Hull" of these Rules or requirements of the Common Structural Rules (as applicable)**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>BC-A</b> <b>BC-B</b> <b>BC-C</b>	<p>When adding the descriptive notation <b>Bulk carrier</b> to the character of classification, for bulk carriers of 150 m in length and upwards provided the appropriate requirements of 3.3, Part II "Hull" of these Rules or requirements of the Common Structural Rules (as applicable) are complied with, one of the following distinguishing marks shall be added after the descriptive notation:</p> <p><b>BC-A</b> — for ships designed to carry the bulk cargoes having a density of 1,0 t/m<sup>3</sup> and above with specified holds empty at the maximum draught;</p> <p><b>BC-B</b> — for ships designed to carry the bulk cargoes having a density of 1,0 t/m<sup>3</sup> and above with all holds loaded;</p> <p><b>BC-C</b> — for ships designed to carry the bulk cargoes having a density less than 1,0 t/m<sup>3</sup>.</p> <p>For distinguishing marks <b>BC-A</b> or <b>BC-B</b>, an entry <b>(maximum cargo density...t/m<sup>3</sup>)</b> shall be made if the maximum cargo density is less than 3,0 t/m<sup>3</sup>.</p> <p>For the distinguishing mark <b>BC-A</b>, the allowed combination of specified empty cargo holds shall be additionally entered, for example: <b>(cargo holds Nos. 2, 4, ... may be empty)</b>.</p> <p>For the distinguishing mark <b>BC-A</b>, if the ship is intended to operate in alternate block load condition, any two adjacent cargo holds shall be loaded with the next holds being empty, an entry <b>(block loading)</b> shall be made.</p>	<p><b>Rules for the Classification and Construction of Sea-Going Ships</b>  Part II "Hull", 3.3  or  <b>Common Structural Rules for Bulk Carriers and Oil Tankers</b>  (as applicable)</p>

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
	When the bulk carrier has not been designed for loading and unloading in multiple ports, an entry <b>(no MP)</b> shall be added	

**1.16 GRAB(X) — distinguishing mark for ships with cargo holds designed for loading/unloading by grabs**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>GRAB(X)</b>	<p>For bulk carriers having one of the distinguishing marks <b>BC-A</b> or <b>BC-B</b> in the class notation, and with cargo holds designed for loading/unloading by grabs in compliance with the requirements of Section 6, Chapter 1, Part 2 of the Common Structural Rules, the distinguishing mark <b>GRAB(X)</b> shall be mandatory added after the above distinguishing marks, where instead of <b>X</b> an unladen grab weight shall be indicated, taken not less than:</p> <p>35 t for ships with <math>L \geq 250</math> m;  30 t for ships with <math>200 \text{ m} \leq L &lt; 250</math> m;  20 t otherwise.</p> <p>For all other bulk carriers, the addition of the distinguishing mark <b>GRAB(X)</b> is voluntary</p>	<p><b>Rules for the Classification and Construction of Sea-Going Ships</b>  Part II "Hull", 2.4.2.5, 2.4.4.3, 2.4.4.4 (if 3.3 is applicable)  Part III "Equipment, Arrangements and Outfit", 7.13.20  <b>Common Structural Rules for Bulk Carriers and Oil Tankers</b> (if applicable)  Pt2, Ch1, Sec 6</p>

**1.17 Distinguishing mark for ships with membrane LNG cargo tanks designed to carry LNG at high pressure**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>highPRESS (pressure)</b>	If membrane LNG cargo tanks of LG carrier are capable to withstand vapour pressure exceeding 25 kPa but not more than 70 kPa, the distinguishing mark <b>highPRESS(pressure)</b> shall be added to the character of classification where a maximum allowable vapour pressure, in kPa, is indicated in brackets, for example, <b>highPRESS(50)</b>	<b>Rules for the Classification and Construction of Ships Carrying Liquefied Gases in Bulk</b> Part I "Classification", 2.2.12 Part IV "Cargo Containment", 24.1.4 and 24.4 Part VI "Systems and Piping", 3.16.6 Part VIII "Instrumentation and Automation Systems", 4.1

### 1.18 Distinguishing marks related to survey arrangement

(ESP)

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>(ESP)</b>	<p>The distinguishing mark is mandatorily added to the character of classification of self-propelled ships with descriptive notations <b>Chemical tanker, Oil tanker, Bulk carrier, Self-unloading bulk carrier, Ore carrier</b> or the word combinations <b>(Oil/bulk carrier, Oil/ore carrier, etc.)</b> after the descriptive notation.</p> <p>Also applied when adding descriptive notation <b>FSO</b> or <b>FPSO</b> to the character of classification (added after the descriptive notation for self-propelled ships). This means the necessity to survey these ships based on the Enhanced Survey Programme (not applied to floating installations with descriptive notations <b>FPSO(LG), FSO(LG)</b> or <b>FSRU</b>)</p>	<p><b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.48</p> <p><b>Rules for the Classification and Construction of FPU</b> Part I "Classification", 2.2.3</p>

### 1.19 Distinguishing mark for a ship complying with the requirements for stability under icing

IcingSTAB()

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>IcingSTAB(full)</b>	Ship's stability has been checked at full ice weight allowance. The distinguishing mark is mandatory for ships operating: to the north of latitude 66°30'N; to the south of latitude 60°00'S; in winter <sup>1</sup> in the Bering Sea, the Sea of Okhotsk and in the Tatar Strait	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part IV "Stability", 2.4
<b>IcingSTAB(half)</b>	Ship's stability has been checked at ice weight allowance reduced by half. The distinguishing mark is mandatory for ships operating: in winter <sup>1</sup> within seasonal winter zones <sup>2</sup> , except for water areas specified in the description of distinguishing mark <b>IcingStab(full)</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part IV "Stability", 2.4
<sup>1</sup> Start and end of winter period is determined in accordance with the International Convention on Load Lines or the Load Lines Rules, whichever is applicable to the ship. <sup>2</sup> Boundaries of seasonal winter zones are determined in accordance with the International Convention on Load Lines or the Load Lines Rules, whichever is applicable to the ship.		



**1.20 Distinguishing marks confirming application of protective coatings or utilization of alternative means of corrosion protection in ship's spaces**

**COAT()**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>COAT(PSPC)</b>	Added to the character of classification of ships of all types of 500 gross tonnage and upwards as well as bulk carriers of 150 m in length and above covered by regulation II-2/3-2 of SOLAS 74 as amended by IMO resolution MSC.216(82), and on board which the protective coating is applied in accordance with IMO resolution MSC.215(82)	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part II "Hull", 1.2.5.1 Part XIII "Materials", 6.5.1.1
<b>COAT(PSPC-COT)</b>	Added to the character of classification of crude oil tankers of 5000 t deadweight and above covered by regulation II-1/3-11 of SOLAS 74 as amended by IMO resolution MSC.291(87), and on board which the protective coating is applied in accordance with IMO resolution MSC.288(87)	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part II "Hull", 1.2.5.3 Part XIII "Materials", 6.5.1.2

**CORRES**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>CORRES</b>	Added to the character of classification of crude oil tankers of 5000 t deadweight and above covered by regulation II-1/3-11 of SOLAS 74 as amended by IMO resolution MSC.291(87), and on board which the alternative means of corrosion protection or corrosion resistant materials are utilized to maintain the required structural integrity for 25 years in accordance with IMO resolution MSC.289(87)	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part II "Hull", 1.2.5.3

**1.21 CON-M — distinguishing mark specifying the necessity for monitoring of critical structural areas**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>CON-M</b>	Added to the character of classification of the CSR ship having the approved critical structural areas monitoring plan	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.49 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", Section 22 <b>Guidelines on Technical Supervision of Ships under Construction</b> 2.11.1.1.1.3, 2.11.3.1.1

**1.22 VCS — distinguishing mark for ships fitted with a cargo vapour discharge system**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>VCS</b>	Added to the character of classification of a chemical tanker and an oil tanker fitted with a cargo vapour discharge system	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.16 Part VIII "Systems and Piping", 9.9

**1.23 COW — distinguishing mark for ships fitted with a crude oil washing system**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>COW</b>	Added to the character of classification of an oil tanker if it is fitted with a crude oil washing system	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.18 Part VIII "Systems and Piping", 9.12

**1.24 IGS — distinguishing marks for ships fitted with an inert gas system**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>IGS-IG</b> <b>IGS-NG</b> <b>IGS-Pad</b>	Added to the character of classification of oil tankers, chemical tankers and other tankers fitted with an inert gas system	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.17 Part VIII "Systems and Piping", 9.16, 12.13

**1.25 BWM(T) — distinguishing mark for ships fitted with a ballast water treatment system**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>BWM (T)</b>	Added to the character of classification of a ship covered by regulation B-3 of IMO resolution MEPC.297(72). The distinguishing mark means that a ship performs ballast water management through the ballast water management system (BWMS) and carries the operation, maintenance and safety manual of the BWMS	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.22 Part VIII "Systems and Piping", 8.7 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", 3.4.4 <b>Guidelines on Application of the Requirements of International Convention for the Control and Management of Ship's Ballast Water and Sediments, 2004</b>

**1.26 DE-Tier III — distinguishing mark for a marine diesel engine complying with Tier III Limit according to Regulation 13, Appendix VI to MARPOL**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>DE-Tier III</b>	Added to the character of classification of any ship where NO <sub>x</sub> emissions from marine diesel engines comply with Tier III limit according to Regulation 13 of Annex VI to MARPOL. In the class notations of ships where marine diesel engines are not covered by Regulation 13 but comply with it, the distinguishing mark may be added by the shipowner's written request	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.37 <b>International Convention MARPOL 73/78, Appendix VI</b>

**1.27 CONT() — distinguishing marks for ships capable of carrying international standard containers**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>CONT (deck)</b> <b>CONT (cargo hold(s) No.)</b> <b>CONT (deck)</b> <b>(cargo hold(s) No.)</b>	Added to the character of classification of ships adopted for carriage of cargo in international standard containers on deck and/or in hold/holds except for container ships	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.32 Part II "Hull", 3.1.3.8, 3.1.4.6 Part III "Equipment, Arrangements and Outfit", 7.10.6.11, 7.10.6.12 Part IV "Stability", 3.10 (for ships with the distinguishing mark <b>CONT (deck)</b> ) Part XI "Electrical Equipment", 19.5 <b>Technical Requirements for the Arrangement and Securing of the International Standard Containers on Board the Ships Intended for Container Transportation</b>



**1.28 DG — distinguishing marks for ships fit for carriage of dangerous goods**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>DG (bulk)</b> <b>DG (pack)</b> <b>DG (bulk, pack)</b>	Added to the character of classification of ships recognized fit for carriage of dangerous goods in bulk (bulk) and/or packaged form (pack)	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.33 Part VI "Fire Protection", 7.2 Part XI "Electrical Equipment", 19.11 <b>Rules for the Classification Surveys of Ships in Service</b> Part III "Additional Surveys of Ships Depending on Their Purpose and Hull Material", Sections 11 and 12

**1.29 HELIDECK — distinguishing marks for ships fitted with helicopter facilities**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>HELIDECK</b> <b>HELIDECK-F</b> <b>HELIDECK-H</b>	Added to the character of classification of ships fitted with helicopter facilities	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.26 Part VI "Fire Protection", 6.1, 5.1.2 Part VIII "Systems and Piping", 12.11, 13.13 Part XI "Electrical Equipment", 4.3.1.21, 6.9, 9.3.1.1 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", Section 6 <b>Rules for the Equipment of Sea-Going Ships</b> (if applicable) Part V "Navigational Equipment", Appendix 2, 1.1.8

**1.30 REF — distinguishing marks for ships intended for carriage of refrigerated cargo**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>REF (REF)</b>	Added to the character of classification of ships fitted with a classed (distinguishing mark <b>REF</b> ) or unclassified (distinguishing mark <b>(REF)</b> ) refrigerating plant	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.11, Section 4 Part VIII "Systems and Piping", 7.8 Part XI "Electrical Equipment", 7.3.1.11, 16.8.4.15, 16.8.4.16, Section 20 Part XII "Refrigerating Plants" Part XV "Automation", 4.8 <b>Rules for the Classification and Construction of Inland Navigation Ships (for European Inland Waterways)</b> Part I "Classification", 2.2.7

**1.31 COMF(N – S) — distinguishing mark for a ship complying with SOLAS-74 requirements for noise level in ship's spaces**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>COMF(N – S)</b>	<p>Ship complies with the requirements for noise level in ship's spaces. Grade <b>S</b> indicates the noise comfort level in ship's spaces (<b>S</b> — compliance of the noise comfort level with SOLAS-74 requirements). For ships of 1600 gross tonnage and upwards engaged on international voyages, the distinguishing mark is mandatory.</p> <p><b>N o t e .</b> For ships of 1600 gross tonnage and upwards engaged on international voyages contracted for construction before 1 January 2023 and which comply with SOLAS-74 reg. II-2/3-12 and relevant provisions specified in the column "References to RS requirements", the distinguishing mark may be assigned at the shipowner's discretion</p>	<p><b>Rules for the Classification and Construction of Sea-Going Ships</b>  Part I "Classification", 2.2.42.2  Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", 18.2.1.3</p>

## 2 Optional distinguishing marks in the class notation

(Adding specified below distinguishing marks to the character of classification is possible provided the relevant RS requirements listed below are met)

### 2.1 Ice class notations

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
Ice1 Ice2 Ice3 Arc4 Arc5 Arc6 Arc7 Arc8 Arc9	Sea-going ships complying with the Register ice class requirements	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.3 Part II "Hull", 1.2.3.3, 3.7.1.6.2, 3.7.2.6, 3.7.3.4, 3.10, 3.11 Part III "Equipment, Arrangements and Outfit", 2.1.5, 2.1.8, 2.2.2.2, 2.2.2.3, 2.2.3.1, 9.2.5, 9.2.9 Part V "Subdivision", 1.1.1, 3.4.10 Part VII "Machinery Installations", 1.3.2.3, 2.1.1, 2.1.2, 2.4.3, 5.1.3, 5.2.5, 5.4.3, 6.2.1, 6.2.2, 6.2.4, 6.2.5, 6.3.4, 6.5.2, 7.2.4, 8.2.1, 8.3.1, 8.4.2, 8.8.2, 8.8.5 Part VIII "Systems and Piping", 4.3.1, 4.3.2.3, 8.3.2, 12.1.7, 15.6.1 Part IX "Machinery", 4.2.3.2, 8.1.8 <b>Rules for the Equipment of Sea-Going Ships</b> Part III "Signal Means", 3.1.3.3
Icebreaker6 Icebreaker7 Icebreaker8 Icebreaker9	Ice classes for icebreakers	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.3 Part II "Hull", 3.10 Part III "Equipment, Arrangements and Outfit", 2.1.4, 2.2.2.2 Part V "Subdivision", 1.1.1.12, 3.4.2 Part VII "Machinery Installations", 1.3.2.3, 2.1.1.1, 2.1.2, 2.4.3, 5.1.3, 5.2.5, 5.4.3, 6.2.1, 6.2.2, 6.2.4, 6.2.5, 6.3.4, 6.5.2, 7.2.4, 8.2.1, 8.3.1, 8.4.2, 8.8.2, 8.8.5 Part VIII "Systems and Piping", 4.3.1, 4.3.2.3, 8.3.2, 12.1.7, 15.6.1 Part IX "Machinery", 4.2.3.2, 8.1.8 <b>Rules for the Equipment of Sea-Going Ships</b> Part III "Signal Means", 3.1.3.3
PC1 PC2 PC3 PC4 PC5 PC6 PC7	IACS polar class ships	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.3.1 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", Section 1
IA Super IA IB IC II III	Baltic ice classes	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.3.1 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", Section 10
Ice	Ice strengthening of inland navigation ships for navigation in broken ice	<b>Rules for the Classification and Construction of Inland Navigation Ships (for European Inland Waterways)</b> Part I "Classification", 2.2.3.1 Part II "Hull", 3.6
Ice(5) Ice(10)	Ice strengthening of small pleasure craft (the thickness of ice cake, in cm, to be stated in parentheses)	<b>Rules for the Classification and Construction of Pleasure Craft</b> Part I "Classification", 2.2.3

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>Ice1</b>	Ice class of small sea fishing vessels	<b>Rules for the Classification and Construction of Small Sea Fishing Vessels</b> Part I "Classification", 2.2.1 Part II "Hull", 4.4
<b>I1(Hull)</b> <b>I2(Hull)</b> <b>I3(Hull)</b>	Ice class marks indicating operation of a ship in freezing areas of the following seas: <b>I1(Hull)</b> — the East Siberian Sea, the Chukchi Sea; <b>I2(Hull)</b> — the Barents Sea, the Sea of Okhotsk, the Kara Sea, the Laptev Sea, the Bering Sea; <b>I3(Hull)</b> — the Baltic Sea, the Caspian Sea, the Sea of Azov. The distinguishing mark may be added to the class notation of birth-connected ships operated when lying at anchor at a water area distanced from the shore as well as ships operated in accordance with their intended purpose allowing for periodical drifting in ice-covered waters	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.3.3.6 Part II "Hull", 3.10.5

**2.2 DAS — distinguishing mark for ship complying with the requirements to ice-strengthened hull design of ship intended to operate stern first**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>DAS (ice class mark)</b>	<p>Ice navigation ship fitted with active means of the ship's steering (refer to 1.2 Part VII "Machinery Installations") and designed for both bow-first operation and stern-first ice operation.</p> <p>If double acting ships comply at least with the requirements of Section 19, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", the distinguishing mark <b>DAS (ice class mark)</b> may be added to the character of classification, where the RS ice class is indicated in brackets according to 2.2.3.3.1 or 2.2.3.3.4 in case of stern-first operation.</p> <p>When the RS ice class in case of stern-first operation differs from that in case of bow-first operation, the appropriate limitation is introduced to the RS ice class assigned according to 2.2.3.3.1 or 2.2.3.3.4, for example:</p> <p><b>Arc4 (hull at <math>d \leq 11</math> m; ahead) DAS (Arc6 hull at <math>d \leq 11</math> m)</b>  <b>Arc6 (machinery)</b></p>	<p><b>Rules for the Classification and Construction of Sea-Going Ships</b></p> <p>Part I "Classification", 2.2.3.3.5</p> <p>Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", Section 19</p>

### 2.3 AUT — distinguishing automation marks

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>AUT1</b>	The automation extent is sufficient for the machinery installation operation with unattended machinery spaces and the main machinery control room	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.6 Part XV "Automation", Section 4 <b>Rules for the Classification, Construction and Equipment of MODU/FOP</b> Part I "Classification", 2.4.1, 4.1.10 Part XIV "Automation", Section 6 <b>Rules for the Classification and Construction of FPU</b> Part XV "Automation", Section 6
<b>AUT2</b>	The automation extent is sufficient for the machinery installation operation by one operator at the main machinery control room with unattended machinery spaces	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.6 Part XV "Automation", Section 5 <b>Rules for the Classification and Construction of MODU/FOP</b> Part I "Classification", 2.4.1, 4.1.10 Part XIV "Automation", Section 6 <b>Rules for the Classification and Construction of FPU</b> Part XV "Automation", Section 6
<b>AUT3</b>	The automation extent is sufficient for the machinery installation operation of a ship with the main machinery power output not more than 2250 kW with unattended machinery spaces and the main machinery control room	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.6 Part XV "Automation", Section 6 <b>Rules for the Classification and Construction of Small Sea Fishing Vessels</b> Part I "Classification", 2.2.2 Part XV "Automation"
<b>AUT1-C</b> <b>AUT1-ICS</b>	The same as <b>AUT1</b> , but the automation is based on computers or programmable logic controllers ( <b>AUT1-C</b> ) or on a computerized integrated monitoring and control system ( <b>AUT1-ICS</b> )	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.6 Part XV "Automation", Sections 4 and 7 <b>Rules for the Classification, Construction and Equipment of MODU/FOP</b> Part I "Classification", 2.4.1, 4.1.10 Part XIV "Automation", Section 6 <b>Rules for the Classification and Construction of FPU</b> Part XV "Automation", Section 6
<b>AUT2-C</b> <b>AUT2-ICS</b>	The same as <b>AUT2</b> , but the automation is based on computers or programmable logic controllers ( <b>AUT2-C</b> ) or on a computerized integrated monitoring and control system ( <b>AUT2-ICS</b> )	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.6 Part XV "Automation", Sections 5 and 7 <b>Rules for the Classification, Construction and Equipment of MODU/FOP</b> Part I "Classification", 2.4.1, 4.1.10 Part XIV "Automation", Section 6 <b>Rules for the Classification and Construction of FPU</b> Part XV "Automation", Section 6
<b>AUT3-C</b> <b>AUT3-ICS</b>	The same as <b>AUT3</b> , but the automation is based on computers or programmable logic controllers ( <b>AUT3-C</b> ) or on a computerized integrated monitoring and control system ( <b>AUT3-ICS</b> )	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.6 Part XV "Automation", Sections 6 and 7



Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>AUT</b>	Distinguishing automation mark for inland navigation ships (for European inland waterways)	<b>Rules for the Classification and Construction of Inland Navigation Ships (for European Inland Waterways)</b> Part I "Classification", 2.2.6 Part X "Automation"
<b>AUT</b>	Distinguishing automation mark for pleasure craft	<b>Rules for the Classification and Construction of Pleasure Craft</b> Part I "Classification", 2.2.7 Part X "Automation"

**2.4 OMBO — distinguishing mark for a ship equipped to enable one man bridge operation under normal conditions**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>OMBO</b>	A ship is equipped to enable one man bridge operation under normal conditions	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.7 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", Section 28

**2.5 FF1, FF2, FF3, FF1WS, FF2WS, FF3WS — distinguishing marks for a ship carrying equipment for fire fighting aboard other ships**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>FF1</b> <b>FF2</b> <b>FF3</b>	A ship carries supplementary systems, equipment and outfit for fire fighting aboard other ships, offshore drilling units, offshore installations and shore facilities	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.8 Part III "Equipment, Arrangements and Outfit", 7.2.1.10, 9.2.12 Part IV "Stability", 3.13.1 Part VI "Fire Protection", 6.6, 5.1.2 Part VIII "Systems and Piping", 7.1.10, 13.7.7 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", 13.2.1.3
<b>FF1WS</b> <b>FF2WS</b> <b>FF3WS</b>		<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.8 Part III "Equipment, Arrangements and Outfit", 9.2.12 Part IV "Stability", 3.13.1 Part VI "Fire Protection", 6.6, 5.1.2 Part VIII "Systems and Piping", 7.1.10, 13.7.7 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", 13.2.1.3

**2.6 DYNPOS — distinguishing marks for ships fitted with a dynamic positioning system**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>DYNPOS-1</b> <b>DYNPOS-2</b> <b>DYNPOS-3</b>	A ship or offshore installation is fitted with a dynamic positioning system with relevant redundancy	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.9, 3.2.8, 3.2.9.1.13, 3.3.8, 3.4.8, 3.5.3 Part VII "Machinery Installations", 7.1.7 Part XV "Automation", Section 8 <b>Rules for the Classification, Construction and Equipment of MODU/FOP</b> Part I "Classification", 2.4.2, 4.1.10 Part XIV "Automation", Section 7 <b>Rules for the Classification and Construction of FPU</b> Part XV "Automation", Section 7

**2.7 POSIMOOR — distinguishing marks of availability  
of position-keeping/position mooring systems**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>POSIMOOR-FIX</b> <b>POSIMOOR</b> <b>POSIMOOR-TA</b>	A ship or offshore installation is equipped with a position-keeping system/automated control system for power equipment of position mooring or thruster assisted position mooring systems	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.10 Part XV "Automation", Sections 8, 9 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", Section 21 <b>Rules for the Classification, Construction and Equipment of MODU/FOP</b> Part I "Classification", 2.4.3, 2.4.4, 4.1.10, 4.1.12 Part III "Equipment, Arrangements and Outfit of MODU/FOP", Section 4 Part XIV "Automation", Sections 7, 8 <b>Rules for the Classification and Construction of FPU</b> Part III "Equipment, Arrangements and Outfit", Section 4 Part XV "Automation", Sections 8, 9

**2.8 INF — distinguishing marks related to carriage of cargo**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>2.8.1 Distinguishing marks for ships intended for carriage of packaged irradiated nuclear fuel, plutonium and high-level radioactive wastes (INF cargo)</b>		
<b>INF-1 INF-2 INF-3</b>	A ship is intended for carriage of packaged irradiated nuclear fuel, plutonium and high-level radioactive wastes (INF cargo)	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.14 Part V "Subdivision", 3.4.8 Part VI "Fire Protection", 7.3, 8.12.2

**2.9 ANTI-ICE — distinguishing mark for ships fitted with equipment for icing protection**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>ANTI-ICE</b>	A ship is fitted with equipment providing effective icing protection	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.13 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", Section 4

**2.10 CCO — distinguishing mark for ships fitted with a centralized cargo control system**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>CCO</b>	A ship is fitted with a cargo control room	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.19 Part VII "Machinery Installations", 3.2.11



**2.11 ECO — distinguishing marks for ships of high ecological safety**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>ECO</b> <b>ECO-S</b>	A ship complies with the high ecological safety requirements	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.20 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", Section 3

