



RUSSIAN MARITIME REGISTER OF SHIPPING

CIRCULAR LETTER

No. 328-04-1411c

dated 09.07.2020

Re:

amendments to the Rules for the Classification and Construction of Ships Carrying Liquefied Gases in Bulk, 2020, ND No. 2-020101-131-E, in connection with specifying the requirements for the calculation of hull structures temperature

Item(s) of supervision:

ships under construction

Entry-into-force date:

10.08.2020

Valid till:-

Validity period extended till: -

Cancels / amends / adds Circular Letter No. -

dated -

Number of pages:

1+2

Appendices:

Appendix 1: information on amendments introduced by the Circular Letter

Appendix 2: text of amendments to Part IV "Cargo Containment"

Director General

Konstantin G. Palnikov

Text of CL:

We hereby inform that the Rules for the Classification and Construction of Ships Carrying Liquefied Gases in Bulk shall be amended 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, as well as 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 technical documentation of ships contracted for construction or conversion on or after 10.08.2020.
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List of the amended and/or introduced paras/chapters/sections:

Part IV: para 19.2.1

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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 IV, para 19.2.1	Requirements for calculation of hull structures temperature have been specified	328-04-1411c of 09.07.2020	10.08.2020

RULES FOR THE CLASSIFICATION AND CONSTRUCTION OF SHIPS CARRYING LIQUEFIED GASES IN BULK, 2020

ND No. 2-020101-131-E

PART IV. CARGO CONTAINMENT

19 MATERIALS

Para 19.2.1 is replaced by the following text:

"19.2.1 To determine the grade of plate and sections used in the hull structure, a temperature calculation shall be performed for all tank types when the cargo temperature is below – 10 °C. The following assumptions shall be made in this calculation:

- .1** the primary barrier of all tanks shall be assumed to be at the cargo temperature;
- .2** in addition to 19.2.1.1, where a complete or partial secondary barrier is required, it shall be assumed to be at the cargo temperature at atmospheric pressure for any one tank only;
- .3** for worldwide service, ambient temperatures shall be taken as 5 °C for air and 0 °C for seawater. Higher values may be accepted for ships operating in restricted areas and, conversely, lower values may be accepted for ships trading to areas where lower temperatures are expected during the winter months. During temperature calculation and selection of a steel grade for hull structures adjacent to the cargo containment system but not coming into direct contact with the ambient air the ambient temperature is taken in accordance with the technical documentation submitted in the scope of the ship project review¹. For ice-breakers and ice class ships, the ambient temperature shall not be taken to be above that specified in 1.2.3.3, Part II "Hull" of the Rules for the Classification;
- .4** still air and seawater conditions shall be assumed, i.e. no adjustment for forced convection;
- .5** degradation of the thermal insulation properties over the life of the ship due to factors such as thermal and mechanical ageing, compaction, ship motions and tank vibrations, as defined in 19.4.6 and 19.4.7, shall be assumed;
- .6** the cooling effect of the rising boil-off vapour from the leaked cargo shall be taken into account, where applicable;
- .7** credit for hull heating may be taken in accordance with 19.2.5, provided the heating arrangements are in compliance with 19.2.6;
- .8** no credit shall be given for any means of heating, except as described in 19.2.5; and
- .9** for members connecting inner and outer hulls, the mean temperature may be taken for determining the steel grade.

The ambient temperatures used in the design, described in this Section, shall be shown on the International Certificate of Fitness for the Carriage of Liquefied Gases in Bulk."

¹ Additional provisions not included in the Code.