**CIRCULAR LETTER** 

No. 382-04-1844c

dated 25.10.2022

Re:

amendments to the Collection of the Rules for Containers, 2021, ND 2-090201-012-E

Item(s) of supervision:

containers, materials and products for containers

Entry-into-force date:

from the date of publication

Cancels / amends / adds Circular Letter No.

1 + 11

dated

Number of pages:

Appendices:

Appendix 1: information on amendments introduced by the Circular Letter

Appendix 2: text of amendments to the General Regulations for the Technical Supervision of Containers; and Parts I "Basic Requirements", II "General Freight Containers", III "Thermal Containers", IV "Tank Containers", V "Platform Containers and Platform-Based Containers", VI "Non-Pressurized Dry Bulk Containers", VII "Offshore Containers" and VIII "Tank Containers with Fiber-Reinforced Plastic (FRP) Shell" of Rules for the Manufacture of Containers

**Acting Director General** 

Sergey A. Kulikov

# Text of CL:

We hereby inform that the General Regulations for the Technical Supervision of Containers and Rules for the Manufacture of Containers 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 in the RS practical activity from the entry-into-force date of amendments.
- 3. The provisions of the Circular Letter shall not be applied for works performed under already concluded contracts (contracts-requests) as of the date of publication of the amendments.

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

Dmitry I. Yarveper

General Regulations for the Technical Supervision of Containers:

para 3.1.2

Rules for the Manufacture of Containers:

Part I: para 5.1.2
Part II: para 1.4.1
Part III: para 1.4.1
Part IV: para 1.4.1
Part V: para 1.4.1
Part VI: para 1.4.1

Part VII: para 1.4.1 Part VIII: para 1.4.1

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"Thesis" System No. 22-214528

# Information on amendments introduced by the Circular Letter (for inclusion in the Revision History to the RS Publication)

| Nos. | Amended<br>paras/chapters/<br>sections   | Information on amendments  | Number<br>and date of the<br>Circular Letter | Entry-into-force<br>date |
|------|--|--|--|--------------------------|
| 1    | General Regulations<br>for the Technical<br>Supervision of<br>Containers, para 3.1.2 | Requirements for duration of review of technical documentation have been specified | 382-04-1844c<br>of 25.10.2022                | 25.10.2022               |
| 2    | Rules for the<br>Manufacture of<br>Containers, Part I,<br>para 5.1.2                 | Requirements for scope of technical documentation have been specified              | 382-04-1844c<br>of 25.10.2022                | 25.10.2022               |
| 3    | Rules for the<br>Manufacture of<br>Containers, Part II,<br>para 1.4.1                | Requirements for scope of technical documentation have been specified              | 382-04-1844c<br>of 25.10.2022                | 25.10.2022               |
| 4    | Rules for the<br>Manufacture of<br>Containers, Part III,<br>para 1.4.1               | Requirements for scope of technical documentation have been specified              | 382-04-1844c<br>of 25.10.2022                | 25.10.2022               |
| 5    | Rules for the<br>Manufacture of<br>Containers, Part IV,<br>para 1.4.1                | Requirements for scope of technical documentation have been specified              | 382-04-1844c<br>of 25.10.2022                | 25.10.2022               |
| 6    | Rules for the<br>Manufacture of<br>Containers, Part V,<br>para 1.4.1                 | Requirements for scope of technical documentation have been specified              | 382-04-1844c<br>of 25.10.2022                | 25.10.2022               |
| 7    | Rules for the<br>Manufacture of<br>Containers, Part VI,<br>para 1.4.1                | Requirements for scope of technical documentation have been specified              | 382-04-1844c<br>of 25.10.2022                | 25.10.2022               |
| 8    | Rules for the<br>Manufacture of<br>Containers, Part VII,<br>para 1.4.1               | Requirements for scope of technical documentation have been specified              | 382-04-1844c<br>of 25.10.2022                | 25.10.2022               |
| 9    | Rules for the<br>Manufacture of<br>Containers, Part VIII,<br>para 1.4.1              | Requirements for scope of technical documentation have been specified              | 382-04-1844c<br>of 25.10.2022                | 25.10.2022               |

# **COLLECTION OF THE RULES FOR CONTAINERS, 2021,**

#### ND 2-090201-012-E

# **GENERAL REGULATIONS FOR THE TECHNICAL SUPERVISION OF CONTAINERS**

#### **3 TECHNICAL DOCUMENTATION**

- 1 **Para 3.1.2** is replaced by the following text:
- **"3.1.2** Duration of the technical documentation review, specified in the relevant parts of the Rules for the Manufacture of Containers is no more than 20 working days from the date of the submission of a complete set or each part (if the technical documentation is provided by parts), signing the contract-requests/agreement, as well as when performing work under prepaid contracts-requests/contracts, after payment of the advance invoice in full.

The term for consideration of the technical documentation amended in accordance with the RS remarks is no more than 10 working days from the date of submission of the complete set, signing of the contract-request/agreement, as well as when performing work under prepaid contracts-requests/agreements, after payment of the advance invoice in full.

Duration of the documentation review may be reduced/extended upon agreement by the parties in each particular case.

The procedure, place, terms and other conditions of technical documentation review by the Register shall be determined upon agreement with the RS Branch Office responsible for review of technical documentation.".