**2.12 BWM — distinguishing marks for ships  
complying with ballast water management requirements**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>BWM (E-S)</b> <b>BWM (E-F)</b> <b>BWM (E-D)</b> <b>BWM (E-SF)</b> <b>BWM (E-SD)</b> <b>BWM (E-FD)</b> <b>BWM (E-SFD)</b>	A ship performs ballast water management through ballast water exchange at sea and carries Ballast Water Management Plan approved by RS (letters in brackets indicate the ballast water management method)	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.21 Part IV "Stability", 1.4.13

**2.13 SDS — distinguishing marks for ships fitted with a diving system permanently installed on the ship**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>SDS &lt; 12</b> <b>SDS &lt; 60</b> <b>SDS ≥ 60</b>	A ship is fitted with a diving system permanently installed on the ship complying with the RS requirements (the number after < or ≥ indicates the permissible depth for divers' operations)	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.23 <b>Rules for the Classification and Construction of Manned Submersibles and Ship's Diving Systems</b> Applicable requirements

**2.14 MS — distinguishing mark for ships fitted with a manned submersible**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>MS</b>	A ship is fitted with a manned submersible complying with the RS requirements	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.24 <b>Rules for the Classification and Construction of Manned Submersibles and Ship's Diving Systems</b> Applicable requirements

**2.15 BLS, SPM — distinguishing marks for ships to carry out cargo operations at offshore terminals**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>BLS-SPM</b> <b>BLS</b> <b>SPM</b>	An oil tanker is fitted to carry out cargo operations at offshore terminals	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.25 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", Section 5

**2.16 WINTERIZATION (DAT) — distinguishing mark for a ship equipped to ensure long-term operation at low temperatures**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>WINTERIZATION (DAT)</b>	Design ambient temperature is indicated in brackets	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.27 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", Section 7

**2.17 AUTstab, Ac — automatic stabilization distinguishing marks**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>AUTstab</b>	Automatic stabilization distinguishing mark for a high-speed craft or a WIG craft	<b>Rules for the Classification and Construction of High-Speed Craft</b> Part I "Classification", 2.4
<b>Ac</b>	Automatic stabilization distinguishing mark for a Type A WIG craft	<b>Rules for the Classification and Construction of Type A WIG Craft</b> Part I "Classification", 2.4

**2.18 RP — distinguishing marks for propulsion plant redundancy**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>RP-1</b> <b>RP-1A</b> <b>RP-1AS</b> <b>RP-2</b> <b>RP-2S</b>	Provision is made on board the ship for redundancy of propulsion plant components	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.28 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", Section 8



## 2.19 Distinguishing marks related to survey arrangement

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>2.19.1 Distinguishing mark for ships fitted with a machinery technical condition monitoring system</b>		
<b>PMS</b> (Planned Maintenance Scheme for Machinery)	A ship is fitted with a machinery technical condition monitoring system, where the Planned Maintenance Scheme for Machinery is applied	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.30 <b>Rules for the Classification Surveys of Ships in Service</b> Part II "Survey Schedule and Scope", 2.7
<b>2.19.2 Distinguishing marks for condition monitoring system and condition based maintenance system applied on board the ship</b>		
<b>CM</b> (Condition Monitoring)	If a ship is fitted with an approved condition monitoring system (CM system) complying with the requirements of the Rules	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.31 Part VII "Machinery Installations", Section 10 <b>Rules for the Classification Surveys of Ships in Service</b> Part II "Survey Schedule and Scope", 2.8.1.2, 2.8.2
<b>CBM</b> (Condition Based Maintenance)	If a ship is fitted with an approved condition based maintenance system (CBM system) complying with the requirements of the Rules for the Classification Surveys of Ships in Service	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.31
<b>2.19.3 Distinguishing mark for implementation of modified survey of the shafting</b>		
<b>TMS</b> (Tailshaft Modified Survey)	A modified survey of a propeller shaft is implemented onboard the ship	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.34 <b>Rules for the Classification Surveys of Ships in Service</b> Part II "Survey Schedule and Scope", 2.11.2.7
<b>2.19.4 Distinguishing mark for a ship ready for in-water survey of the ship's bottom</b>		
<b>IWS</b>	A ship is ready for in-water survey of the ship's bottom	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.35 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", Section 12
<b>2.19.5 Distinguishing mark for ship's fitness for long-term operation without dry-docking</b>		
<b>UWILD</b>	A berth-connected ship designed in such a way as to provide the possibility to replace surveys of the outside of the ship's bottom (bottom surveys) in dry dock with underwater inspection (in-water surveys using underwater television). For assignment of distinguishing mark <b>UWILD</b> , the requirements specified in Section 20 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of these Rules, except for provisions of 20.3.1.3.6, shall be complied with	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.47 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", Section 20 (except for 20.3.1.3.6)

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>UWILD-S</b>	Where, for a berth-connected ship with distinguishing mark <b>UWILD</b> , a possibility of performing any types of maintenance and surveys is provided without interrupting the ship's normal operation for the intended purpose (the possibility provided by the design for the ship to remain in operation during the maintenance of bottom and side valves, and for systems and mechanisms using temporarily isolated bottom and side valves, to remain operational using the redundancy of isolated components of sea water systems)	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.47 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", Section 20
<b>2.19.6 Distinguishing mark for ships fitted with boiler plant monitoring system</b>		
<b>BMS</b> (Boiler Monitoring System)	Ship is fitted with a boiler plant monitoring system that allows to carry out internal survey of steam boilers without participation of the RS surveyor	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.40 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", Section 16 <b>Rules for the Classification Surveys of Ships in Service</b> Part II "Survey Schedule and Scope", 2.10
<b>2.19.7 Distinguishing mark for ships equipped with hull strength and stability monitoring system</b>		
<b>HMS(STR)</b> <b>HMS(STAB)</b> <b>HMS(STR-STAB)</b>	For ships equipped with a monitoring system complying with the RS requirements, the distinguishing mark shall be added to the class notation specifying the system completeness: <b>HMS(STR)</b> — system is intended for monitoring of strength parameters; <b>HMS(STAB)</b> — system is intended for monitoring of stability parameters; <b>HMS(STR-STAB)</b> — system is intended for monitoring of strength and stability parameters. Where the monitoring system is fitted with additional functions, the distinguishing mark shall be specified as <b>HMS(...)+...</b> , and the following additional function symbols shall be added after brackets:	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.41 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", Section 17

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
	<p><b>BS</b> — availability of connection to the ballast, heel and trim systems of the ship;</p> <p><b>C</b> — availability of connection to the onboard computer software for calculation of ship's strength and stability;</p> <p><b>DD</b> — availability of directional data link ensuring monitoring data transfer to the shore;</p> <p><b>DM</b> — availability of mutual data link ensuring monitoring data transfer to the shore and control of monitoring system from the shore;</p> <p><b>N</b> — availability of connection to GPS/GLONASS receivers, log, echo sounder and indication of received data on the monitoring system display;</p> <p><b>RPM</b> — availability of connection to the ship system for propeller shaft(s) speed measurement and recording;</p> <p><b>SI</b> — availability of connection to the ship radar ice display with transfer of current ice condition data, their recording in the database and indication on the monitoring system display;</p> <p><b>SW</b> — availability of connection to the ship weather station with transfer of current sea state parameters, their recording in the database and indication on the monitoring system display;</p> <p><b>TS</b> — availability of connection to the ship system for the propeller shaft(s) torque measurement and recording;</p> <p><b>ThS</b> — availability of connection to the ship system for measurement and recording of thrust along the propeller shaft(s) fore-aft axis;</p>	

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
	<p><b>TVS</b> — availability of connection to the ship system for measurement and recording of radial and longitudinal vibration displacements of the propeller shaft(s);</p> <p><b>W</b> — availability of connection to the ship weather station with transfer of current apparent and true wind speed and direction, and sea state parameters including data indication on the monitoring system display</p>	

**2.20 SO<sub>x</sub> Cleaning — distinguishing mark for ships applying  
an alternative method for reducing SO<sub>x</sub> emissions**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>SO<sub>x</sub> Cleaning</b>	As an alternative method for reducing SO <sub>x</sub> emissions, the exhaust gas cleaning system from the fuel oil combustion unit approved by RS is fitted onboard the ship	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.36 <b>IMO resolution MEPC.259(68)</b> , as amended

**2.21 GRS — distinguishing mark for ship prepared for conversion for the use of gas fuel**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>GRS</b> (Gas Ready Ship)	Ship is prepared for conversion for the use of gas fuel. Depending on the ship's readiness for conversion to use gas fuel, the distinguishing mark <b>GRS</b> or one of the following distinguishing marks or their combination shall be added to the character of classification: <b>GRS-D</b> , <b>GRS-H</b> , <b>GRS-T</b> , <b>GRS-P</b> , <b>GRS-E</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.38 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", Section 14

**2.22 Distinguishing marks of additional functions of LNG bunkering ship related to servicing of ships using LNG as a fuel (added after descriptive notation LNG bunkering ship)**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>RE</b>	Where the LNG bunkering ship is designed to receive LNG from a gas fuelled ship for which the LNG fuel tanks shall be emptied	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", 11.1.2, 11.13
<b>IG-Supply</b>	Where the LNG bunkering ship is designed to supply inert gas and dry air to ensure gas-freeing and aeration in compliance with 6.10.4 of the International Code of Safety for Ships Using Gases or Other Low Flashpoint Fuels (IGF Code)	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", 11.1.2, 11.13
<b>BOG</b>	Where system for management of boil-off gas generated during the bunkering operation is provided on board the LNG bunkering ship	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", 11.1.2, 11.13

**2.23 NAABSA ()— distinguishing marks for ship not always afloat  
but safely aground (NAABSA ship)**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>NAABSA1</b> <b>NAABSA2</b> <b>NAABSA3</b>	Ship, which may lie aground in safety with partial or full hull baring in places fit for grounding the ships	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.39 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", Section 15



**2.24 COMF() — distinguishing marks for ship complying with indoor hygiene and sanitary conditions**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>COMF(C)</b>	Ship complies with indoor climate requirements	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.42.1 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", 18.1
<b>COMF(N – 1 or 2, or 3)</b>	Ship complies with the requirements for noise level in ship's spaces. Grades <b>1, 2, 3</b> indicate the noise comfort level in ship's spaces (with grade <b>1</b> corresponding to the most comfortable level)	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.42.2 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", 18.2.1.1
<b>COMF(V – 1 or 2, or 3)</b>	Ship complies with the requirements for sanitary vibration level in ship's spaces. Grades <b>1, 2, 3</b> indicate permissible sanitary vibration comfort level in ship's spaces (with grade <b>1</b> corresponding to the most comfortable level)	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.42.3 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", 18.3

**2.25 FTL() — distinguishing mark confirming fatigue life of a ship**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>FTL (years)</b> <b>FTL (years)</b> <b>Spectral North Atlantic</b>	<p>Design remaining life of a ship (fatigue life) exceeds 25 years.</p> <p>Design remaining life of a ship within the range of 25 — 40 years (at 5-year intervals) is indicated in brackets.</p> <p>When performing verification by direct calculation with application of spectral method, the distinguishing mark <b>Spectral North Atlantic</b> is added after the distinguishing mark <b>FTL (years)</b></p>	<p><b>Rules for the Classification and Construction of Sea-Going Ships</b></p> <p>Part I "Classification", 2.2.44</p>

**2.26 COAT — distinguishing mark confirming application of protective coatings  
in ship's spaces**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>COAT</b>	Added in the class notation of ships covered by the provisions of regulation II-2/3-2 of SOLAS 74 as amended by IMO resolution MSC.47(66), and on board which the protective coating is applied in accordance with IMO resolution A.798(19)	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part II "Hull", 1.2.5.1

**2.27 ICE-COAT — distinguishing mark confirming application of ice-resistant coating  
for protection of shell plating of the ship's hull**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>ICE-COAT</b>	Mandatorily added in the class notation of icebreakers and ice class ships when protection of shell plating with ice-resistant coating is provided in case of reduction of average annual diminution of shell plating as a result of corrosion wear and abrasion (25 % or 50 %). In other cases (when protection of shell plating with ice-resistant coating is provided without reduction of average annual diminution of shell plating as a result of corrosion wear and abrasion), may be added at the shipowner's discretion	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part II "Hull", 3.10.4 Part XIII "Materials", 6.5.3 <b>Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships</b> Part III "Technical Supervision during Manufacture of Materials", 3.5.1

**2.28 LFLFS() — distinguishing mark for a ship equipped to use methanol and ethanol as fuel**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>LFLFS (Me)</b> (Low Flashpoint Liquid Fuelled Ship (Methanol)) <b>LFLFS (Et)</b> (Low Flashpoint Liquid Fuelled Ship (Ethanol))	The mark is assigned if a ship is equipped to use methanol and ethanol as fuel	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.50 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", Section 23

**2.29 Open cargo hatch — distinguishing mark confirming the possibility of ship operation with open cargo hatches or partially or completely hatchcoverless cargo holds**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>Open cargo hatch</b>	Distinguishing mark assigned to: general cargo ships, the cargo hatches of which may be completely or partially open, or the hatch covers of which are temporarily removed during sea voyage; container ships and ships equipped for the carriage of containers designed such that one or more cargo holds are not fitted with hatch covers	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part VI "Fire Protection", 1.2.1, footnote 9 in Table 3.1.2, 3.1.2.13, 3.2.6.2, 3.8.1.5, 4.2.1.7, 4.3.1, 5.1.2, items 3.5 and 19 of Table 5.1.2, 5.1.24, 7.2 Part VIII "Systems and Piping", 7.6.13 Part XI "Electrical Equipment", 2.1.2.2, Section 3, 9.4 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", Section 24

**2.30 ETW — distinguishing mark for tankers equipped with an effective cargo tank washing system**

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
<b>ETW</b> (Effective Tank Washing)	The mark is assigned to tankers with descriptive notation <b>Chemical tanker</b> and/or <b>Oil tanker</b> and combination carriers ( <b>Oil/bulk/ore carrier</b> or <b>Oil/bulk carrier</b> or <b>Oil/ore carrier</b> ) equipped with an effective cargo tank washing system	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part VIII "Systems and Piping", 9.12 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", Section 27

### 3 Descriptive notations (designation of ship type and purpose)

Descriptive notation in the class notation is written in English. At the discretion of the shipowner for ships not engaged on international voyages it may be written in two languages, English and Russian, for example: **Oil tanker (нефтеналивное) (ESP)**. Where required, two or more descriptive notations may be stated in the class notation of a ship, for example: **Cable laying vessel Special purpose ship**.

#### 3.1 Descriptive notations of ships in accordance with the Rules for the Classification and Construction of Sea-Going Ships (basic descriptive notations)

##### Anchor handling vessel

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Anchor handling vessel</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part II "Hull", 3.8 Part VI "Fire Protection", Section 1, 2.1, 2.3, Section 3 — 5 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", 13.3

##### Battery system

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Battery system</b> Ship fitted with electric propulsion plant using accumulator batteries to supply the electrical equipment	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part XI "Electrical Equipment", 17.1.1.9, 17.3.1.1, 17.16

##### Berth-connected ship

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Berth-connected ship (&lt;operation condition&gt;)</b> Operation conditions (aground ( <b>G, ground</b> ) or moored at quay ( <b>S, shore</b> ), or when at a water area distanced from the shore ( <b>W, waters</b> )) are indicated in brackets. If the berth-connected ship complies with the relevant requirements of these Rules for different operation conditions, the operation conditions are listed in brackets after the descriptive notation and separated by comma, for example, ( <b>W, S</b> ). The descriptive notation <b>Berth-connected ship</b> is followed by the statement of ship or offshore installation purpose from those listed in the definition of the berth-connected ship, or otherwise: <b>floating dock</b> <b>floating facility/passenger floating facility (hotel/hostel/workshop/restaurant etc.)</b> <b>floating power plant</b> <b>floating warehouses</b> <b>floating oil storage</b> or otherwise. <b>Berth-connected floating museum (&lt;operation condition&gt;)</b> Floating museums are assigned descriptive notation <b>Berth-connected floating museum (&lt;operation condition&gt;)</b> , and additionally, operation conditions: moored at quay ( <b>S</b> ) — shore, is indicated in brackets	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part III "Equipment, Arrangements and Outfit", 3.1.4, 7.1.14 Part IV "Stability", 4.4 Part V "Subdivision", 1.1.1.17, 3.4.12 Part VI "Fire Protection", Section 1, 2.1, Sections 3 — 5, 6.5 Part VII "Machinery Installations", 1.1.1, 4.5.10 — 4.5.13 Part VIII "Systems and Piping", 7.1.9, 12.2, 13.8.1 Part XI "Electrical Equipment", 19.9 <b>Rules for the Equipment of Sea-Going Ships</b> Part II "Life-Saving Appliances", 5.3 Part III "Signal Means", 2.3 Part IV "Radio Equipment", 2.1.1 <b>Load Line Rules for Sea-Going Ships</b> 4.1.4  <b>Refer to above</b>



**Bilge water removing ship**

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Bilge water removing ship</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part IV "Stability", 3.4 Part VI "Fire Protection", Section 1, 2.1, Sections 3 — 5, 6.4, 8.13 Part VII "Machinery Installations", 4.5.10 — 4.5.13, 7.4.7.2, 7.4.8.2 Part VIII "Systems and Piping", 9.1.2

**Bulk carrier**

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Bulk carrier</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part II "Hull", 3.3 (if applicable) Part III "Equipment, Arrangements and Outfit", 7.13, 7.14, 8.4.4 Part IV "Stability", 3.2 Part V "Subdivision", 1.1.1.10, 1.1.1.11, 1.1.1.18, 1.4.9, 3.4.11, 5.1 Part VI "Fire Protection", Section 1, 2.1, 2.3, Sections 3 — 5 and 7 (specific requirements to ship type in item 15.4 of Table 5.1.2, 7.2.8); Part VII "Machinery Installations", 4.5.10 — 4.5.13, 7.4.7.2, 7.4.8.2 Part VIII "Systems and Piping", 7.6.11, 7.6.15, 7.9, 8.6, 12.7.1, 12.7.3, 12.7.7, 12.7.10, 12.7.11 Part XI "Electrical Equipment", 7.10, 19.11 <b>Rules for the Equipment of Sea-Going Ships</b> (if applicable) Part II "Life-Saving Appliances", 4.1.1.8 <b>Common Structural Rules for Bulk Carriers and Oil Tankers</b> (if applicable, in which case refer also to the distinguishing mark <b>CSR</b> )

**Cable laying barge, Cable laying vessel**

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Cable laying barge</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part VI "Fire Protection", Section 1, 2.1, 2.3, Section 3 — 5, 6.2.1 Part VII "Machinery Installations", 4.5.10 — 4.5.13
<b>Cable laying vessel</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part VI "Fire Protection", Section 1, 2.1, 2.3, Section 3 — 5, 6.2.1 Part VII "Machinery Installations", 4.5.10 — 4.5.13

**Catamaran**

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Catamaran</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part VI "Fire Protection", Sections 1 — 5 and 8 (specific requirements to ship type in 3.2.1.6, 3.2.2.2, 3.2.5.5) Part VII "Machinery Installations", 2.1.10, 3.3.5, 4.5.10 — 4.5.13, 7.4.7.2, 7.4.8.2 Part VIII "Systems and Piping", 5.7.1, 7.1.8, 7.2.2, 8.1.1, 13.6.1 Part XI "Electrical Equipment", 19.6

Container ship

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Container ship</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part II "Hull", 3.1.2.1, 3.1.3.5, 3.1.3.8, 3.1.4.6 Part III "Equipment, Arrangements and Outfit", 7.10.6.11, 7.10.6.12, 8.4.8 Part IV "Stability", 3.10 Part V "Subdivision", 1.1.1.10, 1.1.1.11, 1.4.9.2, 2.6.2 Part VI "Fire Protection", Section 1, 2.1, 2.3, Sections 3 — 5, 6.7 (specific requirements to ship type in footnote 9 in Table 3.1.2.1, 3.1.2.13, 3.2.6.2, 3.8.1.5, 4.2.1.7, 4.3.1, 5.1.2, item 3.5 of Table 5.1.2) Part VII "Machinery Installations", 4.5.10 — 4.5.13, 7.4.7.2, 7.4.8.2 Part VIII "Systems and Piping", 7.6.14, 7.14.1, 12.7.9 Part XI "Electrical Equipment", 19.5 Part XVIII "Additional Requirements for Structures of Container Ships and Ships, Dedicated Primarily to Carry Their Load in Containers"

Crane vessel

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Crane vessel</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part II "Hull", 3.6 Part IV "Stability", 4.1 Part VI "Fire Protection", Section 1, 2.1, 2.3, Sections 3 — 5 (specific requirements to ship type in 3.2.1.1, 3.2.5.1, 3.2.5.6, item 13 of Table 5.1.2) Part VII "Machinery Installations", 4.5.10 — 4.5.13, 7.4.7.2, 7.4.8.2 Part XI "Electrical Equipment", 19.7 <b>Rules for the Cargo Handling Gear of Sea-Going Ships</b> Section 6

Deck carrier

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Deck carrier</b> The descriptive notation is assigned to ships designed for the carriage of general cargoes on the open deck. Assigning only a descriptive notation <b>Heavy cargo carrier (Deck-t/m<sup>2</sup>)</b> may be sufficient for a ship designed for the carriage of heavy and/or bulky cargoes on the open deck provided the applicable RS requirements are met	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", Section 25 (as applicable)

Dredger

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Dredger</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part II "Hull", 3.6 Part IV "Stability", 3.8

Descriptive notation	References to additional RS requirements for the descriptive notation
	Part V "Subdivision", 3.4.14 Part VI "Fire Protection", Section 1, 2.1, 2.3, Sections 3 — 5, Section 8 Part VII "Machinery Installations", 4.5.10 — 4.5.13, 7.4.7.2, 7.4.8.2 Part VIII "Systems and Piping", 4.3.2.15, 5.3.10 Part XI "Electrical Equipment", 19.12 <b>Load Line Rules for Sea-Going Ships</b> (if applicable) Section 8

Escort tug

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Escort tug</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part II "Hull", 3.9 Part III "Equipment, Arrangements and Outfit", 5.3, 5.4, 5.5, 5.6 Part VI "Fire Protection", Section 1, 2.1, 2.3, Sections 3 — 5 Part V "Subdivision", 2.1.1 (for ships of 80 m and above) Part VII "Machinery Installations", 8.2.1, 4.5.10 — 4.5.13 Part VIII "Systems and Piping", 11.1.3 Part IX "Machinery", 6.5, 6.6 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", Section 2 <b>Rules for the Equipment of Sea-Going Ships</b> (if applicable) Part V "Navigational Equipment", 3.2.10.2

Fishing vessel

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Fishing vessel</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part II "Hull", 3.7 Part III "Equipment, Arrangements and Outfit", 3.3.3, 3.4.11, 7.2.1.1, 7.10.2.1 Part IV "Stability", 3.5 Part V "Subdivision", 1.1.1.3, 1.6.1.1, 3.4.2 Part VI "Fire Protection", Section 1, 2.5, 2.6, Sections 3 — 5 (specific requirements in 2.1.1.8.2, 2.1.5.1.1, footnotes 13 and 15 in Table 3.1.2.1, 4.2.1.2.9, item 10 of Table 5.1.2) Part VII "Machinery Installations", 4.5.10 — 4.5.13, 7.4.7.2, 7.4.8.2, 8.2.1 Part VIII "Systems and Piping", 13.8.1 Part XI "Electrical Equipment", 19.10 <b>Rules for the Equipment of Sea-Going Ships</b> Part II "Life-Saving Appliances", 2.3.7, 5.1 Part III "Signal Means", 2.2.4.2, 2.2.5 <b>Rules for the Cargo Handling Gear of Sea-Going Ships</b> 1.3.6 <b>Load Line Rules for Sea-Going Ships</b> Section 6

Floating crane, Floating dock

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Floating crane</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part II "Hull", 3.6 Part III "Equipment, Arrangements and Outfit", 3.2.4 Part IV "Stability", 4.1 Part VI "Fire Protection", 3.2.1.1 Part VII "Machinery Installations", 4.5.10 — 4.5.13, 7.4.7.2, 7.4.8.2 Part XI "Electrical Equipment", 19.7 <b>Rules for the Equipment of Sea-Going Ships</b> (if applicable) Part III "Signal Means", 4.1.4 Part V "Navigational Equipment", 3.2.10.2 <b>Rules for the Cargo Handling Gear of Sea-Going Ships</b> Section 6
<b>Floating dock</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part II "Hull", 3.12 Part III "Equipment, Arrangements and Outfit", 7.2.1.7, 7.2.1.8, 7.2.1.9, 7.6.7, 7.8.5, 9.2.10 Part IV "Stability", 4.3 Part VI "Fire Protection", Section 1, 2.1, 2.3, Sections 3 — 5 (specific requirements in 3.2.1.8, 6.5.2) Part VII "Machinery Installations", 3.2.9, 3.3.4, 4.5.10 — 4.5.13, 7.4.7.2, 7.4.8.2 Part VIII "Systems and Piping", 4.3.2.5, 4.3.2.6, 7.13, 8.4, 10.1.17, 10.4.10 Part XI "Electrical Equipment", 19.8 <b>Rules for the Cargo Handling Gear of Sea-Going Ships</b> Section 6

