



# RUSSIAN MARITIME REGISTER OF SHIPPING

**CIRCULAR LETTER**

**No. 314-42-1474c**

dated 27.11.2020

Re:

amendments to the Rules for the Classification and Construction of Sea-Going Ships in connection with implementation of IACS UR S33 (Rev.2 Dec 2019 and Rev.3 Feb 2020)

Item(s) of supervision:

ships under construction and in service

Entry-into-force date:

**01.01.2021**

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Appendices:

Appendix 1: information on amendments introduced by the Circular Letter

Appendix 2: text of amendments to Part II "Hull" and Part XIV "Welding"

Director General

Konstantin G. Palnikov

Text of CL:

We hereby inform that the Rules for the Classification and Construction of Sea-Going Ships shall be amended at re-publication in 2021 as specified in the Appendices to the Circular Letter.

It is necessary to do the following:

1. Bring the content of the Circular Letter to the notice of the RS surveyors, interested organizations and persons in the area of the RS Branch Offices' activity.
2. Apply the provisions of the Circular Letter during review and approval of the technical documentation on ships contracted for construction or conversion on or after 01.01.2021, in the absence of a contract, the keels of which are laid or which are at a similar stage of construction on or after 01.01.2021, as well as during review and approval of the technical documentation on ships, the delivery of which is on or after 01.01.2021.

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

Part II: paras 3.1.1.3 — 3.1.1.8 and 3.1.2.10;

Part XIV: para 3.3.2.

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

| Nos. | Amended paras/chapters/sections  | Information on amendments  | Number and date of the Circular Letter | Entry-into-force date |
|------|----------------------------------|--|--|-----------------------|
| 1    | Part II, paras 3.1.1.3 — 3.1.1.8 | New paras 3.1.1.3 — 3.1.1.5 containing requirements for material selection, determination of material factor and supporting calculations have been introduced considering IACS UR S33 (Rev.2 Dec 2019 and Rev.3 Feb 2020). Existing paras 3.1.1.3 — 3.1.1.5 have been renumbered 3.1.1.6 — 3.1.1.8 accordingly | 314-42-1474c of 27.11.2020             | 01.01.2020            |
| 2    | Part II, para 3.1.2.10           | New para 3.1.2.10 containing requirements for brittle crack arrest design has been introduced considering IACS UR S33 (Rev.2 Dec 2019 and Rev.3 Feb 2020)  | 314-42-1474c of 27.11.2020             | 01.01.2020            |
| 3    | Part XIV, paras 3.3.2 — 3.3.8    | New para 3.3.2 containing requirements for NDT of upper deck structure of container ships has been introduced considering IACS UR S33 (Rev.2 Dec 2019 and Rev.3 Feb 2020). Existing paras 3.3.2 — 3.3.7 as well as references thereto have been renumbered 3.3.3 — 3.3.8 accordingly                           | 314-42-1474c of 27.11.2020             | 01.01.2020            |

## RULES FOR THE CLASSIFICATION AND CONSTRUCTION OF SEA-GOING SHIPS, 2020,

### ND No. 2-020101-124-E

#### PART II. HULL

##### 3 REQUIREMENTS FOR STRUCTURES OF SHIPS OF SPECIAL DESIGN

- 1 **New paras 3.1.1.3 — 3.1.1.5** are introduced reading as follows:

**3.1.1.3** Where structural members in the upper deck of container ships (including deck plating, hatch coaming plating) are manufactured of extremely thick steel with thickness from 50 to 100 mm it is allowed to use special steel of grades YP36, YP40 (refer to 3.2, Part XIII "Materials") and YP47 (refer to 3.19.2, Part XIII "Materials") with yield stress  $R_{eH} = 355, 390$  and 460 MPa respectively, as well as brittle crack arrest steel BCA of the above listed grades (refer to 3.19, Part XIII "Materials").

**3.1.1.4** The material factors of YP36 and YP40 steels are equal to the values of steels with yield stress 355 and 390 MPa (refer to Table 1.1.4.3), for YP47 steel — 0,62.

**3.1.1.5** Fatigue assessment of longitudinal structural members in the upper deck region of container ships shall be performed taking into account the provisions of the Guidelines on Fatigue Assessment of Ships. In addition, when choosing connection details for calculations special attention shall be paid to the connections of foundations for deck equipment and devices with structures manufactured of steel with thickness from 50 mm."

