



RUSSIAN MARITIME REGISTER OF SHIPPING

CIRCULAR LETTER

No. 311-05-1940c

dated 24.05.2023

Re:

amendments to the Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships, 2023, ND No. 2-020101-175-E

Item(s) of supervision:

materials and welding

Entry-into-force date:

01.07.2023

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

~~dated~~

Number of pages: 1 + 3

Appendices:

Appendix 1: information on amendments introduced by the Circular Letter

Appendix 2: text of amendments to Part III "Technical Supervision during Manufacture of Materials"

Acting Director General

Andrey V. Fasolko

Text of CL:

We hereby inform that the Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for 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, as well as interested organizations and persons in the area of the RS Branch Offices' activity.
 2. Apply the provisions of the Circular Letter when performing technical supervision of materials and approving welding procedures for ships contracted for construction or conversion on or after 01.07.2023, in the absence of a ship's data, during review and approval of the technical documentation requested for review on or after 01.07.2023.
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List of the amended and/or introduced paras/chapters/sections:

Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships:

Part III: para 2.5.2.4.1.5, Table 6.4.1.1 and para 6.6.4.1

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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	Para 2.5.2.4.1.5	New para with the requirements for non-destructive testing of icebreaker stern castings in connection with particular operating conditions has been introduced	311-05-1940c of 24.05.2023	01.07.2023
2	Table 6.4.1.1	Requirements for the extent of testing of scope of testing of T-joints without edge preparation during approval of welding procedures have been specified considering ISO 15614-1	311-05-1940c of 24.05.2023	01.07.2023
3	Para 6.6.4.1	Requirements for the range of approval for the flux applied during approval of welding procedures have been specified	311-05-1940c of 24.05.2023	01.07.2023

**RULES FOR TECHNICAL SUPERVISION DURING CONSTRUCTION OF SHIPS
AND MANUFACTURE OF MATERIALS AND PRODUCTS FOR SHIPS, 2023,**

ND No. 2-020101-175-E

PART III. TECHNICAL SUPERVISION DURING MANUFACTURE OF MATERIALS

2 METALS

1 **Chapter 2.5** is supplemented with **new para 2.5.2.4.1.5** reading as follows:

"2.5.2.4.1.5 During survey of stern castings of ice class ships of **Arc6, Arc7, Arc8** and **Arc9**, as well as **Icebreaker6, Icebreaker7, Icebreaker8, Icebreaker9** classes, surfaces shall be tested in the areas shown in Fig. 2.5.2.4.1-1, taking into account the requirements of 2.5.2.4.1.2 and 2.5.2.4.1.3."

6 APPROVAL OF WELDING PROCEDURES FOR STEEL STRUCTURES AND ITEMS

2 **Table 6.4.1.1** is replaced by the following text:

"Table 6.4.1.1

Requirements for extent of testing for approval of welding procedures

Nos.	Type of welded test piece	Type of test	Extent of testing
1	Butt joint in plate and pipe — refer to Figs. 6.3.1.2 and 6.3.1.3	Visual and measurement testing	100 % of weld length
		Radiographic or ultrasonic testing ¹	100 % of weld length
		Surface crack detection ²	100 % of weld length
		Transverse tensile test	2 specimens
		Transverse bend test ³	4 specimens
		Impact test	From 3 to 8 series of 3 specimens each ⁴
		Hardness test ⁵	Required
2	T-joints in plate with edge preparation (with full penetration), refer to Fig. 6.3.1.5. Pipe branching node with edge preparation on branch to be welded on (double tee-butt joint), refer to Fig. 6.3.1.6	Visual and measurement testing	100 % of weld length
		Surface crack detection ²	100 % of weld length
		Ultrasonic testing ^{1,6}	100 % of weld length
		Hardness test ⁵	1 or 2 specimens required ⁷
		Macro examination	2 or 3 transverse specimens required ⁷
		Additional tests ⁸	
3	T-joints in plate without edge preparation (fillet/joint), refer to Fig. 6.3.1.4. Pipe branching node without edge preparation on branch to be welded (without penetration), refer to Fig. 6.3.1.6	Visual and measurement testing	100 % of weld length
		Surface crack detection ²	100 % of weld length
		Hardness test ⁵	1 or 2 specimens required ⁷
		Macro examination	2 or 3 transverse specimens required ⁷
		Fracture test	Required for the test piece of a joint in plate

Nos.	Type of welded test piece	Type of test	Extent of testing
4	Tekken test piece	Visual and measurement testing for surface cracks	100 % of weld length
		Macro examination of the test weld for cracks	4 transverse specimens in the absence of any visible surface cracks in the weld
¹ Ultrasonic testing shall not be used at base metal thicknesses $t < 8$ mm, as well as for austenitic and austenitic stainless steels (groups 8 and 10 according to ISO/TR 15608). ² Penetrant testing or magnetic particle testing. For non-magnetic materials, penetrant testing. ³ In compliance with the requirements of 6.4.4.2. ⁴ In compliance with the requirements of 6.4.4.4. ⁵ Hardness test is required if prescribed by requirements in 6.4.4.5. ⁶ For outside diameter $D \leq 50$ mm no ultrasonic test is required. For outside diameter $D > 50$ mm and where it is not technically possible to carry out ultrasonic testing, a radiographic testing shall be carried out on the maximum weld length available. ⁷ In compliance with the location of test specimens for tests according to Figs. 6.4.2-2 to 6.4.2-5. ⁸ In cases when the welding procedure according to pWPS is not subjected to approval testing by other methods, additional tests to check the mechanical properties (mechanical tests) shall be conducted on a butt joint test piece with identical edge preparation.			

3 **Para 6.6.4.1** is replaced by the following text:

"6.6.4.1 Submerged arc welding (welding process 12).

Range of approval is limited only to that welding process (121 to 125) that was used in the welding procedure qualification test.

The range of approval for the flux is restricted to the particular designation that was used in the welding procedure qualification tests."