General dry cargo ship

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>General dry cargo ship</b> The descriptive notation is assigned to ships intended for the carriage of dry general cargoes, that may periodically carry bulk cargoes as well as rolling cargoes in specially adapted spaces. In case the bulk cargoes are carried periodically, the ships the keels of which are laid or which are at a similar stage of construction on 1 June 2010 shall comply with the provisions 1.6 and/or 1.7 of IMO resolution MSC.277(85), as amended, if applicable. If these ships carry rolling cargoes in which the cargo loading operations are performed preferably in a horizontal direction, the requirements applied for a roll-on/roll-off ship (ro-ro ship) shall be met. An entry <b>ro-ro ship</b> is added to the class notation of these ships. For ships adopted for rolling-on devices in which the cargo loading operations are performed preferably in a vertical or combined direction (lo-lo, lo-ro ships), the distinguishing mark <b>Multipurpose (Multipurpose dry cargo ship)</b> shall be added to the class notation.	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part II "Hull", 1.1.5.2, 1.2.5.1, 1.3.4.2, 1.4.3, 1.7.3.3, 2.3.2.5, 2.3.3.1, 2.3.4.1, 2.3.5, 2.5.4, 2.5.4.5, 2.5.4.7, 2.6.4.6, 3.3 (as applicable: refer to XII/6.2, 6.3, 6.4, XII/10, XII/11 of SOLAS 74, as amended) Part III "Equipment, Arrangements and Outfit", 7.1.13, 7.10, 8.4 Part IV "Stability", 1.4.11.3, 1.4.11.4, 3.2, 3.12 (if applicable) Part V "Subdivision", 1.1.1.10, 1.1.1.11, 1.4.9, 2, 3.4.11 Part VIII "Systems and Piping", 5.3.3, 7.6.11, 7.6.15, 7.9 Part XI "Electrical Equipment", 7.3, 5.12, 7.10, 16.8.4.5, 19.5

Descriptive notation	References to additional RS requirements for the descriptive notation
The requirements of the RS rules, IACS and IMO normative documents related to bow, side, stern doors, ramps and inner doors and relevant requirements for ro-ro ships (as applicable) shall be applied	

**Heavy cargo carrier**

Descriptive notation	References to additional RS requirements for the descriptive notation
<p><b>Heavy cargo carrier</b></p> <p>The descriptive notation is assigned to ships designed for the carriage of heavy and/or bulky cargoes on deck, hatch covers of cargo holds and/or in cargo holds.</p> <p>Depending on the method of cargo carriage, the following distinguishing marks are added in brackets:</p> <p>on deck — <b>(Deck)</b>;</p> <p>on hatch covers of cargo holds — <b>(Hatch cover)</b>;</p> <p>in cargo holds — <b>(Hold)</b>.</p> <p>For distinguishing marks in brackets, the design uniformly distributed static load acting on the relevant structure, in t/m<sup>2</sup>, shall be additionally indicated, for example: <b>(Deck-15 t/m<sup>2</sup>)</b>.</p> <p>Combinations of distinguishing marks may be concatenated within one pair of brackets.</p> <p>At the shipowner's discretion, for ships intended for the carriage of project (non-standard) heavy cargoes, the descriptive notation <b>Project</b> may be added before the descriptive notation <b>Heavy cargo</b></p>	<p><b>Rules for the Classification and Construction of Sea-Going Ships</b></p> <p>Part I "Classification", 1.1.1</p> <p>Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", Section 25</p>

**Hopper barge, Hopper dredger**

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Hopper barge</b>	<p><b>Rules for the Classification and Construction of Sea-Going Ships</b></p> <p>Part I "Classification", 1.1.1</p> <p>Part II "Hull", 3.6</p> <p>Part IV "Stability", 3.8</p> <p>Part V "Subdivision", 3.4.14</p> <p>Part VI "Fire Protection", Section 1, 2.1, 2.3, Sections 3 — 5</p> <p>Part VII "Machinery Installations", 4.5.10 — 4.5.13, 7.4.7.2, 7.4.8.2</p> <p>Part VIII "Systems and Piping", 4.3.2.15, 5.3.10</p> <p>Part XI "Electrical Equipment", 19.12</p> <p><b>Load Line Rules for Sea-Going Ships</b> (if applicable)</p> <p>Section 8</p>
<b>Hopper dredger</b>	<p><b>Rules for the Classification and Construction of Sea-Going Ships</b></p> <p>Part I "Classification", 1.1.1</p> <p>Part II "Hull", 3.6</p> <p>Part IV "Stability", 3.8</p> <p>Part V "Subdivision", 3.4.14</p> <p>Part VI "Fire Protection", Section 1, 2.1, 2.3, Sections 3 — 5</p> <p>Part VII "Machinery Installations", 4.5.10 — 4.5.13, 7.4.7.2, 7.4.8.2</p> <p>Part VIII "Systems and Piping", 4.3.2.15, 5.3.10</p> <p>Part XI "Electrical Equipment", 19.12</p> <p><b>Load Line Rules for Sea-Going Ships</b> (if applicable)</p> <p>Section 8</p>

**Icebreaker, Icebreaking vessel**

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Icebreaker</b> Assigned to ice class ships complying with the relevant requirements of these Rules and the Rules for the Equipment of Sea-Going Ships for icebreakers and having one of the following ice class marks in the class notation: <b>Icebreaker6, Icebreaker7, Icebreaker8, Icebreaker9</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.3 Part II "Hull", 3.10 Part III "Equipment, Arrangements and Outfit", 2.1.5, 2.2.2.2 Part V "Subdivision", 1.1.1.12, 3.4.2 Part VII "Machinery Installations", 1.3.2.3, 2.1.1.1, 2.1.2, 2.4.3, 5.1.3, 5.2.5, 5.4.3, 6.2.1, 6.2.2, 6.2.4, 6.2.5, 6.3.4, 6.5.2, 7.2.4, 8.2.1, 8.3.1, 8.4.2, 8.8.2, 8.8.5 Part VIII "Systems and Piping", 4.3.1, 4.3.2.3, 8.3.2, 12.1.7, 15.6.1 Part IX "Machinery", 4.2.3.2, 8.1.8 <b>Rules for the Equipment of Sea-Going Ships (as applicable)</b> Part III "Signal Means", 3.1.3.3
<b>Icebreaking vessel</b> Assigned to ice class ships which are not icebreakers in accordance with <a href="#">2.2.3.1.1</a> but occasionally are involved in icebreaking operations and comply with the relevant requirements of these Rules and the Rules for the Equipment of Sea-Going Ships and which have one of the following ice class marks in the class notation: <b>Icebreaker6</b> or <b>Icebreaker7</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.3 Part II "Hull", 3.10 Part III "Equipment, Arrangements and Outfit", 2.1.5, 2.2.2.2 Part V "Subdivision", 1.1.1.12, 3.4.2 Part VII "Machinery Installations", 1.3.2.3, 2.1.1.1, 2.1.2, 2.4.3, 5.1.3, 5.2.5, 5.4.3, 6.2.1, 6.2.2, 6.2.4, 6.2.5, 6.3.4, 6.5.2, 7.2.4, 8.2.1, 8.3.1, 8.4.2, 8.8.2, 8.8.5 Part VIII "Systems and Piping", 4.3.1, 4.3.2.3, 8.3.2, 12.1.7, 15.6.1 Part IX "Machinery", 4.2.3.2, 8.1.8 <b>Rules for the Equipment of Sea-Going Ships (as applicable)</b> Part III "Signal Means", 3.1.3.3

**Oil recovery ship**

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Oil recovery ship</b> If an oil recovery ship complies with the requirements for the ships, which recover from the sea surface and carry petroleum products having flash point above 60 °C, this temperature shall be indicated in the descriptive notation. For example: <b>Oil recovery ship (&gt; 60 °C)</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part II "Hull", 3.5 Part III "Equipment, Arrangements and Outfit", 4.2.1, 4.3.2, 7.11 Part IV "Stability", 3.4 Part VI "Fire Protection", Section 1, 2.1, 2.4, Sections 3 — 5, 6.4, 8.13 (specific requirements to ship type in 2.1.1.7, 5.1.2, 5.1.3, 6.6.7.1) Part VII "Machinery Installations", 4.2.5, 4.2.9, 4.5.10 — 4.5.13, 7.4.7.2, 7.4.8.2 Part VIII "Systems and Piping", 7.2.5, Section 9, 10.1.19, 10.4.7, 11.1.3, 11.1.9, 12.2, 12.4, 12.12 Part XI "Electrical Equipment", 19.2 <b>Rules for the Equipment of Sea-Going Ships (if applicable)</b> Part II "Life-Saving Appliances", 2.4.1, 4.1.1.6, 4.1.1.7, 6.2.1.3.5.2 Part V "Navigational Equipment", 3.4.4.7 <b>Rules for the Cargo Handling Gear of Sea-Going Ships</b> 1.6
<b>Oil recovery ship (&gt; 60 °C)</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part II "Hull", 3.5 Part III "Equipment, Arrangements and Outfit", 7.11 Part IV "Stability", 3.4 Part VI "Fire Protection", Section 1, 2.1, 2.3, Sections 3 — 5, 6.3, 6.4, 8.13 (specific requirements to ship type in 2.1.1.7, 5.1.2, 5.1.3, 6.6.7.1)

Descriptive notation	References to additional RS requirements for the descriptive notation
	Part VII "Machinery Installations", 4.2.5, 4.2.9, 4.5.10 — 4.5.13, 7.4.7.2, 7.4.8.2 Part VIII "Systems and Piping", 7.2.5, 8.7.4, Section 9, 11.1.3, 11.1.9, 12.2, 12.4, 12.12 Part XI "Electrical Equipment", 19.2.1 <b>Rules for the Equipment of Sea-Going Ships</b> (if applicable) Part II "Life-Saving Appliances", 2.4.1, 4.1.1.6, 6.2.1.3.5.2 Part V "Navigational Equipment", 3.4.4.7 <b>Rules for the Cargo Handling Gear of Sea-Going Ships</b> 1.6

**Oil tanker**

Descriptive notation	References to additional RS requirements for the descriptive notation
<p><b>Oil tanker</b>                      If an oil tanker complies with the requirements for the ships, which carry petroleum products having flash point above 60 °C, this temperature shall be indicated in the descriptive notation. For example: <b>Oil tanker (&gt; 60 °C), Oil/ore carrier (&gt; 60 °C)</b>.                      If an oil tanker carries asphalt solutions only, information on specific cargo may be added to the descriptive notation in the class notation.                      A ship intended for bunkering (i.e. being a "bunkering ship" according to its purpose) is also qualified as an oil tanker</p>	<p><b>Rules for the Classification and Construction of Sea-Going Ships</b>                      Part I "Classification", 1.1.1                      Part II "Hull", 3.5 (if applicable)                      Part III "Equipment, Arrangements and Outfit", 2.9.4, 4.2.1, 4.3.2, 5.7, 7.11, 7.14                      Part IV "Stability", 3.4                      Part V "Subdivision", 1.1.1.2, 3.4.5                      Part VI "Fire Protection", Section 1, 2.1, 2.4, Sections 3 — 5, 6.3, 8.10 (specific requirements to ship type in 1.4.3, 2.1.1.7, 2.1.5.4, items 20 and 21 of Table 3.1.2.1, 3.1.2.8, 3.2.5.4, 3.7.2.8, 4.3.5, 5.1.3, items 8.1, 10.2, 15.2 — 15.3 of Table 5.1.2, 5.1.6.1, 5.1.15.1.4, 5.1.22)                      Part VII "Machinery Installations", 1.1.2, 4.2.5, 4.3.4, 4.5.10 — 4.5.13, 4.5.15, 4.5.16, 7.4.7.2, 7.4.8.2                      Part VIII "Systems and Piping", 7.2.5, 7.7, 8.1.6, Section 9, 11.1.3, 12.2, 12.4, 12.13, 13.7.8, 13.11                      Part IX "Machinery", 5.2.6, 5.3.3, 6.2.1.2, 6.2.1.8, 6.2.1.11                      Part XI "Electrical Equipment", 7.19, 19.2  <b>Rules for the Equipment of Sea-Going Ships</b> (if applicable)                      Part II "Life-Saving Appliances", 2.4.1, 4.1.1.6, 6.2.1.3.5.2                      Part V "Navigational Equipment", 3.4.4.7  <b>Rules for the Cargo Handling Gear of Sea-Going Ships</b>                      1.6  <b>Common Structural Rules for Bulk Carriers and Oil Tankers</b> (if applicable, in which case refer also to the distinguishing mark <b>CSR</b>)</p>

**Combination carriers and ore carriers (Oil/bulk carrier, Oil/bulk/ore carrier, Ore carrier, Oil/ore carrier)**

Descriptive notation	References to additional RS requirements for the descriptive notation
<p><b>Oil/bulk carrier</b>                      If an oil tanker complies with the requirements for the ships, which carry petroleum products having flash point above 60 °C, this temperature shall be indicated in the descriptive notation. For example: <b>Oil tanker (&gt; 60 °C), Oil/ore carrier (&gt; 60 °C)</b>, etc.</p>	<p><b>Rules for the Classification and Construction of Sea-Going Ships</b>                      Part I "Classification", 1.1.1                      Part II "Hull", 3.3                      Part III "Equipment, Arrangements and Outfit", 2.9.4, 4.2.1, 4.3.2, 5.7, 7.13, 7.14, 8.4.4                      Part IV "Stability", 3.2, 3.4                      Part V "Subdivision", 1.1.1.2, 1.1.1.18, 3.4.5, 3.4.11                      Part VI "Fire Protection", Section 1, 2.1, 2.4, Sections 3 — 5, 6.3, 8.10 (specific requirements to ship type in 1.4.3, 2.1.1.7, 2.1.5.4, items 20 and 21 of Table 3.1.2.1, 3.1.2.8, 3.2.5.4, 3.7.2.8, 4.3.5, 5.1.3, items 8.1, 10.2, 15.2 — 15.3 of Table 5.1.2, 5.1.6.1, 5.1.15.1.4, 5.1.22)                      Part VII "Machinery Installations", 1.1.2, 4.2.5, 4.3.4, 4.5.10 — 4.5.13, 4.5.15, 4.5.16, 7.4.7.2, 7.4.8.2</p>

Descriptive notation	References to additional RS requirements for the descriptive notation
	Part VIII "Systems and Piping", 7.2.5, 7.6.11, 7.7, 7.9, 8.1.6, 8.6, Section 9, 11.1.3, 12.2, 12.4, 12.13, 13.7.8, 13.11 Part IX "Machinery", 5.2.6, 5.3.3, 6.2.1.2, 6.2.1.8, 6.2.1.11 Part XI "Electrical Equipment", 7.10, 19.2 <b>Rules for the Equipment of Sea-Going Ships</b> (if applicable) Part II "Life-Saving Appliances", 2.4.1, 4.1.1.6, 6.2.1.3.5.2 Part V "Navigational Equipment", 3.4.4.7 <b>Rules for the Cargo Handling Gear of Sea-Going Ships</b> 1.6
<b>Oil/bulk/ore carrier</b> If an oil tanker complies with the requirements for the ships, which carry petroleum products having flash point above 60 °C, this temperature shall be indicated in the descriptive notation. For example: <b>Oil tanker (&gt; 60 °C)</b> , <b>Oil/ore carrier (&gt; 60 °C)</b> etc.	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part II "Hull", 3.3 Part III "Equipment, Arrangements and Outfit", 2.9.4, 4.2.1, 4.3.2, 5.7, 7.13, 7.14, 8.4.4 Part IV "Stability", 3.2, 3.4 Part V "Subdivision", 1.1.1.2, 1.1.1.18, 3.4.5, 3.4.11 Part VI "Fire Protection", Section 1, 2.1, 2.4, Sections 3 — 5, 6.3, 8.10 (specific requirements to ship type in 1.4.3, 2.1.1.7, 2.1.5.4, items 20 and 21 of Table 3.1.2.1, 3.1.2.8, 3.2.5.4, 3.7.2.8, 4.3.5, 5.1.3, items 8.1, 10.2, 15.2 — 15.3 of Table 5.1.2, 5.1.6.1, 5.1.15.1.4, 5.1.22) Part VII "Machinery Installations", 1.1.2, 4.2.5, 4.3.4, 4.5.10 — 4.5.13, 4.5.15, 4.5.16, 7.4.7.2, 7.4.8.2 Part VIII "Systems and Piping", 7.2.5, 7.6.11, 7.7, 7.9, 8.1.6, 8.6, Section 9, 11.1.3, 12.2, 12.4, 12.13, 13.7.8, 13.11 Part IX "Machinery", 5.2.6, 5.3.3, 6.2.1.2, 6.2.1.8, 6.2.1.11 Part XI "Electrical Equipment", 7.10, 19.2 <b>Rules for the Equipment of Sea-Going Ships</b> (if applicable) Part II "Life-Saving Appliances", 2.4.1, 4.1.1.6, 6.2.1.3.5.2 Part V "Navigational Equipment", 3.4.4.7 <b>Rules for the Cargo Handling Gear of Sea-Going Ships</b> 1.6
<b>Ore carrier</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part II "Hull", 3.4 Part III "Equipment, Arrangements and Outfit", 7.13, 7.14 Part IV "Stability", 3.2 Part V "Subdivision", 1.1.1.10, 1.1.1.11, 1.1.1.18, 1.4.9, 3.4.11, 5.1 Part VI "Fire Protection", Section 1, 2.1, 2.3, Sections 3 — 5 Part VII "Machinery Installations", 4.5.10 — 4.5.13, 7.4.7.2, 7.4.8.2 Part XI "Electrical Equipment", 7.10, 19.11
<b>Oil/ore carrier</b> If an oil tanker complies with the requirements for the ships, which carry petroleum products having flash point above 60 °C, this temperature shall be indicated in the descriptive notation. For example: <b>Oil/ore carrier (&gt; 60 °C)</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part II "Hull", 3.4 Part III "Equipment, Arrangements and Outfit", 2.9.4, 4.2.1, 4.3.2, 5.7, 7.13, 7.14 Part IV "Stability", 3.2, 3.4 Part V "Subdivision", 1.1.1.2, 1.1.1.18, 3.4.5, 3.4.11 Part VI "Fire Protection", Section 1, 2.1, 2.4, Sections 3 — 5, 6.3, 8.10 (specific requirements to ship type in 1.4.3, 2.1.1.7, 2.1.5.4, items 20 and 21 of Table 3.1.2.1, 3.1.2.8, 3.2.5.4, 3.7.2.8, 4.3.5, 5.1.3, items 8.1, 10.2, 15.2 — 15.3 of Table 5.1.2, 5.1.6.1, 5.1.15.1.4, 5.1.22) Part VII "Machinery Installations", 1.1.2, 4.2.5, 4.3.4, 4.5.10 — 4.5.13, 4.5.15, 4.5.16, 7.4.7.2, 7.4.8.2 Part VIII "Systems and Piping", 7.2.5, 7.6.11, 7.7, 8.1.6, Section 9, 11.1.3, 12.2, 12.4, 12.13, 13.7.8, 13.11



Descriptive notation	References to additional RS requirements for the descriptive notation
	Part IX "Machinery", 5.2.6, 5.3.3, 6.2.1.2, 6.2.1.8, 6.2.1.11 Part XI "Electrical Equipment", 7.10, 19.2, 19.11 <b>Rules for the Equipment of Sea-Going Ships</b> (if applicable) Part II "Life-Saving Appliances", 2.4.1, 4.1.1.6, 6.2.1.3.5.2 Part V "Navigational Equipment", 3.4.4.7 <b>Rules for the Cargo Handling Gear of Sea-Going Ships</b> 1.6

**Passenger ship, Passenger yacht**

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Passenger ship</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part III "Equipment, Arrangements and Outfit", 2.9.5, 7.12.5, 8.5.2.1, 8.5.2.2, 8.5.3.1, 8.5.3.5, 8.5.3.7, 8.5.4.2, 8.5.5, 9.2.2, Appendix Part IV "Stability", 3.1 Part V "Subdivision", 1.1.1.1, 2.1.1, 2.2.1, 2.2, 2.5.2, 2.5.4, 2.7, 2.9.1, 2.9.2, 2.9.4 Part VI "Fire Protection", Section 1, 2.1, 2.2, Sections 3 — 5 (specific requirements to ship type in 1.4.7, 2.1.1.4, 2.1.1.6, 2.1.1.7, 2.1.1.8, 2.1.1.9, 2.1.1.10, 2.1.2.3, 2.1.3.2, 2.1.3.6, 2.1.4.2.5, 2.1.4.3.3, footnotes 1, 10, 17 and 21 in Table 3.1.2.1, 3.1.3.4, 3.2.1.2, 3.2.1.4, 3.2.1.5, 3.2.2.1, 3.2.3.1, 3.2.3.8, 3.2.6.2, 3.2.6.9, 3.4.9, 3.12.1, 4.1.2, 4.2.1.1.3, 4.2.1.1.5, 4.2.1.2.2, 4.2.1.2.3, 5.1.1, 5.1.4.4, items 4.1.4, 8.1, 10.1, 16.1, 16.2, 18.1.2 and 18.3 of Table 5.1.2, 5.1.15.2, 5.1.15.3, 5.1.23, 7.2.2, 7.2.3.1) Part VII "Machinery Installations", 2.1.12, 4.3.2, 4.5.5 — 4.5.9, 7.4.7.1, 7.4.8.1, Section 11 Part VIII "Systems and Piping", 5.1.2, 7.1.2, 7.1.3, 7.1.4, 7.1.5, 7.1.6, 7.3.6, 7.4.3, 7.6.12, 8.1.5, 8.1.7, 10.1.18, 10.4.2, 10.4.4, 12.2, 12.3, 13.6.2 Part IX "Machinery", 6.2.1.13, 7.1.1, 7.1.5 Part XI "Electrical Equipment", 7.10, 16.8.1.8, 19.3.3, 7.4.2, 7.3.1.7, 19.1 <b>Rules for the Equipment of Sea-Going Ships</b> (if applicable) Part II "Life-Saving Appliances", 2.1.1.1, 2.1.1.2, 2.1.3.3, 2.1.4, 2.2.2.1, 2.3.7, 2.4.2, 2.5.2.1.2, 2.6.1, 3.1, 3.2, 3.3 Part IV "Radio Equipment", 1.1.1.1, 3.3.13 Part V "Navigational Equipment", 2.1.1 <b>Load Line Rules for Sea-Going Ships</b> 2.2.6
<b>Passenger yacht</b> The descriptive notation is assigned to yachts intended for commercial and non-commercial use, carrying from 13 to 36 passengers and not carrying cargoes	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part XX "Additional Requirements for Yachts"

**Pipe laying barge, Pipe laying vessel**

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Pipe laying barge</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part II "Hull", 3.6 Part VI "Fire Protection", Section 1, 2.1, 2.3, Sections 3 — 5, 6.2.1 Part VII "Machinery Installations", 4.5.10 — 4.5.13

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Pipe laying vessel</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part II "Hull", 3.6 Part VI "Fire Protection", Section 1, 2.1, 2.3, Sections 3 — 5, 6.2.1 Part VII "Machinery Installations", 4.5.10 — 4.5.13

Pontoon

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Pontoon</b> <b>Pontoon for technological services</b> <b>Pontoon for transportation services</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part IV "Stability", 4.2 Part VI "Fire Protection", Section 1, 2.1, 2.3, Sections 3 — 5, 8.11 Part VII "Machinery Installations", 4.5.10 — 4.5.13 <b>Load Line Rules for Sea-Going Ships</b> 4.1.4

Ro-ro passenger ship, Ro-ro ship

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Ro-ro passenger ship</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part II "Hull", 3.2 Part III "Equipment, Arrangements and Outfit", 2.9.5, 7.4.2, 7.4.3, 7.12.5, 7.12.6, 7.15, 8.4.9, 8.5.2.1, 8.5.2.2, 8.5.2.3, 8.5.3.1, 8.5.3.5, 8.5.3.7, 8.5.4.2, 8.5.5, 8.5.6, 9.2.2, Appendix Part IV "Stability", 3.1, 3.2 Part V "Subdivision", 1.4.6.2.3, 3.3.4.5, 2.1.1, 2.2, 2.2.1, 2.3.1.3, 2.5.2, 2.5.4, 2.7, 2.9.1, 2.9.2, 2.9.4, 3.4.1 Part VI "Fire Protection", Section 1, 2.1, 2.2, Sections 3 — 5 and 7 (specific requirements to ship type in 1.4.7, 2.1.1.4, 2.1.1.6, 2.1.1.7, 2.1.1.8, 2.1.1.9, 2.1.1.10, 2.1.2.3, 2.1.3.2, 2.1.3.6, 2.1.4.2.5, 2.1.4.3.3, footnotes 1, 10, 17 and 21 in Table 3.1.2.1, 3.1.3.4, 3.2.1.2, 3.2.1.4, 3.2.1.5, 3.2.2.1, 3.2.3.1, 3.2.3.8, 3.2.6.2, 3.2.6.9, 3.4.1, 3.4.9, 3.12.1, 4.1.2, 4.2.1.1.3, 4.2.1.1.4, 4.2.1.1.5, 4.2.1.2.2, 4.2.1.2.3, 5.1.1, 5.1.4.4, items 3.4, 4.1.4, 4.14, 8.1, 10.1, 15.1, 16.1 — 16.3, 18.1.2 and 18.3 of Table 5.1.2, 5.1.14.3, 5.1.15.2, 5.1.15.3, 5.1.23, 7.2.2, 7.2.3.1, 7.2.18) Part VII "Machinery Installations", 2.1.12, 4.3.2, 4.5.5 — 4.5.9, 7.4.7.1, 7.4.8.1, Section 11 Part VIII "Systems and Piping", 5.1.2, 7.1.2, 7.1.3, 7.1.4, 7.1.5, 7.1.6, 7.3.6, 7.4.3, 7.6.12, 8.1.5, 10.1.18, 10.4.2, 10.4.4, 12.1.9, 12.2, 12.3, 12.6, 13.6.2 Part IX "Machinery", 5.3.3, 6.2.1.13, 7.1.1, 7.1.5 Part XI "Electrical Equipment", 7.10, 7.12, 19.1, 19.3 <b>Rules for the Equipment of Sea-Going Ships (if applicable)</b> Part II "Life-Saving Appliances", 2.1.1.1, 2.1.1.2, 2.1.3.3, 2.1.4, 2.2.2.1, 2.3.7, 2.4.2, 2.5.2.1.2, 2.6.1, 3.1, 3.2, 3.3, 3.4 Part IV "Radio Equipment", 1.1.1.1, 3.3.13 Part V "Navigational Equipment", 2.1.1 <b>Load Line Rules for Sea-Going Ships</b> 2.2.6
<b>Ro-ro ship</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part II "Hull", 3.2