- 2 **Existing paras 3.1.1.3 — 3.1.1.5** are renumbered **3.1.1.6 — 3.1.1.8** accordingly.

- 3 **New para 3.1.2.10** is introduced reading as follows:

**3.1.2.10** Brittle crack arrest design.

Where extremely thick steel with thickness from 50 to 100 mm is used for the upper deck structures in cargo hold region to arrest propagation of brittle cracks in block-to-block connection between the hatch coaming and upper deck, the deck plating and longitudinal hatch side coaming shall be manufactured of brittle crack arrest steel.

Where block-to-block butt welds of longitudinal hatch side coaming and those of the upper deck plating are shifted, this shift shall be greater than or equal to 300 mm."

#### PART XIV. WELDING

##### 3 TESTING OF WELDED JOINTS

- 4 **New para 3.3.2** is introduced reading as follows:

**3.3.2** Non-destructive testing of welded joints of hull structures of container ships manufactured of extremely thick steel plates.

Ultrasonic testing (UT) in compliance with 3.2.6 shall be carried out on all block-to-block butt joints of all upper flange longitudinal structural members in the cargo hold region, including the topmost strakes of the inner hull/bulkhead, the sheer strake, main deck, coaming plate, coaming top plate, and all attached longitudinal stiffeners (refer to Fig. 3.3.2).

- Notes: 1. Acceptance criteria of UT shall be in accordance with 3.4.6 and/or recognized standards.  
2. The acceptance criteria may be adjusted under consideration of the appertaining brittle crack initiation prevention procedure, and where this is more severe than that found in the Rules and standards, the acceptance criteria shall be amended accordingly to a more severe sensitivity.

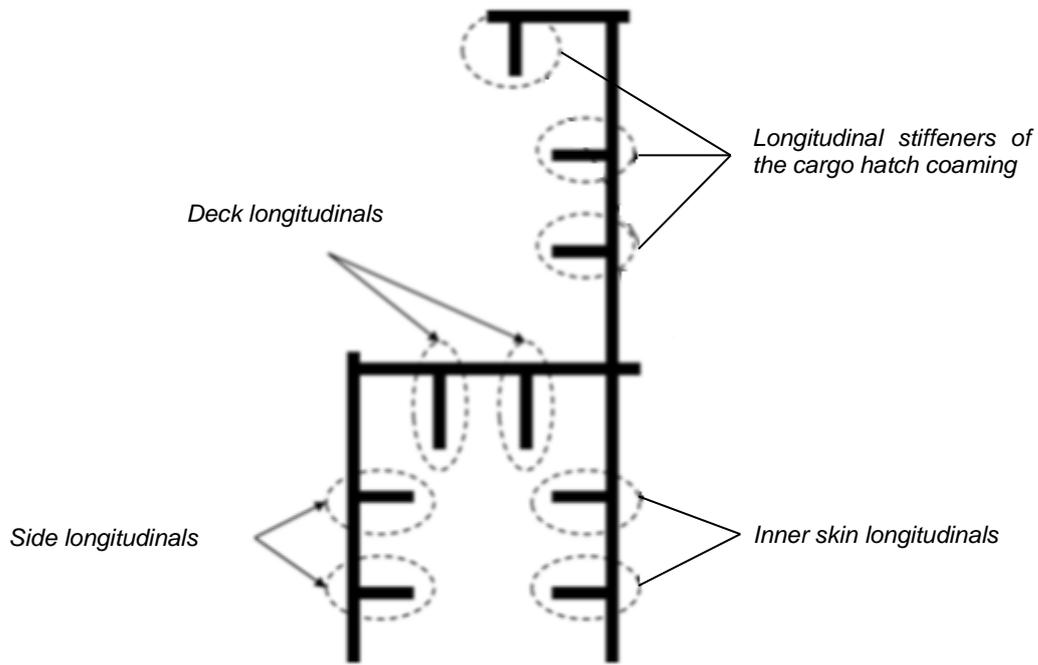


Fig. 3.3.2  
Upper flange longitudinal structural members."

- 5 Existing **paras 3.3.2 — 3.3.7** are renumbered **3.3.3 — 3.3.8** accordingly.