



RUSSIAN MARITIME REGISTER OF SHIPPING

CIRCULAR LETTER

No. 313-67-1788c

dated 04.07.2022

Re:

amendments to the Rules for the Classification and Construction of Sea-Going Ships, 2022, ND No. 2-020101-152-E

Item(s) of supervision:

steerable propellers with podded drives

Entry-into-force date:

15.07.2022

~~Cancels / amends / adds Circular Letter No.~~

dated Insert date here

Number of pages: 1+3

Appendices:

Appendix 1: information on amendments introduced by the Circular Letter

Appendix 2: text of amendments to Part VII "Machinery Installations"

Acting Director General

Sergey A. Kulikov

Text of CL:

We hereby inform that the Rules for the Classification and Construction of Sea-Going Ships 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, 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 15.07.2022 and in the absence of a contract, during review and approval of the technical documentation on ships requested for review on or after 15.07.2022.
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List of the amended and/or introduced paras/chapters/sections:

Part VII: paras 7.2.12, 8.1.1, 8.1.2 and 8.7.1

Person in charge: Sergey V. Lavrov

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+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	Para 7.2.12	New para 7.2.12 with the requirements for steerable propellers is introduced	313-67-1788c of 04.07.2022	15.07.2022
2	Para 8.1.1	Requirements for application have been specified	313-67-1788c of 04.07.2022	15.07.2022
3	Para 8.1.2	Requirements for κ steerable propellers with a submersible slewing motor have been specified	313-67-1788c of 04.07.2022	15.07.2022
4	Para 8.7.1	Requirements for confirmation of torsional vibration calculation results by measurements have been specified	313-67-1788c of 04.07.2022	15.07.2022

RULES FOR THE CLASSIFICATION AND CONSTRUCTION OF SEA-GOING SHIPS, 2022,

ND No. 2-020101-152-E

PART VII. MACHINERY INSTALLATIONS

7 ACTIVE MEANS OF THE SHIP'S STEERING

1 New **para 7.2.12** is introduced reading as follows:

"7.2.12 The steerable propellers with podded drives shall be free of restricted speed ranges due to torsional vibrations within the entire operating speed range."

8 TORSIONAL VIBRATION

2 **Para 8.1.1** is replaced by the following text:

"8.1.1 The present Section applies to propulsion plants with the main engines having a power of not less than 75 kW when ICE are used and of not less than 110 kW when using turbo or electric drives, and to main and auxiliary diesel generators as well as to ICE-driven machinery having a primary engine power of not less than 110 kW, as well as main and auxiliary diesel generators and auxiliary machinery driven by ICE with not less than 110 kW power."

3 **Para 8.1.2** is replaced by the following text:

«8.1.2 Torsional vibration calculations shall be prepared both for the basic variant and for other variants and conditions possible in the operation of the installation, as follows:

.1 maximum power take-off and idling speed (with the propeller blades at zero position) for installations comprising CP-propellers or vertical axis propellers;

.2 individual and simultaneous operation of main engines with a common reduction gear;

.3 reverse gear (propulsion plant reversing mode);

.4 connection of additional power consumers if their moments of inertia are commensurate with the inertia moments of the working cylinder;

.5 running with one cylinder missfiring, for installations containing flexible couplings and reduction gear; to be assumed not firing is the cylinder the disconnection of which accounts to the greatest degree for the increase of stresses and alternating torques;

.6 damper jammed or removed where single main engine installations are concerned;

.7 flexible coupling blocked due to breakage of its elastic components (where single main engine installations are concerned).

The steerable propellers with podded drives with respect to torsional vibrations shall all comply with 7.2.12, which shall be indicated in the technical documentation submitted for consideration to the Register. In this case, the submission of a separate torsional vibration calculations is not required."

4 **Para 8.7.1** is replaced by the following text:

"8.7.1 Data obtained from torsional vibration calculations for machinery installations with the main engines shall be confirmed by measurements except for steerable propellers with podded drives (refer to 7.2.12 and 8.1.2). The measurements shall cover all the variants and operation conditions of the installation, for which calculations were made in accordance with 8.1.2, except emergency operation conditions listed in 8.1.2.6 and 8.1.2.7. In well-grounded cases, the Register may require torsional vibrations to be measured in auxiliary diesel generators and ICE-driven auxiliary machinery for essential services."