Descriptive notation	References to additional RS requirements for the descriptive notation
	Part III "Equipment, Arrangements and Outfit", 7.4.2, 7.4.3, 7.12.6, 7.15, 8.4.9, 8.5.2.3 Part IV "Stability", 3.2 Part V "Subdivision", 1.1.1.10, 1.4.6.2.3, Section 2, 2.3.1.3, 3.3.4.5 Part VI "Fire Protection", Section 1, 2.1, 2.3, Sections 3 — 5, 7 and 8 (specific requirements to ship type in 2.1.4.7, 2.1.5.5, 3.4.1, 3.7.3.1.12, 3.7.3.3, 3.8.1.1, 4.2.1.1.4, 4.2.1.3, items 3.4, 4.14, 15.1 and 16.3 of Table 5.1.2, 5.1.14.3, 7.2.13, 7.2.18) Part VII "Machinery Installations", 4.5.10 — 4.5.13, 7.4.7.2, 7.4.8.2 Part VIII "Systems and Piping", 12.1.9, 12.1.14, 12.2.2, 12.6 Part IX "Machinery", 5.3.3 Part XI "Electrical Equipment", 7.12, 19.3

**Salvage ship**

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Salvage ship</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part V "Subdivision", 1.1.1.13 Part VI "Fire Protection", Section 1, 2.1, 2.3, Sections 3 — 5 Part VII "Machinery Installations", 4.5.10 — 4.5.13 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", 13.2.3 (except for 13.2.3.1 — 13.2.3.3, 13.2.3.12), 13.2.4, 13.2.5, 13.2.10

**Self-unloading bulk carrier**

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Self-unloading bulk carrier</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part II "Hull", 3.3.1.6.3 Part IV "Stability", 3.2 Part V "Subdivision", 1.1.1.10, 1.1.1.11, 1.1.1.18, 1.4.9, 3.4.11, 5.1 Part VI "Fire Protection", Section 1, 2.1, 2.3, Sections 3 — 5 and 7 (specific requirements to ship type in item 15.4 of Table 5.1.2, 7.2.8) Part VII "Machinery Installations", 4.5.10 — 4.5.13, 7.4.7.2, 7.4.8.2 Part XI "Electrical Equipment", 7.10

**Semi-submersible (Docklift) ship**

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Semi-submersible (Docklift) ship</b> The descriptive notation is assigned to semi-submersible (docklift) ships designed for the carriage of heavy and/or bulky cargos, for loading and unloading of which the docking method (FLO/FLO — Float-on/Float-off) is used. The descriptive notation <b>Heavy cargo carrier (Deck-t/m<sup>2</sup>)</b> is a mandatory for ships carrying heavy and/or bulky cargoes. From 1 September 2022, the exclusive descriptive notation <b>Semi-submersible ship</b> is added	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", Section 25

Shipborne barge

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Shipborne barge</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part III "Equipment, Arrangements and Outfit", 3.1.4 Part VI "Fire Protection", Section 1, 2.1, 2.3, Sections 3 — 5, 8.11 Part VII "Machinery Installations", 4.5.10 — 4.5.13, 7.4.7.2, 7.4.8.2 <b>Load Line Rules for Sea-Going Ships</b> 4.1.4

Special purpose ship

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Special purpose ship</b> The descriptive notation is assigned to ships which carry on board special personnel. The following ship types are included: research, expedition, hydrographic, drill ships, whale factory vessels, fishing vessel base-ships and other ships used for processing of marine life resources and not engaged in their fishing, salvage ships, cable laying vessels, seismic research vessels, diving ships, pipe laying vessels, floating cranes and crane ships	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part II "Hull", 3.7 (only ships intended for processing, storage and/or transportation of catch) Part III "Equipment, Arrangements and Outfit", 2.9.5, 7.12.5, 8.5.2.1, 8.5.2.2, 8.5.3.1, 8.5.3.7, 8.5.4.2, 8.5.5, 9.2.2, Appendix Part IV "Stability", 3.6 Part V "Subdivision", 1.1.1.7, 3.4.3 Part VI "Fire Protection", Section 1, 2.1, 2.2 or 2.3, Sections 3 — 5, 6.2, 8.14 Part VII "Machinery Installations", 4.5.10 — 4.5.13, 7.4.7.2, 7.4.8.2 Part VIII "Systems and Piping", 5.1.2, 7.1.2, 7.1.3, 7.1.4, 7.1.5, 7.3.6, 12.2, 12.3 Part VII "Machinery Installations", 4.3.2 Part IX "Machinery", 7.1.1, 7.1.5 Part XI "Electrical Equipment", 7.3.1.11, 19.4 <b>Rules for the Equipment of Sea-Going Ships</b> (if applicable) Part II "Life-Saving Appliances", 5.2

Supply vessel, Supply vessel (OS)

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Supply vessel</b> <b>Supply vessel (OS)</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part II "Hull", 3.8 Part III "Equipment, Arrangements and Outfit", 3.4.2, 7.1.6, 7.6.6, 7.8.4 Part IV "Stability", 3.11 Part V "Subdivision", 1.1.1.8, 3.4.9 Part VI "Fire Protection", Section 1, 2.1, 2.3, Sections 3 — 5 Part VII "Machinery Installations", 4.5.10 — 4.5.13 Part VIII "Systems and Piping", 9.1.3, 11.1.3 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", 13.1 <b>Rules for the Equipment of Sea-Going Ships</b> (if applicable) Part V "Navigational Equipment", 3.2.10.2

Standby vessel

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Standby vessel</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part II "Hull", 3.8 Part VI "Fire Protection", Section 1, 2.1, 2.3, Sections 3 — 5 Part VII "Machinery Installations", 4.5.10 — 4.5.13 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", 13.2

Tanker

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Tanker</b> The descriptive notation shall be accompanied by a cargo carried specification in brackets such as <b>Tanker (water)</b> , <b>Tanker (wine)</b> , etc.	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part II "Hull", 3.5 Part III "Equipment, Arrangements and Outfit", 7.11 Part IV "Stability", 3.4 Part VI "Fire Protection", Section 1, 2.1, Sections 3 — 5, 6.3, 8.10 Part VII "Machinery Installations", 4.5.10 — 4.5.13, 7.4.7.2, 7.4.8.2 Part XI "Electrical Equipment", 7.19
<b>Tanker (water)</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part II "Hull", 3.5 Part III "Equipment, Arrangements and Outfit", 7.11 Part IV "Stability", 3.4 Part VI "Fire Protection", Section 1, 2.1, 2.3, Sections 3 — 5 Part VII "Machinery Installations", 4.5.10 — 4.5.13, 7.4.7.2, 7.4.8.2 Part XI "Electrical Equipment", 7.19
<b>Tanker (wine)</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part II "Hull", 3.5 Part III "Equipment, Arrangements and Outfit", 7.11 Part IV "Stability", 3.4 Part VI "Fire Protection", Section 1, 2.1, 2.3, Sections 3 — 5 Part VII "Machinery Installations", 4.5.10 — 4.5.13, 7.4.7.2, 7.4.8.2 Part XI "Electrical Equipment", 7.19

Timber carrier

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Timber carrier</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part IV "Stability", 3.3 Part V "Subdivision", 2.8 Part VI "Fire Protection", Section 1, 2.1, 2.3, Sections 3 — 5 Part VII "Machinery Installations", 4.5.10 — 4.5.13, 7.4.7.2, 7.4.8.2 <b>Load Line Rules for Sea-Going Ships</b> Section 5

**Tug**

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Tug</b>	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part II "Hull", 3.9 Part III "Equipment, Arrangements and Outfit", 5.4, 5.5, 5.6 Part IV "Stability", 3.7 Part V "Subdivision", 2.1.1 Part VI "Fire Protection", Section 1, 2.1, 2.3, Sections 3 — 5 Part VII "Machinery Installations", 4.5.10 — 4.5.13, 7.4.7.2, 7.4.8.2, 8.2.1 Part VIII "Systems and Piping", 11.1.3, 14.1.3 Part IX "Machinery", 6.5, 6.6 <b>Rules for the Equipment of Sea-Going Ships</b> (if applicable) Part V "Navigational Equipment", 3.2.10.2

**Yacht for commercial service**

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Yacht for commercial service</b> The descriptive notation is assigned to yachts of 24 m in length and above, intended for commercial use, not carrying cargoes and more than 12 passengers	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part XX "Additional Requirements for Yachts"

**Pilot ship**

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Pilot ship</b> The descriptive notation is assigned to ships intended for transportation and safe embarkation/disembarkation of pilots from one board to another	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", 13.4

**Unmanned barge**

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Unmanned barge</b> The descriptive notation is assigned to unmanned non-self-propelled barges (UNSP barges)	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1

**3.2 Descriptive notations of ships and offshore installations according to the rules for the classification and construction of ships of special types (Rules for the Classification and Construction of Chemical Tankers, Rules for the Classification and Construction of Ships Carrying Liquefied Gases in Bulk and other rules) — dedicated descriptive notations**

Wooden ship

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Wooden ship</b> Ships and floating facilities constructed of wood	<b>Rules for the Classification and Construction of Wooden Ships</b>

High-Speed Craft

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>HSC</b> (high-speed craft)	<b>Rules for the Classification and Construction of High-Speed Craft</b> Part I "Classification", Section 2 Part XVIII "Navigational Equipment", 1.2 (for <b>Passenger-A</b> in case of craft not engaged in the international voyages) Part XXI "Craft for Personnel Transportation"
Designation of HSC type in class the notation:	
<b>ACV</b> (air-cushion vehicle)	
<b>SES</b> (surface-effect ship)	
<b>Hydrofoil craft</b>	
<b>SWATH</b> (small waterplane area twin hull craft)	
<b>MHC</b> (multy-hull craft)	
Descriptive notation:	
<b>Crew boat</b>	
<b>Light ship</b>	
A high-speed craft not covered by the International Code of Safety for High-Speed Craft	
<b>Passenger-A</b>	
<b>Passenger-B</b>	

Gas carrier LG

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Gas carrier type 1G</b> <b>Gas carrier type 2G</b> <b>Gas carrier type 2PG</b> <b>Gas carrier type 3G</b> The descriptive notation is added to the character of classification of gas carriers carrying liquefied gases in bulk (LG): gas carriers <b>type 1G</b> ; gas carriers <b>type 2G</b> ; gas carriers <b>type 2PG</b> ; gas carriers <b>type 3G</b> . If an LG carrier is intended for the carriage of one specific cargo only, the name of cargo, its design temperature, in °C, and design density, in kg/m <sup>3</sup> , may be additionally indicated in brackets after the descriptive notation <b>Gas carrier</b> , for example, <b>Gas carrier type 2G (ethylene, – 104 °C, 560 kg/m<sup>3</sup>)</b> . For LG carriers intended for the carriage of liquefied natural gas (LNG), an entry ( <b>methane</b> ) shall be additionally added after the descriptive notation <b>Gas carrier</b> , for example, <b>Gas carrier type 2G (methane)</b> . The descriptive notation is assigned if the LG carrier is intended for periodical operation at a fixed location as FPU with descriptive notations <b>FPSO(LG)</b> , <b>FSO(LG)</b> or <b>FSRU</b>	<b>Rules for the Classification and Construction of Ships Carrying Liquefied Gases in Bulk</b> (entirely) <b>Rules for Membrane Containment System for Liquefied Natural Gas</b> (if applicable, depending on the type of cargo tanks) <b>Rules for the Classification and Construction of Sea-Going Ships</b> Part II "Hull", 3.5 Part III "Equipment, Arrangements and Outfit", 2.9.4, 5.7, 7.11 Part IV "Stability", 3.4 Part V "Subdivision", 1.1.1.6, 3.4.6 Part VI "Fire Protection", Section 1, 2.1, 2.4, Sections 3, 4 5 (specific requirements to ship type in 1.4.3, 2.4, item 17 of Table 3.1.2.1, 3.10.2.4, 3.10.3.2, 5.1.3) Part VII "Machinery Installations", 1.1.2, 2.3.1, 3.2.10, 3.2.12, 4.5.10 — 4.5.13, 7.4.7.2, 7.4.8.2 Part VIII "Systems and Piping", 7.2.5, 8.7.4, 11.1.3, 12.2, 13.7.8, 13.12 Part IX "Machinery", 6.2.1.2, 6.2.1.8, 6.2.1.11 Part XVII "Distinguishing Marks and Descriptive Notation in the Class Notation Specifying Structural and Operational Particulars of Ships", Section 9 (if applicable) <b>Rules for the Equipment of Sea-Going Ships</b> (if applicable) Part II "Life-Saving Appliances", 2.4.1, 4.1.1.6, 4.1.1.7, 6.2.1.3.5.2 <b>Rules for the Cargo Handling Gear of Sea-Going Ships</b> 1.6

**LNG bunkering ship**

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>LNG bunkering ship</b> For gas carriers engaged in transportation of liquefied natural gas (LNG) and intended to ensure the transfer of LNG on board the ships using LNG as a fuel (hereinafter referred to as "the LNG bunkering ships") in compliance with the requirements of Section 11, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", the descriptive notation <b>LNG bunkering ship</b> shall be added in the class notation after the descriptive notation <b>Gas carrier</b>	<b>Rules for the Classification and Construction of Ships Carrying Liquefied Gases in Bulk</b> (entire document) <b>Rules for the Classification and Construction of Sea-Going Ships</b> Part VI "Fire Protection", Section 1, 2.1, 2.4, Sections 3 — 5 (specific requirements to ship type in 1.4.3, 2.4, item 17 of Table 3.1.2.1, 3.10.2.4, 3.10.3.2, 5.1.3) Part VII "Machinery Installations", 4.5.10 — 4.5.13 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", Section 11

**Gas carrier CNG**

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Gas carrier CNG</b> ships intended for the carriage of compressed natural gas	<b>Rules for the Classification and Construction of Ships Carrying Compressed Natural Gas</b> (entire document)

**Historical ships**

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Replica</b> Replica of a historical ship (traditional craft)	Special technical requirements developed by the designer and approved by the Register for further design and construction of a ship

**Small fishing vessel**

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>SFV</b> (small fishing vessel) For small sea fishing vessels having the length of 12 up to 24 m and with the power of main engines from 55 to 375 kW	<b>Rules for the Classification and Construction of Small Sea Fishing Vessels</b> (entire document)

**Manned submersibles and ship's diving systems**

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>MS self-sustained</b> <b>MS tethered</b> <b>MS suspended</b> <b>MS towed</b> <b>MS passenger</b>	<b>Rules for the Classification and Construction of Manned Submersibles and Ship's Diving Systems</b>

**MODU, FOP, drilling ships**

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>MODU self-elevating</b> <b>MODU semi-submersible</b> <b>MODU tension leg</b> <b>Drilling barge</b> <b>Drilling ship</b> <b>FOP gravity</b> <b>FOP pile</b> <b>FOP mast</b> <b>Ice-resistant</b>	<b>Rules for the Classification, Construction and Equipment of MODU/FOP</b> <b>Load Line Rules for Sea-Going Ships</b> Section 7



Self-elevating, semi-submersible units

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Self-elevating unit</b> Assigned to offshore platforms, which have movable legs capable of raising their hulls above the surface of the sea and lowering them back into the sea and which perform operations other than drilling, hydrocarbon production, storage or processing	<b>Rules for the Classification, Construction and Equipment of MODU/FOP</b> <b>Load Line Rules for Sea-Going Ships</b> Section 6
<b>Semi-submersible unit</b> Assigned to column-stabilized offshore platforms, which are afloat when in operating condition and which are kept in the horizontal plane by means of anchors, thrusters or other positioning equipment and which perform operations other than drilling, hydrocarbon production, storage or processing	<b>Rules for the Classification, Construction and Equipment of MODU/FOP</b> <b>Load Line Rules for Sea-Going Ships</b> Section 6

FPU

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>FPO</b> (floating production and offloading unit) The descriptive notation is assigned to floating installations intended for production, intake, processing and offloading of products	<b>Rules for the Classification and Construction of FPU</b> (entirely) <b>Rules for the Equipment of FPU</b> (entirely)
<b>FPSO</b> (floating production storage and offloading unit) The descriptive notation is assigned to floating installations intended for production, intake, processing, storage and offloading	<b>Rules for the Classification and Construction of FPU</b> (entirely) <b>Rules for the Equipment of FPU</b> (entirely)
<b>FPSO(LG)</b> (floating production, storage and offloading unit for liquefied gas) The descriptive notation is assigned to floating installations intended for liquefied gas production, intake, processing, storage and offloading. One of the following descriptive notations <b>Gas carrier type 1G, Gas carrier type 2G, Gas carrier type 2PG, Gas carrier type 3G</b> is assigned, if FPSO(LG) is periodically operated as an LG carrier provided the requirements of the Rules for the Classification and Construction of Sea-Going Ships applicable to gas carriers and the Rules for the Classification and Construction of Ships Carrying Liquefied Gases in Bulk are fully met	<b>Rules for the Classification and Construction of FPU</b> Part I "Classification", 1.2.1, 2.2.3, 2.2.6 <b>Rules for the Classification and Construction of Ships Carrying Liquefied Gases in Bulk</b> Part I "Classification", 2.1, Section 4 Part II "Ship Arrangement" Part III "Stability. Subdivision. Freeboard", 1.2, 1.3, 2.1, Sections 3, 4 Part IV "Cargo Containment" (if applicable, depending on the type of cargo tanks) Part V "Fire Protection", Sections 2, 3, 4 Part VI "Systems and Piping" (Section 11 — only if methane is used as a fuel) Part VII "Electrical Equipment" (Section 4 — only if methane is used as a fuel) Part VIII "Instrumentation and Automation Systems" Part IX "Materials and Welding" Part X "Special Requirements" (applied depending on the type of cargo) Part XV "Automation" <b>Rules for Membrane Containment System for Liquefied Natural Gas</b> (if applicable, depending on the type of cargo tanks) <b>Rules for the Classification and Construction of Sea-Going Ships</b> Part VI "Fire Protection", 2.4, Sections 3, 4, 5 Part XVII "Distinguishing Marks and Descriptive Notation in the Class Notation Specifying Structural and Operational Particulars of Ships", Section 9 (if applicable) <b>Rules for the Equipment of FPU</b> (entirely)

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>FSO</b> (floating storage and offloading unit) The descriptive notation is assigned to floating installations intended for intake, storage and offloading of products	<b>Rules for the Classification and Construction of FPU (entirely)</b> <b>Rules for the Equipment of FPU (entirely)</b>
<b>FSO(LG)</b> (floating storage and offloading unit for liquefied gas) The descriptive notation is assigned to floating installations intended for liquefied gas intake, storage and offloading. One of the following descriptive notations <b>Gas carrier type 1G, Gas carrier type 2G, Gas carrier type 2PG or Gas carrier type 3G</b> is assigned if FSO(LG) is periodically operated as an LG carrier provided the requirements of the Rules for the Classification and Construction of Sea-Going Ships applicable to gas carriers and the Rules for the Classification and Construction of Ships Carrying Liquefied Gases in Bulk are fully met	<b>Rules for the Classification and Construction of FPU</b> Part I "Classification", 1.2.1, 2.2.3, 2.2.6 Part XV "Automation" <b>Rules for the Classification and Construction of Ships Carrying Liquefied Gases in Bulk</b> Part I "Classification", 2.1, Section 4 Part II "Ship Arrangement" Part III "Stability. Subdivision. Freeboard", 1.2, 1.3, 2.1, Sections 3, 4 Part IV "Cargo Containment" (if applicable, depending on the type of cargo tanks) Part V "Fire Protection", Sections 2, 3, 4 Part VI "Systems and Piping" (Section 11 — only if methane is used as a fuel) Part VII "Electrical Equipment" (Section 4 — only if methane is used as a fuel) Part VIII "Instrumentation and Automation Systems" Part IX "Materials and Welding" Part X "Special Requirements" (applied depending on the type of cargo) <b>Rules for Membrane Containment System for Liquefied Natural Gas</b> (if applicable, depending on the type of cargo tanks) <b>Rules for the Classification and Construction of Sea-Going Ships</b> Part VI "Fire Protection", 2.4, Sections 3, 4, 5 Part XVII "Distinguishing Marks and Descriptive Notation in the Class Notation Specifying Structural and Operational Particulars of Ships", Section 9 (if applicable) <b>Rules for the Equipment of FPU (entirely)</b>
<b>FSPM</b> (floating single point mooring) The descriptive notation is assigned to floating single point mooring intended for mooring of oil tankers or FPU and for offloading of products at sea or at anchorage	<b>Rules for the Classification and Construction of FPU (entirely)</b> Part I "Classification", 1.2.1, 2.2.5 Part III "Equipment, Arrangements and Outfit", 1.3.4, 3.1.2, 3.1.3, 4.5.5 — 4.5.7, 8.4 Part V "Subdivision", 1.5, 2.2.6 Part VII "Machinery Installations", 2.3 Part VIII "Systems and Piping", 3.5 Part XI "Electrical Equipment", 2.1.3 <b>Rules for the Equipment of FPU (entirely)</b>
<b>FSRU</b> (floating storage and regasification unit) The descriptive notation is assigned to floating installations intended for long-term (or constant) operation at a fixed location in a regasification and gas discharge mode and/or a gas receiving, processing, liquefaction and storage mode. One of the following descriptive notations <b>Gas carrier type 1G, Gas carrier type 2G, Gas carrier type 2PG or Gas carrier type 3G</b> is assigned if FSRU is periodically operated as an LG carrier provided the requirements of the Rules for the Classification and Construction of Sea-Going Ships applicable to gas carriers and the Rules for the Classification and Construction of Ships Carrying Liquefied Gases in Bulk are fully met	<b>Rules for the Classification and Construction of FPU</b> Part I "Classification", 1.2.1, 2.2.4, 2.2.6 <b>Rules for the Classification and Construction of Ships Carrying Liquefied Gases in Bulk</b> Part I "Classification", 2.1, Section 4 Part II "Ship Arrangement" Part IV "Cargo Containment" (if applicable, depending on the type of cargo tanks) Part V "Fire Protection" Part VI "Systems and Piping", 3.24, 8.3.4, Section 11 Part VII "Electrical Equipment" (Section 4 — only if methane is used as a fuel) Part VIII "Instrumentation and Automation Systems" Part IX "Materials and Welding" Part X "Special Requirements" (applied depending on the type of cargo)

Descriptive notation	References to additional RS requirements for the descriptive notation
	<b>Rules for Membrane Containment System for Liquefied Natural Gas</b> (if applicable, depending on the type of cargo tanks) <b>Rules for the Classification and Construction of Sea-Going Ships</b> Part II "Hull", 3.5 Part III "Equipment, Arrangements and Outfit", 2.9.4, 5.7, 7.11 Part IV "Stability", 3.4, 4.1.3.8 Part V "Subdivision", 1.1.1.6, 3.4.6 Part VI "Fire Protection", 2.1, 2.4, Sections 3, 4, 5 (specific requirements to ship type in 1.4.3, 2.4, in item 17 of Table 3.1.2.1, in 3.10.2.4, 3.10.3.2, 5.1.3) Part VII "Machinery Installations", 1.1.2, 2.3.1, 3.2.10, 3.2.12, 4.5.10 — 4.5.13, 7.4.7.2, 7.4.8.2 Part VIII "Systems and Piping", 7.2.5, 7.10, 8.7.4, 11.1.3, 12.2, 13.7.8, 13.12 Part IX "Machinery", 6.2.1.2, 6.2.1.8, 6.2.1.11 Part XV "Automation" <b>Rules for the Equipment of FPU</b> (entirely)
<b>SSPM</b> (stationary single point mooring) The descriptive notation is assigned to stationary single point mooring intended for mooring of oil tankers or FPU and for offloading of products at sea or at anchorage	<b>Rules for the Classification and Construction of FPU</b> Part I "Classification", 1.2.1, 2.2.5 Part III "Equipment, Arrangements and Outfit", 1.3.4, 3.1.3 Part V "Subdivision", 2.2.6, 3.4 Part VII "Machinery Installations", 2.3.4, 2.3.5 Part VIII "Systems and Piping", 3.5 Part XI "Electrical Equipment", 2.1.3 <b>Rules for the Equipment of FPU</b> (entirely)

