



RUSSIAN MARITIME REGISTER OF SHIPPING

CIRCULAR LETTER

No. 382-08-1142c

dated 20.06.2018

Re:

amendments to the General Regulations for the Technical Supervision of Containers, Rules for the Manufacture of Containers, Rules for Technical Supervision during Manufacture of containers and Rules for Technical Supervision of Containers in Service, 2015, ND No. 2-090201-009-E

Item(s) of supervision:

service suppliers, manufacture of containers, containers in service

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Appendix(ces):

amendments to the General Regulations for the Technical Supervision of Containers, Rules for the Manufacture of Containers, Rules for Technical Supervision during Manufacture of Containers and Rules for Technical Supervision of Containers in Service

Director General

Konstantin G. Palnikov

Text of CL:

We hereby inform that the General Regulations for the Technical Supervision of Containers, Rules for the Manufacture of Containers, Rules for Technical Supervision during Manufacture of Containers and Rules for Technical Supervision of Containers in Service shall be amended as specified in the Appendix to the Circular Letter.

The above amendments will be introduced into the Rules at their re-publication.

It is necessary to do the following:

1. Familiarize the surveyors of the RS Branch Offices with the content of the Circular Letter.
 2. Bring the content of the Circular Letter to the notice of the interested organizations in the area of the RS Branch Offices' activity.
 3. Apply provisions of the Circular Letter during review of technical documentation, technical supervision of manufacture and testing of containers, materials and products for containers, as well as during technical supervision of containers in service.
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List of ND amended and introduced paras/chapters/sections (to specify in the List of Circular Letters (form 8.3.36)):

General Regulations for the Technical Supervision of Containers: Table 2.1.2

Rules for the Manufacture of Containers. Part I: paras 2.2.4, 3.3.5, Table 3.2.4.2; Part VII: paras 2.1.4, 2.1.5, 5.1.2, 7.1.10, 7.2.2, 8.1.7, 8.1.8, 8.4.2, 8.4.6, 9.2.1, Table 9.3.1

Rules for Technical Supervision during the Manufacture of Containers: Table 2.3.1, para 2.3.13, Table 3.2.2-1, para 3.2.2; Appendix 1: paras 2.2.1, 2.2.6; Appendix 2: paras 2.12, 3.2

Rules for Technical Supervision of Containers in Service: paras 3.4.2, 3.4.5.1, 3.5.7

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GENERAL REGULATIONS FOR THE TECHNICAL SUPERVISION OF CONTAINERS

2 TECHNICAL SUPERVISION

Table 2.1.2. Code of item of technical supervision 22009000 shall be replaced as follows:

”

40000006	Preparing and testing of tank containers during the periodical surveys	ССП/Certificate of Firm Conformity	-
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RULES FOR THE MANUFACTURE OF CONTAINERS

Part I. BASIC REQUIREMENTS

2 GENERAL TECHNICAL DATA

Para 2.2.4 shall be amended to read:

“**2.2.4** Each fitting manufactured under the Register technical supervision shall have, as a minimum, the following marking: the manufacturer's mark, heat number and abbreviation of the fitting position on the container, as well as the RS stamp. Marking and branding shall be located so that they are clearly visible after assembly of the fitting on the container and will not be damaged during the container handling and securing.”.

3 MATERIALS AND WELDING

Table 3.2.4.2 shall be amended to read:

“Mechanical properties

Yield stress R_{eH} , H/mm^2 , min	Tensile strength R_m , H/mm^2	Elongation A_5 , %, min	Reduction of area Z , %, min	Impact energy KV^1 , J, min, at the temperature, °C, min	
				- 20	- 40 ²

275	480 - 600	25	40	27	21
¹ Average value obtained at testing three sharp V-notch specimens in compliance with 2.2.3, Part XIII "Materials" of the Rules for the Classification and Construction of Sea-Going Ships. The impact energy value determined on one specimen may be less than that specified in the table but in any case it shall not be less than 70 per cent of this value. ² Testing at lower temperature may be carried out at the request of the customer with due regard to climatic design version of the product.					

”
Para 3.3.5 shall be amended to read:

“**3.3.5** Materials used for manufacture of tank containers intended for carriage of liquefied gas shall in addition comply with the requirements of Table 2.1-2 and 2.1-3 of Part IX "Materials and Welding" of the Rules for the Classification and Construction of Ships Carrying Liquefied Gases in Bulk depending on design temperature. Requirements for materials for design temperatures below —165 °C are subject to special consideration by the Register in each particular case.”.

PART VII. OFFSHORE CONTAINERS

2 TECHNICAL REQUIREMENTS

Para 2.1.4 shall be amended to read:

“**2.1.4** Where containers are designed for stacking, the top corners of the container shall be raised to sufficient height above the roof and the top frame to prevent damage to the lifting set. As a rule, it is permitted to stack the loaded containers ashore or at the drilling rig stacked in two layers. Stacking the trapezoidal waste containers is only permitted in unloaded condition. Stacking of containers during the transportation is not permitted.

