



# RUSSIAN MARITIME REGISTER OF SHIPPING

**CIRCULAR LETTER**

**No. 313-79-1284c**

dated 07.11.2019

Re:

amendments to the Rules for the Classification and Construction of Ships Carrying Liquefied Gases in Bulk, 2019, ND No. 2-020101-122-E

Item(s) of supervision:

ships under construction

Entry-into-force date:

**01.01.2020**

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Appendices:

Appendix 1: information on amendments introduced by the Circular Letter

Appendix 2: text of amendments to Part VI "Systems and Piping" and Part VIII "Instrumentation and Automation Systems"

Director General

Konstantin G. Palnikov

Text of CL:

We hereby inform that in connection with coming into force on 1 January 2020 of IACS Unified Interpretations (UI) GC26 (Oct. 2018) and GC27 (Dec 2018) 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. Familiarize the RS surveyors and interested organizations in the area of the RS Branch Offices' activity with the content of the Circular Letter.
2. Apply provisions of the Circular Letter in the RS practical activity.

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

Part VI: paras 3.16.2 and 12.1.1.1.1.1

Part VIII: 2.1

Person in charge: Vladimir K. Shurpyak 313

+7 (812) 312-39-85

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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 VI, para 3.16.2	The requirements for pressure relief devices in cargo tanks have been specified	313-79-1284c of 07.11.2019	01.01.2020
2	Part VI, para 12.1.1.1.1.1	The requirements for the flow capacity of pressure relief valves considering IACS UI GC26 (Oct 2018) have been specified	313-79-1284c of 07.11.2019	01.01.2020
3	Part VIII, para 2.1	The requirements for liquid level gauging device in cargo tanks considering IACS UI GC27 (Dec 2018) have been specified	313-79-1284c of 07.11.2019	01.01.2020

# RULES FOR THE CLASSIFICATION AND CONSTRUCTION OF SHIPS CARRYING LIQUEFIED GASES IN BULK, 2019

ND No. 2-020101-122-E

## PART VI. SYSTEMS AND PIPING

### 3 CARGO SYSTEM

1 **Para 3.16.2** is replaced by the following text:

**"3.16.2** Each cargo tank including deck tanks shall be fitted with at least two pressure relief valves of equal capacity within the tolerances specified by the manufacturer and each shall be designed and constructed for the prescribed service."

### 12 TESTING

2 **Para 12.1.1.1.1.1** is replaced by the following text:

**"12.1.1.1.1.1** Each size and type of valve intended to be used at a working temperature below – 55 °C shall be approved through design assessment and prototype testing. Prototype testing for all valves to the minimum design temperature or lower and to a pressure not lower than the maximum design pressure foreseen for the valves shall be witnessed in the presence of the RS surveyor.

Flow and capacity of pressure relief valves covered by 3.16 shall be certified by the Administration or the Register acting on its behalf. For other types of valves, the manufacturer shall certify the flow properties of the valves based on tests carried out according to recognized standards.

Prototype testing shall include hydrostatic test of the valve body at a pressure equal to 1,5 times the design pressure, and cryogenic testing consisting of valve operation or safety valve set pressure. In addition, for all valves other than safety valves, a seat and stem leakage test at a pressure equal to 1,1 times the design pressure shall be conducted.

The following type tests shall be conducted:

.1 each size and type of valve shall be subjected to seat tightness testing over the full range of operating pressures for bi-directional flow and temperatures at intervals, up to the rated design pressure of the valve. During the testing, satisfactory operation of the valve shall be verified;

.2 the flow or capacity shall be certified to a recognized standard for each size and type of valve;

.3 pressurized components shall be pressure tested to at least 1,5 times the rated pressure; and

.4 for emergency shutdown valves, with materials having melting temperatures lower than 925 °C, the type testing shall include a fire test. ESD valves, with materials having melting temperatures lower than 925 °C, do not include emergency shutdown valves which use such materials only in components such as rubber handle covers where failure would not cause deterioration of shell or seat tightness intrinsically. For valves intended to be used at a working temperature above –55 °C, prototype testing is not required."

## PART VIII. INSTRUMENTATION AND AUTOMATION SYSTEMS

### 2 LEVEL INDICATORS FOR CARGO TANKS

3      **Para 2.1** is replaced by the following text:

"**2.1** Each cargo tank shall be fitted with one or several liquid level gauging devices arranged to ensure that a level reading is always obtainable whenever the cargo tank is operational. The devices shall be designed to operate throughout the design pressure range of the cargo tank and at temperatures within the cargo operating temperature range.

Where only one liquid level gauge is fitted it shall be arranged so that it can be maintained in an operational condition without the need to empty or gas-free the tank. In order to assess whether or not only one level gauge is acceptable, phrase "can be maintained" means that any part of the level gauge other than passive parts can be overhauled while the cargo tank is in service. For this purpose, passive parts are those parts assumed not subject to failures under normal service conditions."