#### Pleasure Craft

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Pleasure craft</b> Mandatory for all pleasure craft <b>Pleasure yacht</b> Mandatory for all pleasure yachts <b>Yacht (charter)</b> May be assigned to yachts of less than 24 m in length ( $L_{LL}$ ) intended for commercial service, not carrying cargoes and more than 12 passengers. $L_{LL}$ is a length as defined in Part II "Hull" of the Rules for the Classification and Construction of Sea-Going Ships Additional notation according to propulsion type: <b>(Sailing)</b> <b>(Sailing-motor)</b> <b>(Motor-sailing)</b> <b>(Tow)</b> <b>(Berth-connected)</b> Additional notation according to structural particulars: <b>(Catamaran)</b> or <b>(Trimaran)</b> or <b>(Proa)</b> <b>(Hydroplane)</b> Additional notation according to pleasure craft purpose: <b>(Touristy)</b> <b>(Water-bower)</b> <b>(Water-house)</b>	<b>Rules for the Classification and Construction of Pleasure Craft</b>

**Nuclear support vessels**

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Nuclear support vessel</b> Operational capabilities of the nuclear support vessel according to its purpose are shown, where necessary, as additional characteristics in Section "Other Characteristics" of the Classification Certificate (e.g. "treatment of liquid radioactive waste")	<b>Rules for the Classification and Construction of Nuclear Ships and Nuclear Support Vessels</b> (entirely) <b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 1.1.1 Part V "Subdivision", 2.1.1

**Inland Navigation Ships (for European Inland Waterways)**

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Bulk carrier</b> <b>Cargo push-ship</b> <b>Day-trip passenger ship</b> <b>Floating crane</b> <b>Floating establishment</b> <b>Flush-deck ship</b> <b>Lighter</b> <b>Oil/bulk carrier</b> <b>Oil recovery ship</b> <b>Oil tanker</b> <b>Passenger sailing ship</b> <b>Passenger ship</b> <b>Pushed barge</b> <b>Pusher</b> <b>Push-tug</b> <b>Replica</b> Replica of a historical ship (traditional craft) <b>Shipborne barge</b> <b>Towed barge</b> <b>Tug</b>	<b>Rules for the Classification and Construction of Inland Navigation Ships (for European Inland Waterways)</b>

**Ships using alternative sources of propulsion**

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>WAPS</b> (wind assisted propulsion system) May be assigned to ships fitted with wind assisted propulsion system	<b>Guidelines on Wind Assisted Propulsion Systems (WAPS)</b>

**Chemical tankers**

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>Chemical tanker type 1</b> <b>Chemical tanker type 2</b> <b>Chemical tanker type 3</b>	<b>Rules for the Classification and Construction of Chemical Tankers</b> (entire document) <b>Rules for the Classification and Construction of Sea-Going Ships</b> Part II "Hull", 3.5 Part III "Equipment, Arrangements and Outfit", 2.9.4, 4.2.1, 4.3.2, 5.7, 7.11 Part IV "Stability", 3.4 Part V "Subdivision", 1.1.1.5, 3.4.5.4.2, 3.4.5 Part VI "Fire Protection", Section 1, 2.1, 2.4, Sections 3 — 5 (specific requirements to ship type in 1.4.3, 2.1.1.7, 5.1.3) Part VII "Machinery Installations", 2.3.1, 3.2.10, 3.2.11, 3.2.13, 4.2.5, 4.5.10 — 4.5.13, 7.4.7.2, 7.4.8.2 Part VIII "Systems and Piping", 7.2.5, 8.7.4, 11.1.3, 12.2, 13.7.8 Part IX "Machinery", 6.2.1.2, 6.2.1.8, 6.2.1.11

Descriptive notation	References to additional RS requirements for the descriptive notation
	Part XI "Electrical Equipment", 2.1.2.1, 7.11, 19.11 <b>Rules for the Equipment of Sea-Going Ships</b> (if applicable) Part II "Life-Saving Appliances", 2.4.1, 4.1.1.6, 4.1.1.7, 6.2.1.3.5.2 <b>Rules for the Cargo Handling Gear of Sea-Going Ships</b> 1.6

WIG craft

Descriptive notation	References to additional RS requirements for the descriptive notation
<b>WIG craft</b>	<b>Rules for the Classification and Construction of Type A WIG Craft</b> Part I "Classification", Section 2

## **2.6 ALTERATION OF MARKS IN THE CLASS NOTATION**

**2.6.1** The Register may delete or alter any mark in the class notation in the case of any alteration of, or non-compliance with the requirements defining the insertion of this mark in the class notation.

### **3 TECHNICAL DOCUMENTATION**

#### **3.1 GENERAL**

**3.1.1** General provisions pertinent to the review and approval (agreement) of technical documentation on ships, materials and products are given in Part II "Technical Documentation" of the Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships.

**3.1.2** Prior to the commencement of a ship construction, technical documentation proving that all requirements of the Register applicable to the ship concerned are complied with shall be submitted to the Register for review. The documentation for review shall be submitted to the Register in electronic form in PDF format, providing its autonomous timeless storage and stamping with the results of documentation review.

Basically two practical alternatives of documentation submission and approval are allowed:

**.1** submission of plan approval documentation at least within the scope specified in column "PAD" in tables of Chapter [3.2](#), taking into account the peculiarities and type of the ship without further approval of detailed design documentation;

**.2** submission of technical design documentation at least within the scope specified in column "TD" in tables of Chapter [3.2](#), taking into account the peculiarities and type of the ship with further approval of detailed design documentation (refer to column "DD" of the above-mentioned tables). Chapter [3.2](#) covers only the minimum scope of detailed design documentation to be submitted to the Register. If necessary, the scope of detailed design documentation may be revised by agreement with the Register for each project individually depending on the extent and nature of changes in relation to the technical design.

The technical design documentation approved by the Register does not constitute grounds for assignment of class to the ship. This documentation is reviewed by the Register exclusively as the basis for further detailed design.

**Note:** The additional technical documentation required by Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" shall also be submitted in the set of technical documentation depending on the distinguishing mark or descriptive notation in the class notation of the ship, and taking into account the requirements of [3.1.9](#) of this Part.

**3.1.3** Documentation, containing the results of calculations, performed using software, shall contain the reference on the name and version of such software.

**3.1.4** When the earlier approved documentation is used for construction of a similar ship according to a new contract for construction, the scope of documentation to be submitted may be reduced based on the RS analysis of compliance with the requirements of the RS normative documents that came into force on or after the date of signing of the previous contract for construction for which the documentation was approved.

**3.1.5** Depending on the type of documentation, the results of the technical documentation review by the Register are finalized by appropriate stamping of the documents in accordance with 8.2 of Part II "Technical Documentation" of the Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships.

Information on stamps for different types of documentation is given in [3.2](#) and [3.3](#) of this Part.

**3.1.6** Requirements for the scope of technical documentation of a ship under conversion, repair or renovation, transfer of class, as well as during the initial survey of ship not built under the technical supervision of the Register or another classification society, are given in Part I "General Provisions" of the Rules for the Classification Surveys of Ships in Service.

At the same time, technical documentation for conversion of single-hull tankers to double-hull tankers or bulk carriers shall meet the relevant requirements of these Rules taking in to account IACS UI SC226 (Rev.1 Dec 2012) set out in the Supplement to rules of Russian Maritime Register of Shipping "IACS Procedural Requirements, Unified Interpretations and Recommendations" (published in electronic form as a separate edition).

**3.1.7** Requirements for the scope of technical documentation of materials and products for ships are given in the relevant parts of these Rules.

**3.1.8** When alternative design and arrangements being applied on board, deviate from the classification requirements of the RS rules, an engineering analysis shall be submitted for approval by the Register with technical justification demonstrating that the alternative design and arrangements provide an equivalent level of safety to that stipulated by the RS requirements.

During the review of alternative design and arrangements under SOLAS Convention (IMO resolution MSC.216(82)), one should be guided by the provisions of regulations II-1/55, II-2/17 and III/38 of SOLAS 74 with regard to IMO circulars MSC.1/Circ.1002 and MSC.1/Circ.1212.

**3.1.9** The technical documentation specified in [Section 3](#) of this Part does not cover operational documentation which is necessary for assignment of class to the ship. With regard to the requirements for operational documentation, the requirements of 4.6 and Appendix 1 of Part II "Technical documentation" of the Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships shall be met.



### 3.2 DESIGN DOCUMENTATION

Letter identification and abbreviations:

A — Approved;

AG — Agreed;

FI — For information;

TD — Technical design;

PAD — Plan approval documentation;

DD — Detailed (design) documentation.

#### 3.2.1 Ship's general documentation.

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Ship specification	FI	•		•	
.2	General arrangement plan	FI/A	•		•	If all necessary information concerning escape routes is stated in the plan, the general arrangement plan shall be approved
.3	List of deviations from the RS rules (with references to the relevant RS letters of their approval, refer to 1.3.4 of the General Regulations for the Classification and Other Activity, if any)	AG	•	•	•	The possibility of deviations shall be agreed with RHO and approved by the RS Director General
.4	Engineering analysis of the alternative design and arrangements — if any	AG	•		•	
.5	Evacuation analysis for passenger ships carrying more than 36 passengers, special purpose ships carrying more than 240 persons and ro-ro passenger ships confirming compliance with regulation II-2/13.3.2.7 of SOLAS-74, as amended, based on the guidelines in IMO circular MSC.1/Circ.1533	AG	•		•	

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.6	Engineering analysis of the capability of a ship to return to port in case of an accident in accordance with 2.2.6 and 2.2.7 of Part VI "Fire Protection", considering interpretations of IMO circular MSC.1/Circ.1369 (for passenger ships having length of 120 m and above or having three or more main vertical zones)	AG	•		•	
.7	Tonnage calculations in accordance with the International Convention on Tonnage Measurement of Ships, 1969 (for ships of 24 m in length and above) or the Rules for the Tonnage Measurement of Sea-Going Ships (for ships of less than 24 m in length)	AG	•	•	•	
.8	Tonnage calculations in accordance with the Regulations for the Measurement of Tonnage for the Suez Canal and/or the Rules for Measurement of Vessels for the Panama Canal (if necessary, issue of appropriate tonnage certificates)	AG	•	•	•	
.9	Plan showing the location of the IMO ship identification number (IMO number) marking (in compliance with the requirements of regulation XI-1/3 of SOLAS-74 as amended; applicable to all passenger ships of 100 gross tonnage and above and for all cargo ships of 300 gross tonnage and above; ships not covered by this regulation shall comply with the provisions of IMO resolution A.1117(30) as amended)	A		•	•	

**3.2.2 Hull documentation.**

Documentation specified in [3.2.2.1 — 3.2.2.4](#) of this Part shall be submitted together with the first portion of the documentation on hull.

All constructional drawings specified in [3.2.2.4 — 3.2.2.7](#), [3.2.2.9 — 3.2.2.11](#), [3.2.2.14 — 3.2.2.17](#), [3.2.2.20 — 3.2.2.22](#) of this Part, shall indicate the scantlings of the hull members, their material with indication of grades according to Part XIII "Materials", as well as typical sections and details, types and dimensions of fillet welds.

No.	Description of documentation	Stamp	TD	DD	PAD	Remark
.1	Hull members scantlings determination as well as analysis of the longitudinal strength and buckling stability of members (for all specified loading conditions of a ship, including the loading and carriage of bulk cargoes other than grain)	AG	•		•	
.2	Midship section plan and the typical transverse sections (with indication of spacing between the main longitudinal and transverse members, main particulars of the ship and their ratios, class notation of a ship and values of design still water bending moments)	A	•		•	
.3	Constructional profile (with indication of frame spacing, boundaries of the portions of a ship length, position of the watertight bulkheads, pillars, arrangement of superstructures and deckhouses)	A	•		•	
.4	Shell expansion (with indication of the ship hull boundaries, positions and dimensions of openings in shell plating, and for ships strengthened for navigation in ice — the upper and lower edges of the ice belt and corresponding forward and aft draughts (with due regard to trim), arrangement of intermediate frames)	A	•		•	Shell expansion for fiber-reinforced plastic ships shall be submitted if the outer shell plating has different thickness
.5	Deck and platform plans (with indication of design loads, including the loads induced by lift trucks and containers, positions and dimensions of openings, their strengthening, end structures of the side coamings)	A	•		•	
.6	Double bottom plan (the plan shall contain: sea chest sections with indication of pressure in the blow-down system; boundaries of watertight compartments, table of pressure heads. For bulk carriers and ore carriers, an allowable load on the inner bottom plating shall be indicated)	A	•		•	
.7	Drawings of longitudinal and transverse bulkheads, tank wash bulkheads (for tanks, the heights of overflow and air pipes shall be indicated)	A	•		•	

No.	Description of documentation	Stamp	TD	DD	PAD	Remark
.8	Hull typical structural details	A		•	•	Listed typical details shall comply with those shown on structural drawings given in <a href="#">3.2.2.2</a> — <a href="#">3.2.2.7</a> , <a href="#">3.2.2.9</a> , <a href="#">3.2.2.10</a> , <a href="#">3.2.2.14</a> , and <a href="#">3.2.2.17</a> of this Part. The remaining information shall comply with the shipbuilding quality standards for the hull structure during new construction agreed at the kick-off meeting with the shipyard (refer to 2.7 of the Guidelines on Technical Supervision of Ships under Construction) and shall be reviewed by the RS Branch Office for technical supervision during construction
.9	Drawing of after end framing	A	•		•	
.10	Drawing of fore end framing	A	•		•	
.11	Drawing of superstructures and deckhouses	A	•		•	
.12	Drawings of sections and assemblies of superstructures and deckhouses	A		•	•	
.13	Hull blocks plan	AG		•	•	
.14	Drawings of sternframe and stem	A	•	•	•	
.15	Drawings of bulwark	A	•	•	•	
.16	Drawings of engine and boiler casings, coamings, companions and other guards of openings in the ship's hull	A	•	•	•	
.17	Drawings of propeller shaft brackets and bossings as well as fixed nozzles	A	•	•	•	
.18	Drawings of propeller shaft tunnel, recesses, emergency escape trunks	A		•	•	
.19	Drawings of sections and assemblies of the main hull (including decks, transverse and longitudinal bulkheads, sides, bottom, double bottom (with table of positions of manholes and other openings), integral tanks outside double bottom)	A		•		

No.	Description of documentation	Stamp	TD	DD	PAD	Remark
.20	Drawings of seatings for the main machinery (main engine, main diesel engine) and boilers, including bottom construction (with indication of type and model of the equipment and that the seating complies with the requirements of the supplier's conditions on the equipment or that no special requirements are placed by the supplier on the equipment)	A	•	•	•	At the TD stage, the drawings are submitted if the information on the selected equipment is available
.21	Drawings of seatings for equipment (arrangements, machinery with statical load on deck exceeding 50 kN, or resulting statical bending moment on deck exceeding 100 kN m, deck mechanisms with breaking load of a rope or chain exceeding 150 kN or safe working load (SWL) exceeding 30 kN; the drawings shall be provided with indication of type and model of equipment and that the seating complies with the requirements of the supplier's conditions on the equipment or that no special requirements are placed by the supplier on the equipment; the design load and loading scheme; accepted corrosion allowance)	A	•	•	•	At the TD stage, the drawings are submitted if the information on the selected equipment is available. Drawings shall be submitted only if the seatings are manufactured independently of the equipment to be installed on them. If equipment is supplied together with the seating, these drawings are not required to be included in TD
.22	Drawings of seatings for mooring, anchor and towing equipment (the drawings shall be provided with indication that seatings comply with the requirements of the supplier's conditions on the equipment or that no special requirements are placed by the supplier on the seatings)	A	•	•	•	At the TD stage, the drawings are submitted if the information on the selected equipment is available. Drawings shall be submitted only if the seatings are manufactured independently of the equipment to be installed on them. If equipment is supplied together with the seating, these drawings are not required to be included in TD
.23	Plan of weld control	A	•	•	•	
.24	Table of the main hull and superstructure welding (containing the following information: name and thickness of hull structural members to be joined; shape or symbol of edge preparation (types of weld joints); brands and grades of base metal; welding processes; grades of welding consumables)	A	•	•	•	If the information listed herein is stated to the full in the drawings of a ship's hull, then submission of the table of welding is not required.

No.	Description of documentation	Stamp	TD	DD	PAD	Remark
						For the TD stage, general technical requirements for welding and choice of welding consumables grades are submitted
.25	Plan of testing the hull	A	•	•	•	It can be merged with plan of subdivision specified in <a href="#">3.2.5.3</a> of this Part
.26	Construction Monitoring Plan (for ships with the distinguishing mark <b>CSR</b> in the class notation)	AG	•	•	•	
.27	Specifications of protective coatings (according to 6.5 of Part XIII "Materials")	A	•	•	•	At the TD stage, the designer specifies general requirements for protective coatings in the specification
.28	Basic parameters of the hull protection by damping from damages when mooring (for ships to be moored at sea to other ships)	A	•	•	•	
.29	Detailed description of the hull construction process, including materials data, methods of forming the structural items, necessary conditions required during hull construction, as well as hull local scantlings and hull girder strength report)	A	•	•	•	Documentation is submitted for fiber-reinforced plastic ships only
.30	Loading Manual (for ships of 65 m in length and above refer to 1.4.9 of Part II "Hull")	AG	•	•	•	For oil tankers having length 150 m and above and bulk carriers having length 90 m and above, the scope of documentation shall consider the provisions of the Common Structural Rules

### 3.2.3 Documentation on arrangements, equipment and outfit.

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	General arrangement plans of openings in hull, superstructures, deckhouses and subdivision bulkheads, including data on coamings height and type of closing appliances	A	•	•	•	
.2	Drawings of essential assemblies and parts of closing appliances of openings in hull, superstructures, deckhouses and subdivision bulkheads	A		•	•	
.3	Strength calculations of bow, side and stern closing appliances in the ship's hull	AG	•		•	
.4	General arrangement plans of machinery and actuators of rudder and steering gear	A	•			
.5	General arrangement plans of rudder and steering gear with indication of essential assemblies and parts	A		•	•	
.6	Strength calculation of essential assemblies and parts of rudder and steering gear	AG	•		•	
.7	Calculation of efficiency of rudder and steering gear	AG	•		•	
.8	General arrangement plan of hatch covers of cargo holds	A	•			
.9	General arrangement plan with essential assemblies and parts of hatch covers of cargo holds	A		•	•	
.10	Strength calculations of hatch covers of cargo holds	AG	•		•	
.11	General arrangement plans of anchor, mooring and towing arrangements	A	•			
.12	General arrangement plans with essential assemblies and parts of anchor, mooring and towing arrangements	A		•	•	
.13	Calculations of anchor, mooring and towing arrangements	AG	•		•	
.14	Drawings of signal masts and rigging	A	•	•	•	
.15	Calculations of signal masts and rigging	AG	•		•	
.16	General arrangement plans of guard rails	A	•			
.17	General arrangement plans with essential assemblies and parts of guard rails	A		•	•	
.18	General arrangement plans of means of access for inspections of cargo and other spaces on oil tankers and bulk carriers and ships carrying liquefied gases in bulk	A	•			

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.19	General arrangement plans with essential assemblies and parts of means of access for inspections of spaces in cargo area and other spaces on oil tankers, bulk carriers and ships carrying liquefied gases in bulk	A		•	•	
.20	Means of access manual (for oil tankers and bulk carriers)	A	•		•	
.21	General arrangement plan of catwalk on oil tankers and ships carrying liquefied gases in bulk	A	•			
.22	General arrangement plan with essential assemblies and parts of catwalk on oil tankers and ships carrying liquefied gases in bulk	A		•	•	
.23	General arrangement plans of guide members for containers in cargo holds	A	•	•	•	
.24	Calculations of essential assemblies and parts of guide members for containers in cargo holds	AG	•		•	
.25	General arrangement plans and fastening plans of ladders with essential assemblies and parts (including accommodation and pilot ladders, and gangways)	A	•	•	•	
.26	General view of hoisting gear of shipborne barges	A	•	•	•	
.27	Calculation of hoisting gear of shipborne barges	AG	•		•	
.28	Plan of escape routes	A	•		•	If all necessary information concerning escape routes is stated in the general arrangement plan, plan of escape routes may not be submitted. In this case, the general arrangement plan shall be approved
.29	List of emergency outfit	AG	•		•	If required by Flag State Maritime Administration



**3.2.4 Documentation on stability.**

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Lines drawing, coordinate table of lines	AG	•		•	
.2	Corner point coordinate table for compartments and tanks	AG	•		•	
.3	Preliminary calculation of stability containing:	AG	•		•	Information listed in <a href="#">3.2.4.3.1</a> — <a href="#">3.2.4.3.8</a> may be submitted by separate documents
.3.1	tables of hydrostatic particulars					
.3.2	tables of cross-curves of stability, including drawing of the buoyant hull					
.3.3	mass tables for various loading conditions and cargo handling operations with indication of distribution of cargoes, fuel oil, fresh water and liquid ballast in tanks, as well as data on ship's displacement, centre of gravity and trim					
.3.4	diagrams of windage area of a ship and calculations of heeling moments					
.3.5	calculations of heel caused by crowding of passengers and by turning					
.3.6	calculations of icing, angles of flooding, corrections for free surface effect of liquid cargoes and stores					
.3.7	sketch showing the location of solid ballast with a specification containing information on the weight of each ballast group and the coordinates of the centre of gravity		•		•	If all necessary information is stated in the plans and diagrams required by <a href="#">3.2.3.1</a> , <a href="#">3.2.3.17</a> , <a href="#">3.2.9.1.8</a> , <a href="#">3.2.9.1.10</a> and <a href="#">3.2.9.1.13</a> of this Part, the freeboard plan may not be submitted
.3.8	righting lever curves and results of stability verification in compliance with the requirements of Part IV "Stability"					
.4	Freeboard plan containing: maximum draught of the ship; arrangement of openings and closing appliances, which contribute to the watertight integrity of the ship external boundaries, with an indication of the height of coamings and type of closing appliances (external doors, cargo hatches, service hatches; bow, stern and side doors and ramps; scuttles and windows, scuppers and freeing ports, bottom and side valves of sea water systems, sewage system, etc.; air pipes and ventilation heads, closures of ventilation ducts, engine room skylights, etc.); arrangement plan of means for protection of the crew (bulwark, guard rails, gangways, passageways, etc.)	AG	•	•	•	
.5	Freeboard calculation and drawings of the load line mark	AG	•		•	

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.6	Drawing for the ship's hull marking with the load line mark, deck line, lines to be used with the load line mark, mark of assigning Authority etc.	A		•		

### 3.2.5 Documentation on subdivision.

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Documents on probabilistic assessment of subdivision (if required)	AG	•		•	
.2	Damage trim and stability calculations, including righting lever curves	AG	•		•	
.3	Subdivision plan showing all watertight structures and openings with indication of types of closing appliances, as well as arrangements used for equalizing heel and trim of a damaged ship	AG	•		•	
.4	Calculations of sectional areas of cross-flooding fittings and of uprighting time of a ship	AG	•		•	
.5	Documents on installation of flooding detection sensors of water ingress into compartments of passenger ship and bulk carrier, containing:					
.5.1	flooding detection system specification	AG	•	•	•	
.5.2	documents with indication of the flooding detection system location	A	•		•	

### 3.2.6 Documentation of fire protection.

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Documents on structural fire protection: structural fire protection plan, including arrangement of doors and other openings in fire-fighting divisions with indication of categories of spaces in accordance with 2.2.1.3, 2.2.1.5, 2.3.3, 2.4.2, 2.5.3 and 2.6.3 of Part VI "Fire Protection"	A	•		•	
.2	Structural drawings of pipe and duct penetrations and cable transits in fire-fighting divisions	A		•	•	
.3	Documents on structural fire protection: insulation plan, scheme of linings and ceilings, deck coverings plan, schemes or description of facings and other finishing materials	A	•		•	
.4	Structural drawings of insulation, linings and deck coverings	A		•	•	
.5	Documents on structural fire protection: calculations required by 2.1.1.4 and 2.1.1.10 of Part VI "Fire Protection"	AG	•		•	
.6	Diagrams of fire extinguishing systems and a sample extraction smoke detection system	A	•		•	For PAD — with detailed description and other data confirming compliance with the requirements of Part VI "Fire Protection"
.7	Structural drawings of assemblies and equipment of fire extinguishing systems	A		•	•	
.8	Calculations of fire extinguishing systems confirming compliance with the requirement of Part VI "Fire Protection"	AG	•		•	
.9	List of fire-fighting outfit	AG	•		•	
.10	Arrangement plan of fire-fighting outfit	A		•	•	
.11	List of spare parts and tools	AG		•	•	
.12	Electrochemical protection scheme or drawing in oil tankers	A	•	•	•	
.13	Preliminary fire plan	AG	•		•	

### 3.2.7 Documentation on machinery and boiler plant.

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	General arrangement plans of machinery and equipment in the machinery spaces of category A, as well as in the emergency diesel generator spaces (refer to 1.2 of Part VII "Machinery Installations") with indication of escape routes	A	•		•	
.2	Drawings of seatings and attachment fittings of the main machinery, boilers and shaft bearings	A		•	•	
.3	Diagram of remote control of the main machinery	A	•		•	When remote control for the main machinery is supplied as complete delivery with the main engines and/or with steerable propellers, the mentioned diagram and description may be submitted together with the documentation required by Section 12 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
.4	Description of remote control of the main machinery (completed with information on equipment of remote control stations fitted with controls, indicating instruments and alarm devices, means of communication and other devices)	AG	•		•	
.5	Drawings of fuel and oil tanks location	A	•	•	•	
.6	Calculation of power of the main machinery for <b>Ice2</b> — <b>Arc9</b> ice class ships in compliance with the requirements of 2.1 of Part VII "Machinery Installations" to the minimum value of power delivered to the propeller shafts of the ships	AG	•		•	

### 3.2.7.7 Documentation on shafting.

The PAD or DD documentation shall contain information on treatment and geometry of working surfaces, heat treatment, tolerances on mating parts, hydraulic tests, non-destructive testing, etc.