For the carriage on containerships in stack, containers shall comply with the International Convention for Safe Containers (CSC) and ISO 1496 series requirements. ”.

Para 2.1.5 shall be supplemented with the following text:

"Note: It is recommended not to install top corner fittings on the containers with the dimensions differing from those specified in ISO 668.”.

5 WELDING

Para 5.1.2 shall be amended to read:

“5.1.2 Essential primary structural members shall be welded with full penetration welds. For other primary structure parts, welding without full penetration welds (fillet welds) may be used subject to special consideration by the Register having regard to the design and calculations. Intermittent fillet welding of secondary structure is acceptable. Fork lift pockets shall be welded to the bottom side rails with full penetration.”.

7 MARKING

New para 7.1.10 shall be introduced reading as follows:

“7.1.10 Side surfaces of aluminium containers shall be additionally marked as follows: "ALUMINIUM CONTAINER". The height of the letters shall be at least 75 mm.”.

Para 7.2.2. Note shall be amended to read:

“Note: If confirmed that the requirements of the present Rules and of EN 12079-1 are met, the plate shall be headed: “OFFSHORE CONTAINER DATA PLATE RS/EN12079-1”.”.

8 TESTS

New paras 8.1.7 – 8.1.8 shall be introduced reading as follows:

“8.1.7 Auxiliary containers may be tested without insulation and equipment installed.

8.1.8 The number of containers from the batch subject to testing in case of series manufacture is specified in table 8.1.8..

Table 8.1.8

The batch size	Number of containers*
1 - 5	1
6 - 10	2
11 - 20	3
21 - 40	4

> 40	10 %
* - the number is specified with due account for container prototype testing	

”

Para 8.4.2 shall be amended to read:

“**8.4.2** Container with fork pockets designed for loaded lifting shall be loaded to a total mass of 1,6 (R+S) with regard for the lifting set mass and lifted using the fork pockets. No deflections during testing shall be greater than 1/300 of the length of any member. The offshore container shall show no permanent deformation or other damage after testing.”.

New para 8.4.6 shall be introduced reading as follows:

“**8.4.6** Load securing devices of a container intended for general freight transportation shall be tested in compliance with 3.16, Part II “General Freight Containers” of the Rules for the Manufacture of Containers with due regard for the design load of 10 kN.”.

9 LIFTING SET

Para 9.2.1 shall be supplemented with the following text:

"Note. Lifting device of an auxiliary offshore container may, in justified cases, be removed from the container for the period of long-term stay ashore or on the drilling rig.”.

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Table 9.3.1. Item of the value of the minimum required working load limit for container having the maximum gross weight of 6000 kg shall be replaced as follows:

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The maximum gross mas (R), kg	Enhancement factor	Minimum required working load limit WLL _{min} , kg
6000	1,766	10600

”

RULES FOR TECHNICAL SUPERVISION DURING MANUFACTURE OF CONTAINERS

2 TECHNICAL SUPERVISION AT THE FIRMS INVOLVED IN THE MANUFACTURE OF PRODUCTS FOR CONTAINERS

Table 2.3.1 shall be amended to read:

“Table
2.3.1

Item of technical supervision	Inspection of						Tests
	used materials	machining of parts	welding operations	manufacture of parts and assemblies	assembly of products	in operation	
Corner fittings	+	+	—	—	—	—	refer to Appendix refer to 3.3.2.6
End frames	+	+	—	—	+	—	
Welded parts	+	—	+	—	—	—	—
Tanks	+	—	+	+	+	—	+
Vessel shells	+	+	+	—	—	—	thickness inspection
Heads	+	+	+	—	—	—	thickness inspection
Doors (including locks)	+	+	+	+	+	+	—
Manholes (hatches)	+	—	+	+	+	+	—
Lifting arrangements of offshore containers	+	+	visual and dimensional	+	+	—	+

Para 2.3.13 shall be amended to read:

“2.3.13 Prototypes and type-series lifting sets for offshore containers or their components (when approved separately) shall be tested in compliance with requirements of standards listed in 9.4, Part VII "Offshore Containers" of the Rules for the Manufacture of Containers, as well as in compliance with the approved technical documentation.

During the testing of the prototypes and type-series rope slings for the lifting sets at one specimen of the rope tier the end termination shall be tested by the load equal to 0,9 of the minimum rope strength.

Type-series rope slings for the lifting sets are subject to testing by a test load equal to 2 x WLL. The lifting set from the rope slings may be tested in operation (the shackles which will be used in operation shall be dismantled) when the load may be applied in such a

way that it may be operated in the actual conditions, furthermore, during the tests there is a possibility to subject every component to the load of 2 x WLL.

During the survey of the lifting sets for offshore containers, besides the testing, the compliance of their geometrical dimensions, applicable components, properties of the relevant materials with the approved technical documentation shall be verified.”.