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	General view of shafting	A	•	•	•	When propeller is supplied as complete delivery with the propulsion plant, the documentation listed in <a href="#">3.2.7.7.2 — 3.2.7.7.12</a> of this Part may be submitted together with the documentation required by Section 6 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
.2	Drawing of sterntube and parts of sterntube arrangement (bushes, bearings, sealings), drawing of casing protecting the area between the sterntube and propeller boss	A	•	•	•	
.3	Drawings of shafts (propeller, intermediate and thrust)	A	•	•	•	
.4	Drawings of shaft connections and couplings	A	•	•	•	
.5	Drawings of journal and thrust bearings of shafting and their fastening to the seatings	A	•	•	•	
.6	Strength calculation of shafts and their fastening parts	AG	•		•	
.7	Calculation of the number of shaft supports, their position and loads carried	AG	•		•	
.8	Calculation of fitting of propeller and shafting couplings	AG	•		•	
.9	Torsional vibration calculations in compliance with the requirements of Section 8 of Part VII "Machinery Installations". In some cases, calculation of axial vibration may be required	AG	•		•	
.10	Calculation of parameters of shafting alignment	AG		•	•	
.11	Sterntube bearing and sterntube seal lubrication and cooling diagrams	A	•		•	
.12	Calculation of bending vibration of shafting in compliance with the requirements of Section 5 of Part VII "Machinery Installations"	AG	•		•	

### 3.2.7.8 Documentation on propeller.

The PAD or DD documentation shall contain information on treatment and geometry of working surfaces, heat treatment, tolerances on mating parts, hydraulic tests, non-destructive testing, etc.

For propellers not covered by the requirements of these Rules, the list of documentation shall be agreed with the Register in each particular case.

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	General view of propeller	A	•	•	•	The documentation may be submitted together with the documentation required by Section 7 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
.2	Strength calculation of propeller blade (for detachable-blade propellers and controllable-pitch propellers (CP-propellers), also calculation of fastening of blades to the boss)	AG	•		•	
.3	Drawing of propeller attachment to propeller shaft	A		•	•	
.4	Description of pitch actuating mechanism (PAM) and its control system	AG	•		•	
.5	Diagrams of pitch actuating mechanism (PAM) and its control system	A	•		•	
.6	Drawings of CP-propeller and detachable-blade propeller: blade, boss, cone, as well as items for their securing	A	•	•	•	
.7	Drawing of pitch control unit as assembled	AG		•	•	
.8	Drawings of the main parts of the pitch control unit, including shaft of the pitch control unit, hydraulic cylinders, push-pull rods, pistons, slides, oil distribution boxes, lubricating oil supply tube to hydraulic cylinder in hub	A		•	•	

**3.2.7.9 Documentation on active means of the ship's steering (AMSS).**

The documentation shall contain information on treatment and geometry of working surfaces, heat treatment, tolerances on mating parts, hydraulic tests, non-destructive testing, etc.

For propellers not covered by the requirements of these Rules, the list of documentation shall be agreed with the Register in each particular case.

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Drawings of AMSS installation and securing	AG	•	•	•	The documentation listed in <a href="#">3.2.7.9.3 — 3.2.7.9.20</a> of this Part may be submitted together with the documentation required by Section 7 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
.2	Data to confirm compliance of the AMSS construction with operational conditions	AG	•		•	
.3	Calculation of loads acting on AMSS and its basic elements	AG	•		•	
.4	AMSS main characteristics, material specification for essential assemblies and parts, service and maintenance manual	AG		•	•	
.5	AMSS test programme (prototype and pilot specimen)	A		•	•	
.6	General view of AMSS with necessary sections	A	•	•	•	
.7	Drawings of bearings and seals of AMSS elements	A	•	•	•	
.8	Calculations of propellers (or impellers of water-jets) of AMSS elements, shafts, couplings, pinions and gear wheels of steerable propellers, water-jets and thrusters (when CP-propeller is used, refer to <a href="#">3.2.7.9</a> )	AG	•	•	•	
.9	Drawings of propellers of AMSS elements (or impellers of water-jets), shafts, couplings, pinions and gear wheels of steerable propellers, water-jets and thrusters (when CP-propeller is used, refer to <a href="#">3.2.7.9</a> )	A	•	•	•	
.10	Strength calculations of the input drive shaft of rotor, blade, gear of AMSS vertical-axis propellers	AG	•	•	•	
.11	Drawings of shafts, gearing, rotors, blades and pitch control gear of AMSS vertical-axis propellers	A	•	•	•	
.12	Calculation of connections	AG	•	•	•	
.13	Drawings of propeller nozzles and tunnels, including information on acceptable clearance between ready-fitted propeller and tunnel (nozzle)	A	•	•	•	
.14	Hull member drawings and drawings of reversible-steering gear of AMSS water-jets	A	•	•	•	



No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.15	Diagrams of cooling, lubricating and hydraulic turning systems for steerable propellers (blades of CP-propellers) of AMSS, as well as particulars of piping of the above mentioned systems	A	●	●	●	
.16	Calculations of electric drives for electrically driven AMSS	AG	●	●	●	
.17	Diagrams of electric drives for electrically driven AMSS	A	●	●	●	
.18	Documentation on monitoring, control, and protection systems of AMSS	A	●	●	●	
.19	Torsional vibration calculations (for main AMSS and dynamic positioning systems) and service life calculation of rolling bearings	AG	●	●	●	
.20	Rotational and pendular vibration calculations for steerable propellers if used as main AMSS	AG	●	●	●	

### 3.2.8 Documentation on automation equipment.

#### 3.2.8.1 General documentation.

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Technical description of automation systems and devices with indication of their purpose and principle of operation	AG	•			
.2	Technical description of automation systems and devices with indication of their purpose, principle of operation, their functions, configuration, self-diagnosis principles, with mandatorily designated system integrator (shipyard or, by cooperation, contracted alternative organization/supplier) for each system as well as consoles and control and monitoring switchboards in the main machinery control room and on the navigation bridge	AG			•	
.3	List of controlled parameters with indication of unique identifier, parameter description, type of signal (i.e. analogue/digital, input/output, etc.), distribution by automation systems and devices depending on the signal intended functional purpose (control, alarms, protection, indication), distribution by automation equipment groups	A	•		•	
.4	General arrangement plans of automation equipment in the main machinery control room and on the navigation bridge	A	•		•	
.5	Diagrams of power supply for automation systems: alarm and monitoring systems (AMS), centralized monitoring systems and integrated control systems and AMS, remote automated control systems for main machinery and propellers, automation systems of auxiliary engines and electric power plant, automation systems of boiler plant, automation systems of compressor plants, automation system of bilge and ballast systems, remote level indicating systems	A	•	•	•	
.6	Technical background containing the design intent of a dynamic positioning system with indication of the equipment redundancy level for ships with distinguishing marks <b>DYNPOS-2</b> or <b>DYNPOS-3</b> in the class notation, with substantiation of the worst-case failure design intent when, after occurrence of the worst-case failure, the ship will be able to keep heading and/or position in the specified environmental conditions	AG	•		•	

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.7	Failure modes and effects analysis (FMEA — failure mode and effects analysis, refer to 8.2.1 of Part XV "Automation") of dynamic positioning system taking into account the design intent as specified in <a href="#">3.2.8.1.6</a> of this Part	AG	•	•	•	
.8	General arrangement plan of the dynamic positioning system equipment, including thrusters, switchboards and panels of dynamic positioning system with indication of main and back-up (if any) control stations, automated, manual and emergency controls, emergency stops, position reference systems and external force sensors	A	•		•	
.9	Drawings of cable runs (power and control cables) with indication of their penetrations through watertight and fire-fighting bulkheads of ships with distinguishing mark <b>DYNPOS-3</b> in the class notation	A	•	•	•	
.10	General arrangement plans of the dynamic positioning system equipment on ships with distinguishing mark <b>DYNPOS-3</b> in the class notation with indication of boundaries formed by fire-fighting bulkheads of "A-60" class and watertight bulkheads. The plans shall specify the layout of pipelines of fuel oil system, fresh and sea water cooling system, ventilation equipment and other equipment affecting dynamic positioning system operation, as well as specify passive means of structural fire protection ("A-60" class fire-protective ducts), if any	A	•		•	
.11	Functional diagrams of emergency stop systems of thrusters and steering gear (if the latter is a part of the dynamic positioning system), including the diagrams for control loop monitoring	A	•		•	
.12	Technical description of thruster system on ships with dynamic positioning system including performance and consumption diagrams, assessment of performance loss resulting from interaction with the hull and other thrusters, time delays when changing the value and direction of thrust with indication of all protection settings that may restrict thruster performance	AG	•		•	

### 3.2.8.2 Documentation on individual automation systems, consoles and control and monitoring switchboards.

Technical documentation listed in [3.2.8.2](#) shall be submitted by the designer or system integrator specified in [3.2.8.1.2](#) of this Part. In the latter case, the documentation shall be developed taking into account the solutions adopted in technical documentation listed in [3.2.8.1](#) of this Part, and submitted for approval at the stage of delivery and installation to the RS Branch Office for technical supervision during construction together with the documentation according to 1.4.1 of Part XV "Automation" of these Rules approved during technical supervision of automation equipment as required by Section 12 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.

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Functional diagrams of AMS, centralized monitoring systems, computer-based and integrated control systems and AMS, including diagrams of power supply	A	•			
.2	Technical documentation on alarm and monitoring systems (AMS), centralized monitoring systems and integrated control systems and AMS, including functional diagrams, face panels of consoles and control and monitoring switchboards with indication of all devices, diagrams of power supply	A			•	
.3	Technical documentation on remote automated control for main engines and propellers: including functional diagrams, remote automated control console panels with indication of all devices, diagrams of power supply of remote automated control	A	•		•	
.4	Technical documentation on automation of auxiliary engines and electric power plant, functional diagrams and face panels of consoles and control and monitoring switchboards for electric power plant with indication of all devices	A	•		•	
.5	Technical documentation on automation of boiler plant: functional diagrams and face panels of consoles and control and monitoring switchboards with indication of all devices	A	•		•	
.6	Functional diagrams of automation of compressor plants	A	•		•	
.7	Functional diagrams of automation and remote control of bilge and ballast systems	A	•		•	
.8	Functional diagrams of remote level indicating systems	A	•		•	

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.9	Diagrams of electric connections for automation systems and equipment: alarm and monitoring systems (AMS), centralized monitoring systems and integrated control systems and AMS, remote automated control systems for main machinery and propellers, automation system of auxiliary engines and electric power plant, automation system of boiler plant, automation system of compressor plants, automation system of bilge and ballast systems, remote level indicating systems (with indication of cable types and places of installation of all system elements and devices)	A		•	•	
.10	Drawings of face panels of consoles and control and monitoring switchboards in the main machinery control room and on the navigation bridge with indication of all devices	A			•	
.11	FMEA of dynamic positioning system if it is not included in the document specified in <a href="#">3.2.8.1.7</a>	AG	•		•	
.12	Drawings of panels of main and back-up (for <b>DYNPOS-3</b> ) control stations of dynamic positioning system with indication of location of controls, thruster emergency stops, alarm devices, indicators and internal communications	A	•		•	
.13	List of critical components of dynamic positioning system	AG	•	•	•	
.14	Blackout recovery procedure for dynamic positioning system	AG		•	•	
.15	Capability plots demonstrating ship's position keeping capacity at least for fully effective dynamic positioning system and post worst-case failure condition for particular environmental conditions	AG		•	•	
.16	Functional diagrams of computer-based dynamic positioning control system with indication of inputs and outputs with feedbacks and power supplies	A		•	•	
.17	List of alarm signals displayed on the main control station of dynamic positioning system	AG		•	•	
.18	Technical description of means of two-way internal communication including the list of equipment, characteristics, operation conditions, connection diagrams, description of user interface for ships with dynamic positioning system	AG		•	•	
.19	Functional diagrams of control systems over spraying of fire extinguishing medium, including all control panels and loop monitoring system, for ships with distinguishing mark <b>DYNPOS-2</b> in the class notation	A	•		•	

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
<b>.20</b>	Technical description of safety system of electrical power plant for ships with distinguishing mark <b>DYNPOS-2</b> or <b>DYNPOS-3</b> in the class notation in a form of analysis of protection means that may include: results of short circuit calculation; report with description of selective protection for power distribution systems; FMEA from system manufacturers/suppliers, in particular, for changeover of common elements and automation systems between redundant groups; results of factory acceptance tests for advanced generator protection systems; analysis of matching of safety arrangements groups including engine revolution regulators, power management system and automatic voltage regulators; reports on test for immunity to short-circuit current	AG	•		•	
<b>.21</b>	Diagrams of electric connections and power supply of the dynamic positioning system equipment (with indication of cable types and places of installation of all system elements)	A		•	•	

### 3.2.9 Documentation on systems and piping.

Documentation listed in [3.2.9.1](#) and [3.2.9.2](#) shall contain data on pipe dimensions (diameter and wall thickness) as well as on material of the pipes used, hydraulic tests, material of gaskets and types of pipe connections.

Information on piping design (manufacturing technology, heat treatment, methods of inspection, insulation, installation, piping laying, etc.) shall be specified directly in the technical documentation or may be present there as a reference to the shipyard standard or industry standard, the application of which for the ship project is agreed with the Register.

#### 3.2.9.1 Ship's systems.

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Documentation on ship's systems: calculations of the systems — bilge, ballast, vapour emission control; calculations of ventilation of battery rooms, cargo pump rooms, enclosed spaces and holds intended for the carriage of motor and road vehicles	AG	•		•	
.2	Bilge system diagram	A	•		•	
.3	Drawings of bilge pipes	A		•		
.4	Drawings of position and details of attachment of valves at the collision bulkhead	A		•	•	
.5	Ballast system diagram	A	•		•	
.6	Drawings of ballast pipes	A		•		
.7	Heel and trim system diagrams and diagrams of devices (automatic and manually controlled) for ship equalization by cross-flooding	A	•		•	
.8	Drawings of heel and trim system, diagram and design of devices (automatically and manually controlled) for ship equalization by cross-flooding	A		•		
.9	Air, overflow and sounding pipes diagrams	A	•		•	
.10	Drawings of air, overflow, sounding pipes, liquid level indicators, remote level gauging system in fuel oil tanks, cargo and slop tanks of oil tankers	A		•		
.11	Diagrams of ventilation and air conditioning systems of accommodation, service, cargo, machinery and production spaces with indication of watertight and fire-fighting bulkheads, arrangement of fire dampers, as well as indication of closures of ventilation ducts and openings	A	•		•	

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.12	Drawings of ventilation ducts of accommodation, service, cargo, machinery and production spaces, with indication of design of fire dampers and of means of closing the ventilation ducts and openings required to ensure fire safety of the ship	A		•		
.13	Diagrams of vent pipes and venting equipment (design of flame arresters, flame screens, pressure/vacuum valves and high velocity vents)	A	•		•	
.14	Drawings of vent pipes and venting equipment (design of flame arresters, flame screens, pressure/vacuum valves and high velocity vents)	A		•		
.15	Diagrams of sewage, and sanitary and domestic waste water systems, as well as scuppers with indication of watertight bulkheads, freeboard deck and distances from waterline or freeboard deck to the relevant discharge openings, as stated in 4.3.2.4 and 4.3.2.6 of Part VIII "Systems and Piping"	A	•		•	
.16	Drawings of pipelines of sewage, and sanitary and domestic waste water systems and scuppers	A		•		
.17	Diagrams of pipelines of cargo and stripping systems	A	•		•	
.18	Drawings of pipelines of cargo and stripping systems	A		•		
.19	Diagrams of pipelines of cargo heating system	A	•		•	
.20	Drawings of pipelines of cargo heating system	A		•		
.21	Diagrams of pipelines of fueling and fuel transfer system	A	•		•	
.22	Drawings of pipelines of fueling and fuel transfer system	A		•		
.23	Diagram of thermal liquid system	A	•		•	
.24	Drawings of pipelines of thermal liquid system	A		•		
.25	Diagrams of sea chest heating and blow-down systems, heating system of side valves, heating system for liquids in tanks, steaming system for tanks	A	•		•	
.26	Drawings of sea chest heating and blow-down systems, heating system of side valves, heating system for liquids in tanks, steaming system for tanks	A		•		
.27	Diagram of compressed air system for typhons, for blow down of the sea chests	A	•		•	
.28	Drawings of compressed air system for typhons, for blow down of the sea chests	A		•		
.29	Diagrams of systems for hydraulic drives of mechanisms and arrangements	A	•		•	
.30	Drawings of systems for hydraulic drives of mechanisms and arrangements	A		•		



No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.31	Diagrams of special systems for oil tankers and combination carriers	A	•		•	
.32	Drawings of special systems for oil tankers and combination carriers	A		•		
.33	Diagram of fuel oil loading, transfer, storage and helicopter bunkering system, diagram of off-grade aviation fuel collection, storage and defueling system	A	•		•	
.34	Drawings of fuel oil loading, transfer, storage and helicopter bunkering system, diagram of off-grade aviation fuel collection, storage and defueling system	A		•		

### 3.2.9.2 Machinery installation systems.

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Diagrams of live and waste steam systems, of blow-down systems for boilers, machinery and steam pipes	A	•		•	
.2	Drawings of live and waste steam systems, of blow-down systems for boilers, machinery and steam pipes	A		•		
.3	Diagram of feed water and condensate systems	A	•		•	
.4	Drawings of pipes of feed water and condensate systems, evaporating plant	A		•		
.5	Diagram of fuel oil system	A	•		•	
.6	Calculation of fuel oil service tank capacity of emergency diesel-generator	AG	•		•	
.7	Drawings of pipelines of fuel oil system	A		•		
.8	Diagram of lubricating oil system	A	•		•	
.9	Drawings of pipelines of lubricating oil system	A		•		
.10	Diagrams of fresh water and sea water cooling systems	A	•		•	
.11	Drawings of pipelines of fresh and sea water cooling system	A		•		
.12	Diagram of fuel oil, water and lubricating oil heating systems; structural drawings of assemblies and connections of heating elements	A	•		•	
.13	Drawings of pipelines of fuel oil, water and lubricating oil heating systems; structural drawings of assemblies and connections of heating elements	A		•		
.14	Diagram of starting air system	A	•		•	
.15	Calculation of starting air system	AG	•		•	
.16	Drawings of pipelines of compressed air system	A		•		
.17	Diagram of exhaust gas pipes and uptakes	A	•		•	
.18	Drawings of silencers and spark arresters of exhaust gas pipes and uptakes	A		•	•	The documentation may be submitted together with the documentation required by Section 8 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

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.19	Drawings of pipelines of exhaust gas and uptake systems	A		•		
.20	Drawing of equipment of sea chests and ice boxes	A	•	•	•	
.21	Drawings of position and details of attachment of bottom and side valves	A		•	•	
.22	Calculation of air pipes and ventilator pipes on open deck spaces	AG	•		•	
.23	Drawings of air pipes and ventilator pipes on open deck spaces	A	•	•	•	
.24	Drawings of pipelines and ventilation ducts penetrations through the watertight bulkheads, fire-fighting divisions, decks and platforms	A		•	•	

### 3.2.10 Documentation on electrical equipment.

Technical documentation listed in [3.2.10.2](#) of this Part shall be submitted by the designer or alternative organization (contracted manufacturer, supplier, shipyard or system integrator). In the latter case, the documentation shall be developed taking into account the solutions adopted in technical documentation listed in [3.2.10.1](#) of this Part, and shall be submitted for approval at the stage of delivery and installation to the RS Branch Office for technical supervision during construction, together with the documentation according to 1.4.2 of Part XI "Electrical Equipment" of these Rules, approved under technical supervision of electrical equipment as required by Section 10 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.

When the ship is equipped with a refrigerating plant to be surveyed in accordance with [4.1.1](#) of this Part, documentation specified in [3.2.10.1](#) and [3.2.10.2](#) of this Part shall contain the data on electrical equipment of the refrigerating plant.

#### 3.2.10.1 General documentation.

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Diagrams of power generation and distribution from the main and emergency sources of electrical power: power networks, lighting networks (up to distribution switchboards) and navigation lights	A	•		•	
.2	Single-line diagrams and general view of the main and emergency switchboards, control desks and other switchboards of non-standard design	A	•		•	
.3	Calculation results of necessary output of the ship's electric power plant to ensure the operating conditions specified in 3.1.5 of Part XI "Electrical Equipment", substantiation of the choice of the number and power output of generators, as well as calculation of capacity of emergency sources of electrical power	AG	•		•	
.4	Circuit diagrams of the main current, excitation, control, monitoring, signalling, protection and interlocking of the electric propulsion plant	A	•			
.5	Detailed diagrams of the main current, excitation, control, monitoring, signalling, protection and interlocking of the electric propulsion plant	A		•	•	
.6	Calculation results of cross-sections of cables with indication of their types, types of currents and protection	AG	•		•	
.7	Calculation results of necessary power output of electric propulsion plant generators to ensure normal operation under all operating conditions	AG	•		•	

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.8	Results of short-circuit current calculations and analysis of selective properties of protective devices for rated current of the generators or the generators operating in parallel in excess of 1000 A	AG	•		•	
.9	Calculation results of illumination intensity for areas and spaces	AG	•		•	
.10	Diagrams of internal communication and signalling according to Section 7 of Part XI "Electrical Equipment"	A	•		•	
.11	Documentation on fixed electrical measuring instruments and alarm systems for ultimate concentration of dangerously explosive and noxious gases	A		•	•	
.12	Diagrams of the protective, lightning protection and antistatic earthing	A	•	•	•	
.13	Arrangement diagram of cable runs with indication of spaces which they pierce, including information on power supply cables for services required for operation under fire conditions in case of their transit routing through high fire risk spaces (refer to 16.8.1.9 and 16.8.1.11 of Part XI "Electrical Equipment")	A	•		•	
.14	Capacity calculation results for accumulator batteries of emergency lighting, navigation lights, general alarm system, fire alarm system and fire smothering appliances, starting arrangements of the emergency diesel generators	AG	•		•	
.15	Results of calculation of the expected total harmonic distortions (non-sinusoidality) for different parts of the ship mains when using power semiconductor units, as well as harmonic distortion calculation results following the harmonic filters failure during their installation in the ship's electrical distribution system	AG	•		•	
.16	Calculation of expected efficiency of overload protection of generator sets by means of disconnection of the part of consumers with explanations of the number of disconnection steps and the list of disconnected consumers in every step	AG	•		•	
.17	Diagram and drawing of disconnection and blocking system of electrical equipment, which is not used in the oil recovery ship operations on elimination of oil spills	A	•	•	•	
.18	List of electrical equipment installed in dangerous zones containing information on spaces and areas where it is installed with indication of zones and spaces according to 19.2.3.1 of Part XI "Electrical Equipment", and information on this equipment with indication of type of explosion protection and number of certificate on safe-type electrical equipment issued by a special competent body	AG	•		•	

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.19	Calculation of voltage drop when a consumer with the maximum starting power is switched on	AG	•		•	
.20	Drawings of cable runs and their penetrations through watertight, gastight and fire-fighting bulkheads, decks and platforms	A		•	•	
.21	List of measures to ensure the electromagnetic compatibility of a ship equipment	A	•	•	•	
.22	Diagrams and drawings of devices to ensure the electromagnetic compatibility	A		•	•	
.23	Diagrams of the main and emergency lighting in the spaces and places of arrangement of essential devices, along the escape routes, at survival craft muster and embarkation stations on deck and outboard (supplying from distribution switchboards)	A	•	•	•	
.24	Drawings of layout and installation of essential electrical equipment	A	•	•	•	
.25	Diagrams and installation and layout drawings of electrical apparatus and facilities for measuring non-electric values (level, pressure, temperature gauges, etc.)	A	•	•	•	
.26	Technical background containing substantiation for distinguishing mark <b>EPP</b> (if applicable) in the class notation	AG	•		•	
.27	Drawing of dangerous spaces and zones (only for oil tankers, oil recovery ships, ships carrying liquefied gases in bulk and ships carrying compressed natural gas, chemical tankers, ships, other than LG carriers, using gases or other low flashpoint fuels and ships carrying dangerous goods)	A	•		•	
.28	Drawing of main and emergency switchboards arrangement with indication of structural dimensions, passageways width and distance from the hull elements, equipment and pipelines to these switchboards	A	•	•	•	

### 3.2.10.2 Documentation on certain types of electrical equipment.

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Circuit diagrams of essential electric drives (according to 1.3.2.1 and 1.3.2.2 of Part XI "Electrical Equipment")	A	•			
.2	Diagrams of essential electric drives (according to 1.3.2.1 and 1.3.2.2 of Part XI "Electrical Equipment") with indication of cable types and places of installation of all elements of the diagrams	A		•	•	
.3	Diagrams of lubrication systems for electrical machines and air cooling systems for the main electrical machines	A	•	•	•	
.4	Failure mode and effects analysis (FMEA) for all electric and hydraulic components of the podded azimuth thrusters used as the rudder and steering gear	AG	•	•	•	
.5	Diagrams of electric connections (for systems and equipment specified in <a href="#">3.2.10.1.1</a> , <a href="#">3.2.10.1.2</a> , <a href="#">3.2.10.1.5</a> , <a href="#">3.2.10.1.10</a> and <a href="#">3.2.13.2</a> ) with indication of cable types and places of installation of all elements of the diagrams	A	•	•	•	
.6	Documents on portable electrical measuring instruments and alarm systems for ultimate concentration of dangerously explosive and noxious gases	A	•	•	•	
.7	Assembly drawings of the main and emergency switchboards, electric propulsion plant switchboards, control stations and panels, special switchboards, power and lighting switchboards	A	•	•	•	

### 3.2.11 Documentation on arrangements and equipment for the prevention of pollution from ships.

#### 3.2.11.1 For ships of all types.

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Arrangement plan of oil fuel tanks	A	•	•	•	
.2	Calculation confirming protective location of oil fuel tanks relative to shell plating (Regulation 12A of Annex I to MARPOL 73/78), if applicable	AG	•		•	
.3	Calculation of required capacity of oil residue (sludge) holding tanks, oily bilge water holding tanks and their arrangement plans, as well as calculation of capacity of sewage holding tanks and garbage receptacles	AG	•		•	
.4	Diagram of bilge water piping	A	•	•	•	
.5	Diagram of oil residue (sludge) piping	A	•	•	•	
.6	Diagram of sewage piping	A	•	•	•	
.7	Calculation of the discharge rate of untreated sewage	A	•		•	
.8	Energy Efficiency Design Index Technical File (EEDI Technical File) in accordance with the Guidelines 2014 on Survey and Certification of Energy Efficiency Design Index (IMO resolution MEPC.254(67) as amended), if applicable	AG	•		•	
.9	Calculation of required Energy Efficiency Existing Ship Index (required EEXI), if applicable	AG	•		•	
.10	Diagram of incinerator system piping and garbage processing device	AG	•	•	•	



**3.2.11.2 For oil tankers (in addition to the documentation listed in [3.2.11.1](#)).**

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Calculation of slop tanks capacity	AG	•		•	
.2	Calculation of accidental oil outflow (regulation 23 of Annex I to MARPOL 73/78)	AG	•		•	
.3	Arrangement plan of cargo and slop tanks and calculation confirming their protective location relative to shell plating (regulation 19 of Annex I to MARPOL 73/78)	AG	•	•	•	
.4	Calculation confirming protective location of cargo pump room relative to shell plating (regulation 22 of Annex I to MARPOL 73/78), if applicable	AG	•		•	
.5	Diagram of emergency rapid cargo transfer system (if applicable in accordance with regulation 23 of Annex I to MARPOL 73/78)	A	•	•	•	
.6	Diagram of crude oil washing system and shade diagram (if applicable)	A	•	•	•	
.7	Arrangement plan of discharge outlets	A	•	•	•	
.8	Diagram of transfer of oil residues and tank washings from cargo tank areas into slop tanks	A	•	•	•	
.9	Diagram of ballast and washing water discharge monitoring and control system (if applicable)	A	•	•	•	

**3.2.11.3 For tankers carrying noxious liquid substances, in addition to the documentation listed in [3.2.11.1](#).**

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Calculation of size of underwater discharge outlet	AG	•		•	
.2	Diagram of cargo tank ventilation systems (if applicable for tank cleaning)	A	•	•	•	
.3	Arrangement plan of discharge outlets	A	•	•	•	

**3.2.12 Documentation on cargo handling gear.**

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	General view of cargo handling gear with indication of its principal characteristics, arrangement on board the ship and securing of the cargo handling gear in the stowed for sea position	FI	•		•	

### 3.2.13 Documentation on refrigerating plants.

In case of unclassified refrigerating plant, drawings in accordance with [3.2.13.2](#), [3.2.13.3](#) and [3.2.13.4](#) (for refrigerant only), [3.2.13.5](#), [3.2.13.6](#) and [3.2.13.10](#) shall only be submitted.

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Refrigerating capacity calculation with indication of cooling load from each refrigerated cargo space and cold consumer	AG	•		•	
.2	Diagrams of a refrigerating plant with indication of refrigerating equipment and piping arrangement on board the ship, places for installation of temperature control devices and devices of atmosphere control system	A	•		•	
.3	Installation drawings of refrigerating equipment with indication of equipment arrangement in the refrigerating machinery space, and escape routes	A		•		
.4	Circuit diagrams of main and emergency ventilation systems of refrigerating machinery space and other spaces containing equipment under a refrigerant pressure with indication of the watertight and fire-fighting bulkheads, as well as the number of air changes per hour	A	•		•	
.5	Circuit diagrams of refrigerant, secondary refrigerant, cooling water systems with indication of places for installation of indicating and measuring instruments and automatic devices	A	•		•	
.6	Drawings of pipelines of refrigerant, secondary refrigerant, cooling water systems with indication of places for installation of indicating and measuring instruments and automatic devices	A		•		
.7	Air cooling diagram with indication of watertight and fire-fighting bulkheads	A	•		•	
.8	Drawings of pipelines of air cooling system with indication of watertight and fire-fighting bulkheads	A		•		
.9	Circuit diagram of water-screen system of refrigerating machinery space (for Group II refrigerant)	A	•		•	
.10	Drawings of pipelines of water-screen system of refrigerating machinery space (for Group II refrigerant)	A		•		

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.11	Tables of the values of the bounding surface areas of the refrigerated cargo spaces with data on calculated heat-transfer factor for each surface and averaged heat-transfer factor for the insulating structure of refrigerated spaces	AG	•		•	
.12	Drawings of cargo cooling air ducts to thermal containers with indication of the layout on board	A	•	•	•	
.13	Drawings of air duct insulation with technical data of insulating materials	A		•	•	
.14	Arrangement plan of emergency discharge system of refrigerant	A	•	•	•	

### 3.2.14 Documentation on cyber safety.

Documentation listed in [3.2.14](#) of this Part shall be submitted to RHO for review for all ships contracted for construction on or after 1 January 2021 in accordance with the Guidelines on Cyber Safety.

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Concept of computer based system	FI	•		•	The document shall contain at least the following information: purpose of computer based system with brief description of functions; flowchart (plan) clearly identifying shipboard systems controlled/monitored by the computer based system. The flowchart (plan) shall also contain the following information: communications with external network for monitoring, control and performance of administrative functions; communications with other computer based systems
.2	Description of data transmission networks	FI	•		•	The document shall contain the following information: physical location of the system and subsystem components (e.g., name of a space, deck of location, etc.); category I system communications with category II or III systems; network topology of systems and subsystems (star, ring, etc.); applicable network technologies (e.g., Gigabit Ethernet, Fast Ethernet);

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
						applicable network cables (twisted pair, fibre optic, etc.); communications from controllers and field devices (MODBUS, Fieldbus, etc.); network diagrams indicating the devices, nodes, network cable details and general locations of the equipment; list of IT and OT systems indicating their categories; data flows and network devices or resources potentially limiting them; details of external connections for remote access; access points and interfaces, including machine-to-machine (M2M) interfaces; logical diagrams of shipboard networks

**3.2.15 Documentation on accommodation spaces.**

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Plans of accommodation spaces containing the following information on: location and size of each space; ventilation, heating, and hot and cold running fresh water in accommodation spaces; location of furniture and equipment, including electrical equipment, in cabins (sleeping rooms); location of equipment in sanitary spaces, dining rooms (mess rooms), recreation rooms and medical rooms (hospital accommodation)	A	•		•	



**3.2.16 Documentation of supply vessels carrying manned submersibles or ship's diving systems (vessels having distinguishing marks SDS or MS in the class notation).**

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	General arrangement plans of manned submersibles or ship's diving systems on the vessel-carrier	A	•	•	•	
.2	Arrangement plan of fire-fighting divisions in the vessel-carrier's spaces intended for control, communications and arrangement of manned submersibles and ship's diving system, as well as in the spaces for positioning of ancillary equipment of manned submersibles with indication of doors, closures of openings, passages (cutouts) in such divisions	A	•	•	•	
.3	Diagrams, drawings and calculations of fire extinguishing systems for the spaces specified in <a href="#">3.2.16.2</a>	A	•	•	•	
.4	Diagram of fire protection and alarm system and alarm system for the spaces specified in <a href="#">3.2.16.2</a> and layouts of the devices to monitor explosion/fire-hazardous concentrations of combustible gases in the storerooms for cylinders with flammable gases, compressors, accumulator batteries, etc.	A	•	•	•	
.5	Detailed description of fire protection of the spaces with indication of insulating and finishing materials, their location and combustibility for the spaces specified in <a href="#">3.2.16.2</a>	A	•	•	•	
.6	Documentation on handling system of manned submersibles (except for documentation on handling system components located on the manned submersible to be submitted together with the documentation on the manned submersibles)	A	•		•	

### 3.2.17 Documentation for assignment of distinguishing marks and descriptive notations in the class notation specifying structural and operational particulars of ships.

In addition to [3.1.9](#) of this Part, an operational documentation required for assignment of distinguishing marks and descriptive notations, is specified in the relevant Sections of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships".

#### 3.2.17.1 Escort tug.

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Towing arrangement plan required for escort service, including towing line path and minimum breaking strength of towing line components and strength of appropriate structures	A	•		•	
.2	Preliminary calculation of maximum steering pull of the tug at the escort test speed of 8 and/or 10 knots, including propulsion components of the escort tug for balancing of oblique angular position of the tug	AG	•		•	
.3	Preliminary tug stability calculations	AG	•		•	
.4	Plan of full scale trials	AG	•		•	

### 3.2.17.2 ECO and ECO-S.

#### 3.2.17.2.1 Technical documentation in respect of air pollution prevention.

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Drawings of exhaust gas cleaning system, if applicable, which shall be approved in accordance with the IMO Guidelines	A	•	•	•	For exhaust gas cleaning systems to reduce emissions of: nitrogen oxide (NO <sub>x</sub> ) — in accordance with the NO <sub>x</sub> Technical Code and IMO resolution MEPC.291(71) as amended; sulphur oxide (SO <sub>x</sub> ) — in accordance with IMO resolution MEPC.34(77) as amended
.2	Incinerator systems diagram	A	•	•	•	If not submitted previously
.3	Refrigerating systems diagrams, list of refrigerants used	A	•	•	•	If not submitted previously
.4	Fire-fighting systems diagrams, list of fire extinguishing media used in these systems	A	•	•	•	If not submitted previously
.5	Energy Efficiency Design Index (EEDI) Technical File and/or Energy Efficiency Existing Ship Index (EEXI) Technical File, as applicable	AG	•	•	•	If not submitted previously

**3.2.17.2.2 Technical documentation in respect of marine environment pollution prevention.**

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Ship's general arrangement plan and tanks plan	FI	•		•	If not submitted previously
.2	Documentation confirming compliance of the oil tanker with the requirements for double hull construction in accordance with regulation 19 of Annex I to MARPOL 73/78	A	•	•	•	If not submitted previously
.3	Documentation confirming compliance of the ship with the requirements for protective location of fuel oil tanks (refer to Section 3 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships")	A	•	•	•	If not submitted previously
.4	Ship's Guidelines for Safe Water Ballast Exchange at Sea (where applicable)	A	•	•	•	If not submitted previously
.5	Sewage system diagram	A	•	•	•	If not submitted previously
.6	Diagrams of manifolds in cargo areas, as well as branch pipes and flanges for fuel oil and oil bunkering, oil residues and oily water discharge indicating the trays and appliances for prevention of spillage of oil and noxious liquid substances carried in bulk	A	•	•	•	If not submitted previously
.7	Diagrams and drawings of fuel oil system, bilge system, oil discharge, monitoring and control system for ballast and flushing water, ballast water system	A	•	•	•	If not submitted previously
.8	Sanitary and domestic waste water system diagram	A	•	•	•	If not submitted previously

**3.2.17.3 ANTI-ICE.**

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	List of technical solutions applied onboard the ship and ensuring compliance with the requirements of Section 4 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships"	AG	•		•	
.2	Arrangement plan of de-icing and anti-icing means with indication of their heating capacity	A	•	•	•	
.3	Calculations of heating capacity of anti-icing systems equipment	AG	•		•	
.4	Electrical single-line diagram of anti-icing systems with heating cables (if any)	A	•	•	•	
.5	Circuit diagrams of steam and/or thermal liquids anti-icing systems (if any)	A	•	•	•	

**3.2.17.4 BLS-SPM.**

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Bow loading system (BLS) general arrangement plan with an indication of the cargo system and mooring equipment, including: bow loading coupler, guide roller, chain stopper, traction winch, hawse storage reel, BLS hull structures, control stations	A	•	•	•	The documentation may be submitted together with the documentation required by Section 7 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
.2	Description and drawings of the bow loading coupler	A	•	•	•	
.3	Drawings of hull strengthenings for bow hawses and chain stoppers	A	•	•	•	
.4	Calculation of hull strengthenings for bow hawses and chain stoppers	AG	•		•	
.5	Fire protection diagram for BLS area	A	•		•	
.6	Diagram of ventilation of BLS special spaces	A	•	•	•	
.7	Calculation of ventilation of BLS special spaces	AG	•		•	
.8	Drawings of electrical equipment layout and cable laying in BLS spaces	A	•	•	•	
.9	BLS circuit diagrams	A	•		•	
.10	BLS diagrams of electric connections	A	•	•	•	
.11	Diagrams of BLS hydraulic system	A	•	•	•	
.12	BLS test program	A		•	•	

**3.2.17.5 HELIDECK, HELIDECK-F or HELIDECK-H.**

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Structural helideck and hangar deck drawings with indication of design loads	A	•	•	•	
.2	Scantlings determination of helideck and hangar deck, as well as of deck- and bulkhead stiffeners in way of helicopter tie-down points	AG	•		•	
.3	General arrangement plan of a helicopter facility elements with indication of escape routes, tie-down points, location of fire-fighting equipment and life-saving appliances, arrangement plan and specification of lighting and illumination means	A	•	•	•	
.4	Drawing of helideck safety net	A	•	•	•	
.5	Diagram of power driving gear for the helideck safety net hoisting and lowering, if any	A	•		•	
.6	Diagram of helideck drainage system	A	•	•	•	
.7	Diagram of fuel oil loading, transfer, storage and helicopter refuelling system	A	•	•	•	
.8	Diagram of off-grade aviation fuel collection, storage and defueling system	A	•	•	•	
.9	Diagram of nitrogen system for aviation fuel	A	•	•	•	
.10	Electric diagram of main and emergency lighting in the spaces of helicopter facility arrangement	A	•		•	
.11	Circuit diagram of helideck lighting and illumination means	A	•		•	
.12	Drawings of electrical equipment layout and cable laying on the helideck, in hangar and in other spaces of helicopter facility arrangement	A	•	•	•	
.13	Documentation on helideck and hangar deck covering	A	•	•	•	
.14	Helicopter facility test program	A	•	•	•	
.15	Diagram of obstacle restriction and removal approved by the Flag State Civil Aviation Authority	FI	•		•	
.16	Drawing of helideck and obstacle marking (colour, dimensions and configuration of marks shall be indicated), approved by the Flag State Civil Aviation Authority	FI	•	•	•	

**3.2.17.6 WINTERIZATION(DAT).**

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	List of technical solutions applied onboard the ship and ensuring compliance with the requirements of Section 7 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships"	AG	•		•	
.2	Single-line diagrams of electric heating systems (electric heating appliances, systems utilizing heating cables)	A	•	•	•	



**3.2.17.7 RP-1, RP-1A, RP-1AS, RP-2 or RP-2S.**

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Calculation results demonstrating that a single failure does not lead to the loss of propulsion and ship's steering according to 8.5.3 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" (for ships with the distinguishing marks <b>RP-1A</b> , <b>RP-1AS</b> , <b>RP-2</b> or <b>RP-2S</b> ). As an alternative, the results of the model or full-scale tests may be submitted	AG	•		•	
.2	Qualitative failure analysis for propulsion and steering or FMEA of the propulsion plant components based on the failure tree or the equivalent risk analysis	AG	•		•	
.3	Torsional vibration calculations in compliance with <a href="#">3.2.7.7.9</a> of this Part; at that the possibility of long-term operation of the alternative propulsion plant shall be considered separately (for ships with the distinguishing marks <b>RP-1A</b> , <b>RP-1AS</b> )	AG	•		•	

**3.2.17.8 GFS.**

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Drawings of fuel tanks arrangement with their distances from side plating and the bottom specified	A	•		•	
.2	Drawings of supports and other structures to ensure fastening and limiting shifting of fuel tanks	A	•	•	•	
.3	Calculations of heat emission from the flame which may occur during the fire affecting gas fuel tanks and other equipment and spaces related to gas fuel	AG	•		•	
.4	Drawings and diagrams of systems and piping for gas fuel specifying such assemblies as compensators, flange joints, stop and control valves and fittings, drawings of quick-closing arrangements of the gas fuel system, diagrams of gas fuel preparation, heating and pressure control	A	•	•	•	
.5	Calculations of stresses in piping containing gas fuel at a temperature below – 110 °C	AG	•		•	
.6	Drawings of safety and vacuum safety valves of fuel storage tanks	A	•	•	•	
.7	Drawings and descriptions of all systems and arrangements for the measurement of fuel amount and characteristics, and for gas detection	A	•	•	•	
.8	Diagrams of gas fuel pressure and temperature control and regulating systems	A	•	•	•	
.9	Drawings of bilge and ballast systems in gas-hazardous spaces	A	•	•	•	
.10	Calculations of bilge and ballast systems in gas-hazardous spaces	AG	•		•	
.11	Diagrams of gas-dangerous spaces ventilation	A	•	•	•	
.12	Calculations of gas-dangerous spaces ventilation	AG	•		•	
.13	Diagrams of gas-freeing system	A	•	•	•	
.14	Calculations of gas-freeing system	AG	•		•	
.15	Circuit diagrams of electric drives and control systems for fuel preparation plants, ventilation of hazardous spaces and airlocks	A	•	•	•	
.16	Circuit diagrams of electric measurement and alarm systems for equipment related to the use of gas fuel	A	•	•	•	

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.17	General arrangement drawings of electrical equipment related to the use of gas fuel	A	•	•	•	
.18	Drawings of cable laying in hazardous spaces and areas	A	•	•	•	
.19	Drawings of earthing for electrical equipment, cables, piping located in gas-dangerous spaces	A	•	•	•	
.20	Technical background of electrical equipment fitness	AG	•		•	
.21	General arrangement drawings of gas-containing equipment	A	•	•	•	The drawings shall specify the layout of the gas fuel storage tanks and any openings in them; spaces for fuel storage and preparation and any openings to them; doors, hatches and any other openings into hazardous spaces and areas; venting pipes and air inlet and outlet locations of a ventilation system of hazardous spaces and areas; doors, scuttles, companions, ventilation duct outlets locations and other openings in spaces adjacent to hazardous area
.22	Analysis of risks related to the use and storage of gas fuel and possible consequences of its leakages according to IACS Recommendations No. 146. The analysis shall consider the risks of damage of hull structural members and failure of any equipment after accident related to the use of gas fuel. The results of risk analysis shall be taken into account in the operating manual	AG	•		•	
.23	Drawings of liquefied natural gas (LNG) tanks arrangement	A	•	•	•	
.24	Calculation of liquefied natural gas (LNG) tanks arrangement in compliance with the requirements of the International Code of Safety for Ships Using Gases or Other Low-Flashpoint Fuels (IGF Code)	AG	•		•	
.25	Drawing of compressed natural gas (CNG) tanks	A	•	•	•	

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
<b>.26</b>	Calculation of CNG tanks in compliance with the requirements of the Rules for the Classification and Construction of Ships Carrying Compressed Natural Gas	AG	•		•	
<b>.27</b>	Calculation of permissible pressure when using standard cylinders	AG	•		•	

**3.2.17.9 LNG bunkering ship RE/IG-Supply/BOG.**

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	General arrangement of the ship with indication of LNG bunkering station, bunkering control station and escape routes	FI	•	•	•	If not submitted previously
.2	Diagram of the cargo system; drawings of hose lines, swivels and transfer arms (where applicable)	A	•	•	•	
.3	Description of the cargo system, LNG vapor return transfer system; documentation for the reliquefaction system (where applicable)	AG	•		•	
.4	Diagram of LNG vapor return transfer system	A	•	•	•	
.5	Calculation of maximum allowable bunkering flow	AG	•		•	
.6	Technical documentation for ESD bunkering system (ESD — emergency shutdown system)	AG	•	•	•	
.7	Electrical single line diagrams for all intrinsically-safe circuits	A	•	•	•	
.8	General arrangement plan of electrical equipment in hazardous areas related to bunker operations	A	•		•	
.9	Technical documentation for fire detection and alarm system as well as gas detection system of the bunkering installation, including location of gas detectors, connection lines, valves and sampling points on board the ship	A	•	•	•	
.10	Technical documentation for gauging, alarm and pressure indication system in the cargo tanks and piping	A	•	•	•	
.11	Technical documentation for control and alarm system of cargo pumps	A	•		•	

**3.2.17.10 IWS.**

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Drawing of the marking on the side and bottom plating to identify the tanks	A	•	•	•	

### 3.2.17.11 Anchor handling vessel.

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Arrangement plan of anchor handling equipment: anchor handling winches, shark jaws, towing pins, stern rollers, cargo handling gear, where available, including standard cargo placing on the deck (anchors, cables, chains, etc.) indicating the towing line path, extreme sectors, maximum design towing pull, maximum design load for each component	FI	•		•	
.2	Drawings of foundations and supports for winches, shark jaws, stern rollers and towing pins indicating the maximum design load	A		•	•	At the DD stage refer also to <a href="#">3.2.2.19</a> based on the calculations of <a href="#">3.2.2.1</a>
.3	Electrical power supply circuits and control system configuration of towing equipment and anchor handling equipment	A	•	•	•	
.4	Arrangement plan of operator control stands (user interface) of towing equipment control systems and anchor handling equipment	A	•	•	•	
.5	Technical specification of operator control stands (user interface) of towing equipment control systems and anchor handling equipment	AG	•		•	
.6	Arrangement plan of communication means between the anchor operations control station and wheelhouse	A	•	•	•	
.7	Technical specification of communication means between the anchor operations control station and wheelhouse	AG	•		•	
.8	Bollard pull estimation	FI	•		•	
.9	Bollard pull test procedure	A		•	•	

**3.2.17.11.10 For anchor handling winches.**

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Design criteria, including design loads and characteristics of emergency quick release system of towing line indicating the response time and remaining holding force after release)	FI	•		•	
.2	Strength calculation of winch drum with flanges, shaft couplings, housing and brakes	AG	•		•	
.3	General view	A	•		•	
.4	Assembly drawing	A		•	•	



**3.2.17.11.11 For shark jaw, towing pins, stern rollers.**

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Design criteria, including design loads and characteristics of emergency quick release system in operational and dead ship conditions	FI	•		•	
.2	Strength calculation	AG	•		•	
.3	General view	A	•		•	
.4	Assembly/installation drawing	A		•	•	

**3.2.17.12 GRS.**

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Technical background indicating general ship's data after conversion	FI	•		•	
.2	Drawings of components of systems and machinery required for the use of gas fuel to be installed during the ship's conversion	A	•	•	•	
.3	Drawings of components of systems and machinery required for the use of gas fuel to be installed during the ship's construction	A	•	•	•	
.4	Drawings of hull structures that may be changed during the ship's conversion	A	•	•	•	
.5	Calculation of hull structures that may be changed during the ship's conversion	AG	•		•	
.6	Drawings of hull structures and foundations required for machinery subject to installation during the ship's conversion	A	•	•	•	

**3.2.17.13 BMS.**

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Instruction on maintaining boiler water and chemistry quality in accordance with 16.3.2 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships"	AG	•		•	

**3.2.17.14 HMS (STR) (STAB) (STR-STAB) + BS/C/DD/N/RPM/SL/SW/TS/ThS/TVS/W.**

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Technical description	AG	•		•	
.2	Schematic diagram	AG	•		•	
.3	Function block diagram	AG	•		•	
.4	List of measuring channels	AG	•		•	
.5	Arrangement plan with indication of measuring instrument locations, cable laying and hardware installation	A	•		•	
.6	General electrical diagram	A	•		•	
.7	Schematic circuit diagram	A	•	•	•	
.8	Permissible values of parameters used for monitoring in sensor location points	AG	•		•	
.9	Technical description of software, including procedure for calculation of parameters used for monitoring, based on results of measurements	AG	•		•	
.10	Monitoring system operating manual	AG	•		•	
.11	Maintenance instruction manual, including calibration procedure	AG	•		•	
.12	Installation drawings	A		•	•	
.13	Installation, commissioning and adjustment instruction	AG		•	•	
.14	Programme of periodical surveys of the system in service	A	•		•	