3 TECHNICAL SUPERVISION DURING MANUFACTURE OF CONTAINERS

Table 3.2.2.-1 amended to read:

“Table 3.2.2-1

Visual and dimensional methods	Magnetic particle method	Capillary method	Ultra-sonic method	Radiographic method
ISO 5817 ¹ Level B	ISO 23278 Level 1	ISO 23277 Level 1	ISO 11666 Level 2	ISO 10675-1 ² Level 1
¹ — for aluminium ISO 10042 ² — for aluminium ISO 10675-2				

”

Para 3.3.2 shall be amended to read:

“**3.3.2** During survey of items of technical supervision at the intermediate stages of manufacture inspection is exercised over the assembly and welding of containers, their assemblies and components. Subject to inspection are:

- .1 preparation of components and their edges for welding;
- .2 correctness of container assemblies for welding;
- .3 execution of welds;
- .4 correctness of inspection plates manufacture to check mechanical properties of welding seams of tank container vessels (where required);
- .5 manufacture of floors;
- .6 results of strength tests (when specified in the approved technical documentation) and their conformity with the approved documentation.”.

APPENDIX 1. TECHNICAL SUPERVISION DURING MANUFACTURE OF FITTINGS

2 STEEL FITTINGS MANUFACTURED BY CASTINGS

Para 2.2.1 shall be amended to read:

“**2.2.1 General.**

The manufacturer of the series products shall either fulfill the requirements of 1.4 of Appendix 1 or submit each batch of fittings for survey by the RS surveyor.”.

Para 2.2.6 shall be amended to read:

“2.2.6 Strength tests.

The tests are conducted according to the Register approved program in the recognized testing laboratories. In individual cases, at the RS discretion, tests may be conducted in the testing laboratories not recognized by RS. Therewith, prior to testing the compliance of the testing laboratory with the requirements specified in 1.5.2.2.2.1, 1.5.2.2.3.1, 1.5.2.2.3.2, 1.5.2.2.5.1, 1.5.2.2.5.2, 1.5.2.2.6, 1.5.2.2.7 and 1.5.2.3, Part I “Basic Requirements” of the Rules for the Manufacture of Containers shall be verified.

Test loads are established taking into account the loads arising during the tests of containers in compliance with the standards specified in 2.2.2, Part I "Basic Requirements" of the Rules for the Manufacture of Containers. One lower and one upper fittings from each 100 sets of fittings are subject to testing. Other methods to confirm the strength characteristics may be accepted subject to agreement with the RHO.”.

**APPENDIX 2. LIST OF ITEMS TO BE SUBMITTED TO THE REGISTER FOR
TECHNICAL SUPERVISION^{1,2}**

Para 2.12. Item “Item of technical supervision” shall be replaced by the following text:

“Four point lifting test of offshore containers and weathertightness test (where required)”.

Item “Minimum scope of survey and testing” shall be replaced by the following text:

"The number of containers to be tested is specified in Table 8.1.8, Part VII of the Rules for the Manufacture of Containers⁸".

Para 3.2 shall be deleted. **Paras 3.3 – 3.8** shall be renumbered as **3.2 – 3.7**, accordingly.

RULES FOR TECHNICAL SUPERVISION OF CONTAINERS IN SERVICE

3 SURVEYS

Para 3.4.2 shall be amended to read:

“3.4.2 The firm where periodical survey of tank containers may be carried out shall be inspected by the Register and have Certificate of Firm Conformity (CCП) with activity code 40000006 specialized in "preparing and testing of tank containers during periodical surveys".

To obtain the Certificate of Firm Conformity (CCП) the firm shall comply with the following requirements:

.1 personnel.

.1.1 The firm shall have documents on the personnel containing the following information:

functional duties;

professional and special training;

.1.2 the firm shall have the regular staff of specialists;

.1.3 the firm shall have and adhere to the plans (schedules) of the following:

personnel training and re-training;

advanced training;

.2 technological infrastructure.

.2.1 The firm shall have the lists of equipment, premises and facilities necessary for periodical survey of tank containers;

.2.2 the firm shall have and adhere to the schedules of maintenance of equipment and facilities;

.3 measurement assurance.

.3.1 The firm shall have the lists of the following:

measuring equipment;

testing and auxiliary equipment;

.3.2 the firm shall have and adhere to the schedules of the following:

maintenance of measuring and testing equipment;

testing (calibration) of measuring equipment;

.4 files of the firm documents.

.4.1 The firm shall have the valid normative and technical documents necessary for performance of activity in the relevant area, including:

- list of activities performed (area of activity);
- program and procedure of testing;
- operating and maintenance documentation of equipment;
- duty regulations;
- documents on records keeping and archives maintenance.

Para 3.4.5.1. Note 2 shall be replaced by the following text:

“2. Tank containers operating for more than 10 years from the date of manufacture are subject to diagnostic examination by the methods approved by the Register in the scope prescribed by the RS surveyor upon results of the examination.”.

Para 3.5.7 shall be amended to read:

“**3.5.7** The survey and proof load tests of lifting sets and items thereof shall be carried out in compliance with the applicable provisions of 10.6 of the Rules for the Cargo Handling Gear of Sea-Going Ships.”.