**3.2.17.14.15 For the monitoring system having connection with other systems, the following shall be additionally submitted.**

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Schematic diagram of monitoring system connection with other systems	AG	•		•	Where a computer model of ship is used for the monitoring system calculations, the model shall be approved in accordance with 12.2.4.1 to 12.2.4.3 of Part II "Technical Documentation" of the Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships
.2	Diagram of hardware arrangement and cable routing for monitoring system connection with other systems	A	•	•	•	
.3	Schematic circuit diagram for monitoring system hardware intended for connection with other systems	AG	•	•	•	

**3.2.17.15 COMF(C).**

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Heat balance calculation	FI	•		•	

**3.2.17.16 UWILD and UWILD-S.**

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Technical background containing substantiation of the possibility of the ship operation without drydocking throughout the planned service life, periodical examinations of the shell plating from inside ensuring free passage for the RS surveyor along ship's structures in all directions during surveys	AG	•		•	
.2	Description of means of access to structures from inside and outside (may be drawn up in the form of a manual on means of access), including description of procedures (with the use of divers and other technical means) for installation and securing of temporary blanks required for maintenance and survey of bottom and side valves, closing devices or other structures under water providing free access	FI	•		•	
.3	Installation drawings for bottom and side valves and on board means ensuring maintenance of these valves without dry-docking	A	•	•	•	
.4	Specification of protective coatings	A	•	•	•	Data on coatings used for anticorrosive protection of the inside and the outside of the bottom and side plating of ship's underwater part with confirmation based on the hull coating manufacturer's guarantee that the coatings applied onto ship's bottom have been designed to remain in undamaged condition within the particular period of time (ship service period or possible operation period without dry-docking shall be specified), and that the coating will remain effective within the specified period (the submitted document shall be agreed upon with the coating manufacturer)
.5	Information on installation of anode protection, instructions on the renewal of the installed anodes in the ship outer hull afloat (the submitted document shall be agreed upon with the coating manufacturer as regards compatibility), if applicable	FI	•		•	

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.6	Cathodic protection specification as well as its installation scheme (the submitted document shall be agreed upon with the coating manufacturer as regards compatibility), if applicable	FI	•		•	



**3.2.17.17 POSIMOOR, POSIMOOR-FIX and POSIMOOR-TA.**

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Calculation of anchoring system, including determination of the number of anchor lines which shall be used in operation of the ships and offshore installations and during emergency situations, as well as of the mass and type of anchor	AG	•		•	
.2	Breaking strength calculation for the anchor line. Material specifications of the anchor line	AG	•		•	
.3	Design and calculation of the anchor and anchor shackle unless they are of a type which has been previously approved	A	•		•	
.4	Design of the anchor line stopper. Material specifications	AG	•		•	
.5	Design of guiding devices of the anchor line. Material specifications	AG	•		•	
.6	Design of chain/rope connections (if any). Type and design of connection of the rope and anchor shackle, if any. Material specifications	AG	•		•	
.7	Foundations and supports of position mooring system	A		•	•	
.8	Layout diagram of anchor lines and special components used as a part of anchor lines and anchor arrangements (buoyancy elements, weights, corrosion protection systems, shock-absorbing inserts, etc.), if any, with preliminary calculation	FI	•		•	
.9	Design of special components used as a part of anchor lines and anchor arrangements (buoyancy elements, weights, corrosion protection systems, shock-absorbing inserts, etc.), if any	A		•	•	
.10	Calculations of special components used as a part of anchor lines and anchor arrangements (buoyancy elements, weights, corrosion protection systems, shock-absorbing inserts, etc.), if any	AG	•		•	

**3.2.17.18 CON-M.**

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Construction Monitoring Plan in accordance with 22.3.2 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships"	AG		•	•	

**3.2.17.19 LFLFS (Me) или LFLFS (Et) (Low Flashpoint Liquid Fuelled Ship, (Methanol) или (Ethanol)).**

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Drawing of fuel tanks arrangement with indication of distance from bottom and side plating to methanol/ethanol fuel tanks	A	•		•	
.2	Drawing of supports and other structures to ensure fastening and limiting shifting of methanol/ethanol fuel tanks	A	•	•	•	
.3	Drawings and diagrams of systems and piping for methanol/ethanol specifying such assemblies as compensators, flange joints, stop and control valves and fittings, drawings of quick-closing arrangements of the fuel system, diagrams of fuel preparation systems	A	•	•	•	At the TD stage — diagrams only
.4	Drawings of safety and vacuum valves of fuel tanks, where available	A		•	•	
.5	Installation drawings of arrangements for measurement of fuel amount and characteristics, and for leakage detection	A		•	•	
.6	Diagrams and calculations of gas-dangerous spaces ventilation	A	•		•	
.7	Diagrams and calculations of gas-freeing system and inert gas system, drawings and calculations of bilge and ballast systems in cargo area, pump rooms, cofferdams, pipe tunnels and hold spaces	A	•		•	
.8	Electrical diagrams for connection of drives and control systems for fuel preparation plants, ventilation of hazardous spaces and airlocks	A	•		•	
.9	Electrical circuit diagrams for measurement and alarm systems for equipment related to the use of methanol/ethanol	A	•		•	
.10	Arrangement drawings of electrical equipment related to the use of methanol/ethanol	A		•	•	
.11	Drawings of cable laying in hazardous and gas-dangerous spaces and areas	A		•	•	
.12	Drawings of earthing for electrical equipment, cables, piping located in gas-dangerous spaces	A		•	•	
.13	Arrangement of hazardous areas diagram specifying the layout of methanol/ethanol storage tanks and any openings in them; spaces for fuel storage and preparation and any openings to them; doors, hatches and any other openings into hazardous spaces and areas; venting pipes and air inlet and outlet locations of a ventilation system of hazardous spaces and areas; doors, scuttles, companions, ventilation duct outlets locations and other openings in spaces adjacent to hazardous area	A	•		•	

<b>.14</b>	Analysis of risks related to the use and storage of methanol/ethanol and possible consequences of its leakages. The analysis shall consider the risks of damage of hull structural members and failure of any equipment after accident related to the use of methanol/ethanol	AG	•		•	The results of risk analysis shall be taken into account in the ship's operational documentation
<b>.15</b>	Diagram of fire-protection water spray system, including piping, valves, nozzles and fittings, as well as diagram of dry powder fire extinguishing system and foam fire extinguishing system, their operating manuals and capacity calculation	A	•		•	
<b>.16</b>	Description and plan of monitoring, control and alarm systems	A	•		•	

**3.2.17.20 Open cargo hatch.**

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Assessment of seaworthiness and ingress of green water, containing, as a minimum, a report with the results of: computational modelling of motions in regular and irregular waves and ingress of green water; model tests of seaworthiness and ingress of green water in the ship model basin (model tests shall comply with 24.4 of part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships"), documentation of the process of carrying out model experiments shall be accompanied by a video recording to be attached to the report; freeboard calculation	AG	•		•	
.2	Analysis of the conformity of the means for cargo hold bilge dewatering with the requirements of IMO circular MSC/Circ.608/rev.1	AG	•		•	
.3	Stability and damage stability calculations taking into account the possible flooding of cargo holds	AG	•		•	
.4	Calculations of longitudinal and local strength of the hull taking into account the possible flooding of cargo holds	AG	•		•	
.5	Fixed water spray system diagram	A	•		•	
.6	Structural drawings of assemblies and equipment of fixed water spray system	A		•	•	

**3.2.17.21 Heavy cargo carrier, Semi-submersible ship.**

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Diagrams of bilge and ballast systems	A	•		•	
.2	Structural drawings of assemblies and equipment of bilge and ballast systems	A		•	•	
.3	Power supply and control system diagrams of the ballast system	A	•	•	•	
.4	Description of the draught gauging system	AG	•	•	•	
.5	Description of the ballast tanks level gauging system	AG	•	•	•	
.6	Hull members scantlings determination as well as analysis of longitudinal strength and buckling stability of members (for all specified loading conditions of a ship)	AG	•		•	
.7	Preliminary calculation of stability without cargo on the deck, with cargo on the deck as well as during submersion and emersion	AG	•		•	
.8	Damage trim and stability calculations, including righting lever curves	AG	•		•	
.9	Subdivision plan showing all watertight structures and openings with indication of types of closing appliances	AG	•		•	
.10	General arrangement plans of openings in hull, superstructures, deckhouses and subdivision bulkheads, including data on coamings height and type of closing appliances	A	•	•	•	
.11	Failure mode and effects analysis (FMEA) of the ballast system, including its control and monitoring systems	A	•		•	
.12	General arrangement plans of automation equipment in the central ballast control station, diagrams of power supply and cable laying	A	•	•	•	

**3.2.17.22 ETW (Effective Tank Washing).**

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Cargo tanks arrangement and capacity diagram with indication of distance from the side and bottom shell to the tanks, including information on the materials used and coverings	A	•	•	•	
.2	Effective cargo tank washing system diagram with indication of technical and operational characteristics of the system equipment	A	•		•	
.3	Shadow diagrams of the washing system for each cargo tank (may be included in the system diagram)	A	•		•	
.4	Cargo system diagram	A	•		•	
.5	Technical characteristics of permanently installed and portable washing machines	FI	•		•	

### 3.2.17.23 Battery system.

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Calculation of the capacity of accumulator batteries designed to supply the electrical equipment of electric propulsion plants	AG	•		•	
.2	Analysis of failures regarding supply of electrical equipment and operating capacity of electric propulsion plants	AG	•	•	•	
.3	Information on noxious substances that are contained or may be evolved when using accumulator batteries	FI	•		•	
.4	List of alarms directly related to accumulator batteries and associated shipboard systems, if any	AG	•	•	•	
.5	Substantiation of fire extinguishing system choice	AG	•		•	
.6	Operation manual for accumulator batteries and their control systems	FI	•		•	
.7	Risk analysis (when lithium accumulator batteries are used) containing the following risks of: thermal runaway; internal short circuit; external short circuit; failure of sensors (voltage, temperature, gas sensor, etc.); increase of impedance (of accumulator battery elements, connecting members, etc.); loss of cooling; leakages (electrolyte, cooling system); failure of accumulator battery control system (faults when controlling the circuit breakers, overloads, overdischarge, etc.); external penetration (fire, fluid leak, water for fire fighting, etc.)	AG	•		•	



### 3.3 DESIGN DOCUMENTATION ON LIFE-SAVING APPLIANCES, SIGNAL MEANS, RADIO AND NAVIGATIONAL EQUIPMENT OF SHIPS

#### 3.3.1 General documentation.

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Ship specification	FI	•		•	Polar service temperature shall be indicated (where there is a necessity to survey the ship for compliance with the requirements of the Polar Code). "Radio Equipment" Section of the Specification shall contain the information on the marine areas of ship's navigation and on methods of maintenance of radio equipment under the requirements of Global Maritime Distress and Safety System (GMDSS)
.2	List of spare parts	AG		•	•	

### 3.3.2 Documentation on life-saving appliances.

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Arrangement plan/diagram of: lifeboats and rescue boats; liferafts; marine evacuation systems and their launching appliances; means of embarkation that provide access to survival craft in the water	A	•	•	•	
.2	Drawings of securing of: launching appliances for survival craft and rescue boats, as well as their means of embarkation; hydrostatic release units	A	•	•	•	
.3	Arrangement plan and drawings of securing of personal life-saving appliances	A	•	•	•	
.4	Drawings of securing of survival craft and rescue boats in stowed-for-sea position	A		•	•	
.5	Arrangement plan of survival craft muster and embarkation stations, means of illumination and means of protection from seas, as well as means to prevent any entry of water into the survival craft	A	•		•	
.6	List of life-saving appliances, including their type and technical specifications	A	•		•	The documentation may be submitted together with the drawings required by <a href="#">3.3.2.1</a> and <a href="#">3.3.2.3</a>
.7	Calculations and data proving the compliance with the RS rules	AG	•		•	

**3.3.3 Documentation on signal means.**

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Arrangement plan/diagram of: navigation lights and flashing lights; pyrotechnic and sound signal means	A	•		•	
.2	List of signal means with indication of their principal characteristics	AG	•		•	
.3	Arrangement plan and drawings of securing of signal means	AG		•		
.4	Connection circuits of navigation lights, flashing lights, as well as of electric sound signal means	A	•	•	•	

### 3.3.4 Documentation on navigation bridge.

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Bridge layout drawings showing: bridge layout, including configuration and location of all bridge workstations, including workstations for additional bridge functions, indicating width of passageways, ceiling height, height of deckhead mounted equipment; configuration and dimensions of workstation consoles; chair arrangement at workstations	A	•	•	•	
.2	Drawings of equipment location on navigation bridge (at least two-view drawings) showing: location of all units of radio and navigational and other equipment in workstation consoles; location of all units of radio and navigational and other equipment elsewhere on the navigation bridge; location of all units of radio and navigational equipment outside the navigation bridge functionally associated with it (if any)	A	•	•	•	Moreover, the following shall be indicated (if any): .1 control units (integral or separate) for distress alert transmission; .2 VHF radio installations, including any control units; .3 MF or MF/HF radio installations, including any control units, terminal printing device; .4 satellite radio communication facilities, including printers; .5 receivers providing continuous digital selective calling (DSC) watch on VHF channel 70, on the frequency 2187,5 kHz, as well as HF DSC frequencies; .6 NAVTEX receiver and enhanced group calling (EGC) receiver; .7 ship's and survival craft search and rescue locating devices: ship's and survival craft radar search and rescue transponders (Radar SART), ship's and survival craft automatic identification system (AIS) search and rescue transmitter (AIS-SART); emergency position-indicating radio beacons (EPIRB);

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
						<p>.8 two-way VHF radiotelephone apparatus and chargers;</p> <p>.9 two-way VHF radiotelephone apparatus for communication with aircraft and chargers;</p> <p>.10 emergency lighting supplied from the reserve source of electrical power (GMDSS accumulators);</p> <p>.11 charger for reserve source of electrical power (GMDSS accumulators);</p> <p>.12 ship security alert system and arrangement (button) for its actuation;</p> <p>.13 distribution boards supplying radio and navigational equipment (with protection devices);</p> <p>.14 remote transmission device of magnetic compass;</p> <p>.15 electronic positioning fixing system (EPFS) receiver;</p> <p>.16 sound reception system;</p> <p>.17 log and its repeaters;</p> <p>.18 echo sounder and its repeaters;</p> <p>.19 gyrocompass and its repeaters (for heading indication, for bearing taking);</p> <p>.20 rate-of-turn indicator;</p> <p>.21 AIS equipment with a display;</p> <p>.22 ship's heading/track control system;</p> <p>.23 radars;</p>

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
						.24 electronic chart display and information system (ECDIS); .25 equipment of system of long range identification and tracking of ships (LRIT system); .26 equipment of bridge navigational watch alarm system (BNWAS); .27 voyage data recorder (VDR); .28 indicators of propeller revolutions, the force and direction of thrust, pitch and operational mode of controllable pitch propellers, rudder angle, force and direction of lateral thrust of the thruster
.3	Fields of vision drawings showing: horizontal fields of vision from various workstations, including the arc of individual blind sectors and the sum of blind sectors created by the cargo, handling equipment and other obstacles outside the wheelhouse that impede the view of the sea surface right ahead (over an arc of 180° from side to side forward of the beam); vertical field of vision over the bow to 10° on either side under the most unfavorable conditions of draught, trim and deck cargo location from the conning position and the navigation and maneuvering workstation, including the lines of sight under the upper edge of the window from standing position for a 1800 mm height of eye with pitching $\pm 5^\circ$ , and above the lower edge of the window from seated position; view of the ship's side from the navigation bridge wings; window arrangement, including inclination, dimensions, framing and height of lower and upper edge above bridge deck surface as well as the height of the deckhead	A	•	•	•	

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.4	List of radio and navigational equipment installed on board the ship with indication of: name; type; manufacturer	AG	•	•	•	At the TD stage, the list shall contain at least the name of the equipment

### 3.3.5 Documentation on radio and navigational equipment.

No.	Description of documentation	Stamp	TD	DD	PAD	Remarks
.1	Wiring diagram (according to type approval certificates) of radio and navigational equipment with indication of (if applicable): commutation of aerials; diagrams of power supply from main, emergency and reserve sources of electrical power (GMDSS accumulators); automatic circuit breakers; connection of chargers; connection of EPFS receiver (GPS, GLONASS etc.) to VHF/MF/HF radio installations, satellite communication equipment and other navigational equipment; interfacing of gyrocompass/transmitting heading device to other equipment; connection to VDR	A	•	•	•	For the TD stage, block diagrams of radio and navigational equipment connections may be submitted
.2	Antenna arrangement drawing (in three views) with indication of (if any): all transmitting antennas, including location of antenna tuners; all receiving antennas; radar antennas (with indication of antenna rotation radius and vertical patterns, and any other ship structures or cargo (masts, derricks, containers, etc.), which can affect radio waves propagation or impair the radar system performance); satellite communication equipment antennas; EPFS receiver antennas; location of float-free EPIRB; location of the magnetic compass(es); location of fixed and float-free recording mediums (capsules) of VDR; location of microphones of sound reception system	A	•	•	•	
.3	Calculation of the capacity of reserve source of electrical power (accumulators) for supplying of GMDSS radio equipment	AG	•	•	•	For the DD stage — taking into account <a href="#">3.3.4.4</a>
.4	List of information (data) to be recorded by voyage data recorder (if any) with indication of data sources (equipment, sensors)	AG	•	•	•	



### **3.4 PROGRAMMES OF MOORING AND SEA TRIALS**

**3.4.1** Programmes of mooring and sea trials shall be approved by the Register prior to commencement of the relevant trials.

**3.4.2** The scope of mooring and sea trials shall comply with the relevant requirements of the Guidelines on Technical Supervision of Ships under Construction.

**3.4.3** Programmes of mooring and sea trials of ships with distinguishing marks **DYNPOS-2** or **DYNPOS-3** in the class notation shall contain complete tests of the dynamic positioning system including the tests to verify FMEA provisions.

## **4 CLASSIFICATION OF REFRIGERATING PLANTS**

### **4.1 GENERAL**

**4.1.1** For ensuring safety of a ship and preventing ozone-destructive effect of refrigerants on environment the refrigerating plants installed in ships classed with the Register are subject to surveys in the following cases:

**.1** refrigerating plants working with Group II refrigerants in accordance with Table 2.2.1 of Part XII "Refrigerating Plants";

**.2** refrigerating plants working with Group I refrigerants and comprising the compressors with theoretical suction capacity 125 m<sup>3</sup>/h and above;

**.3** refrigerating plant ensures the functioning of systems affecting the ship safety. It is allowed to install refrigerating plants that ensure the functioning of systems affecting the ship safety and are not subject to survey, provided they are duplicated.

**4.1.2** From the number of the refrigerating plants stated in [4.1.1](#) the Register assigns a class to:

**.1** refrigerating plants intended for developing and maintaining the required temperatures in

refrigerated cargo spaces of transport ships, as well as in thermal containers to provide proper carriage of goods;

**.2** refrigerating plants intended for developing and maintaining the required temperatures in refrigerated cargo spaces, for cold-treatment of sea products (cooling, freezing) and supplying the cold necessary for operation of process plants in fishing ships and other ships used for processing of the biological resources of sea.

Other refrigerating plants from the number of those stated in [4.1.1](#) subject to the Register supervision are considered unclassified.

## **4.2 CLASS OF A REFRIGERATING PLANT**

### **4.2.1 General.**

**4.2.1.1** The Register may assign a class to a refrigerating plant after the ship's construction, as well as assign, or renew a class of a refrigerating plant installed in a ship in service.

**4.2.1.2** Assignment or renewal of a class means that the refrigerating plant fully or to a degree considered acceptable by the Register complies with the relevant requirements of these Rules, and that the technical condition of the plant is in accordance with the provisions of design specifications included in the Classification Certificate for Refrigerating Plant.

**4.2.1.3** Assignment or renewal of a class shall be confirmed by the issue of a Classification Certificate for Refrigerating Plant after the appropriate survey carried out.

### **4.2.2 Class notation of a refrigerating plant.**

**4.2.2.1** The character of classification of a refrigerating plant consists of the following marks:

**REF**⊗ — for a refrigerating plant built according to these Rules and surveyed by the Register;

**REF**★ — for a refrigerating plant built according to the rules of ACS — IACS member, surveyed by that society during construction and subsequently classed by the Register;

**(REF)**★ — for a refrigerating plant built without being survey by ACS — IACS member or without being surveyed by any classification society, but subsequently classed by the Register;

**REF**△ — for a refrigerating plant built according to the rules of ACS — IACS member, surveyed by that society during construction and subsequently classed by the Register, if the refrigerating plant does not fully comply with the requirements of Part XII "Refrigerating Plants".

#### **4.2.2.2 Mark of a capability to cargo refrigeration.**

If the refrigerating plant has a capacity sufficient to refrigeration of a non-precooled cargo on shipboard during a period of time that provides preservation of that cargo, a distinguishing mark **PRECOOLING** shall be added to the character of classification.

In such a case, a note specifying the conditions of cargo cooling on shipboard shall be entered into the Classification Certificate for Refrigerating Plant and in the Register of Ships.

#### **4.2.2.3 Mark of capability for cooling or freezing sea products.**

The distinguishing mark **QUICK FREEZING** is added to the character of classification if the plant is intended for cooling or freezing sea products and is in accordance with the relevant requirements specified in Part XII "Refrigerating Plants".

#### **4.2.2.4 Distinguishing marks of refrigerating plants.**

**4.2.2.4.1** If a refrigerating plant is intended for cooling of cargo transported in thermal containers and complies with applicable requirements of Part XII "Refrigerating Plants", the distinguishing mark **CONTAINERS** is added to the character of classification of the plant.

**4.2.2.4.2** If, in addition to a refrigerating plant, a ship is equipped with atmosphere control system in refrigerated spaces and/or thermal containers which complies with applicable requirements of Part XII "Refrigerating Plants" the distinguishing mark **CA** is added to the character of classification of the plant.

### **4.2.3 Additional characteristics.**

**4.2.3.1** Additional details of conditions for cooling cargoes on board, specified temperature conditions for transportation of cargoes and other details are indicated in the Classification Certificate for Refrigerating Plant and in the Register of Ships if it is found necessary by the Register to specify the purpose or structural features of the refrigerating plant.

**4.2.3.2** Number of thermal containers served by the refrigerating plant is indicated in the Classification Certificate for Refrigerating Plant and in the Register of Ships.

**4.2.4 Alteration of marks in the class notation.**

The Register may delete or alter a mark shown in the class notation in case of any modification or non-compliance with the requirements which served as the basis for the insertion of that mark into the class notation.

### **4.3 TECHNICAL DOCUMENTATION OF A REFRIGERATING PLANT**

#### **4.3.1 Documentation of a classed refrigerating plant.**

**4.3.1.1** Prior to delivery of a refrigerating plant onboard the ship, documentation with a sufficient scope of information to prove that the requirements of the RS rules for the refrigerating plant are complied with shall be submitted to the Register for review.

In the list specified below, documentation marked with (\*) is the documentation, which review results are documented by stamping in accordance with Figs. 8.2-1, 8.2-5 or 8.2-7 (in case of dual classification) of Part II "Technical Documentation" of the Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships. Documentation marked with (\*\*) is the documentation, which review results are documented by stamping in accordance with Figs. 8.2-3 or 8.2-9 (in case of dual classification) of Part II "Technical Documentation" of the Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships:

- .1 technical description of a refrigerating plant (\*\*);
- .2 circuit diagrams of refrigerant, cooling medium, cooling water systems with indication of places for installation of instruments and automatic devices (\*);
- .3 arrangement plans of equipment in refrigerated spaces with indication of places for installation of temperature control devices (\*);
- .4 construction plans of insulation of refrigerated spaces with specification of insulating materials (\*);
- .5 circuit diagrams of automatic control, protection and alarm systems (\*);
- .6 list of machinery, vessels and apparatus of refrigerating plant with indication of technical characteristics (\*\*);
- .7 list of control devices and measuring instruments, protection and alarm systems with indication of technical characteristics (\*\*);
- .8 drawings of sealing and flexible joints with indication of details on materials (\*);
- .9 list of equipment of the atmosphere control system, including control and automatic devices (\*\*);
- .10 drawings of installation and fastening of machinery, vessels and apparatus (\*).

#### **4.3.2 Test program (\*).**

**4.3.2.1** Test program with indication of the method of design cooling load generation (including a calculation of the power of additional heaters to be used) and the method of determining the actual averaged heat-transfer coefficient for the insulating structure of refrigerated cargo spaces shall be approved by the Register prior to commencement of the relevant tests.

**4.3.2.3** The scope of tests shall comply with the relevant requirements of the Guidelines on Technical Supervision of Ships under Construction.

#### **4.3.3 Documentation of an unclassified refrigerating plant.**

**4.3.3.1** Prior to delivery of a refrigerating plant on board the ship, documentation listed in [4.3.1.1.2](#) and [4.3.1.1.3](#) (for refrigerant only), [4.3.1.1.5](#) (for protection and alarm system only), [4.3.1.1.6](#), [4.3.1.1.7](#) (for gauges in refrigerant system and protection and alarm devices only), [4.3.1.1.10](#) shall be submitted to the Register.

Russian Maritime Register of Shipping

**Rules for the Classification and Construction of Sea-Going Ships**  
**Part I**  
**Classification**

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