# **RULES FOR THE MANUFACTURE OF CONTAINERS**

# **PART I. BASIC REQUIREMENTS**

#### **5 FITTINGS**

- 2 **Para 5.1.2** is replaced by the following text:
  - "5.1.2 Technical documentation.
- **5.1.2.1** The scope of the technical documentation submitted for consideration as well as the forms for confirming the compliance of the technical documentation with the RS requirements, are specified in Table 5.1.2.1 and may be changed upon the agreement with RS.

| Nº |                 | Document name                               | nent name Set <sup>1</sup> Review resi |   |  |  |
|----|-----------------|---|--|---|--|--|
| 1  | Tech            | nical conditions or technical specification | I                                      | Α |  |  |
| 2  | Prog            | ram of:                                     |  |   |  |  |
|    | .1              | prototype testing                           | I                                      | Α |  |  |
|    | .2              | series testing                              | II                                     | Α |  |  |
| 3  | Corn            | er and/or intermediate fitting              | I                                      | A |  |  |
| 4  | Marking drawing |   | II                                     | A |  |  |

<sup>&</sup>lt;sup>1</sup> In case of submission of technical documentation by parts, documents marked with the number (I) should be submitted with the first part. Documents marked with the number (II) may be submitted with the second and subsequent parts. The volume of technical documentation provided with the first part may be changed upon the agreement with RS.

Note. Documents specified in this table may not be provided upon the agreement with RS, if all necessary information is contained in other documents included in the set of technical documentation.

#### PART II. GENERAL FREIGHT CONTAINERS

#### 1 GENERAL

# 3 **Para 1.4.1** is replaced by the following text:

**"1.4.1** The scope of the technical documentation, submitted for consideration, as well as the forms for confirming the compliance of the technical documentation with the RS requirements, are specified in Table 1.4.1 and may be changed upon the agreement with RS.

Table 1.4.1

| Nº |        | Document name  | Set1        | Review result <sup>2</sup> |
|----|--------|--|-------------|----------------------------|
| 1  | Techni | ical conditions or technical specification                     |             | Α                          |
| 2  |        | pe static test program, if testing will be carried out at the  | II          | Α                          |
|    | manuf  | acture   |             |                            |
| 3  | Assem  | bly drawing of:  |             |                            |
|    | .1     | container <sup>3</sup>   | l           | Α                          |
|    | .2     | rear end wall  | l           | Α                          |
|    | .3     | front end wall   | l           | Α                          |
|    | .4     | side wall  | l           | Α                          |
|    | .5     | base   | l           | Α                          |
|    | .7     | roof   | l           | Α                          |
|    | .8     | plates (CSC and CCC)   | l           | Α                          |
|    | .9     | marking  | l           | Α                          |
|    | .10    | cover (type of seams and corners) with a cable and its         | I           | Α                          |
|    |        | tips for imposing customs stamps and seals                     |             |                            |
| 4  |        | ngs indicating dimensions and used materials of (if this infor | mation is i | not on the assembly        |
|    | drawin |  |             |                            |
|    | .1     | corner and intermediate posts                                  | II          | Α                          |
|    | .2     | upper longitudinal, end and intermediate beams                 | II          | Α                          |
|    | .3     | lower longitudinal, end and intermediate beams                 | II          | Α                          |
|    | .4     | element to which the CCC requirements apply                    | II          | Α                          |
|    | .5     | floors (fastening, sealing, dimensions of plywood,             | II          | Α                          |
|    |        | boards and configuration of their edges)                       |             |                            |
|    | .6     | doors with seals   | Ш           | Α                          |
|    | .7     | door locks   | II          | Α                          |
|    | .8     | arches for a cover   | II          | Α                          |
|    | .9     | locks of the upper beams, if the beams are removable or        | II          | Α                          |
|    |        | folding  |             |                            |
|    | .10    | cargo securing devices   | Ш           | Α                          |

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<sup>&</sup>lt;sup>2</sup> A — approved; Ag — agreed; FI — for information. If necessary, the documents may be approved and/or agreed subject to the implementation of the comments of the RS letter.

| Nº | Document name | Set1 | Review result <sup>2</sup> |
|----|---------------|------|----------------------------|
|    |               |      |                            |

- <sup>1</sup> In case of submission of technical documentation in parts, documents marked with the number (I) should be submitted with the first part. Documents marked with the number (II) may be submitted with the second and subsequent parts. The volume of technical documentation provided with the first part may be changed upon the agreement with RS.
- <sup>2</sup> A approved; Ag agreed; FI for information. If necessary, the documents may be approved and/or agreed subject to the implementation of the comments of the RS letter.
- <sup>3</sup> RS may additionally request documents on the floor materials and antiseptic impregnation, coatings and sealing materials used.
- Notes: 1. Documents specified in this table may not be provided upon the agreement with RS, if all necessary information is contained in other documents, included in the set of technical documentation.
- 2. Documents containing information about structural elements that are not applicable to a specific container are not submitted to RS.

#### **PART III. THERMAL CONTAINERS**

#### 1 GENERAL

- 4 **Para 1.4.1** is replaced by the following text:
- **"1.4.1** The scope of the technical documentation, submitted for consideration, as well as the forms for confirming the compliance of the technical documentation with RS requirements, are specified in Table 1.4.1 and may be changed upon the agreement with RS.

Table 1.4.1

| Nº |        | Document name  |         |                     |  |
|----|--------|--|---------|---------------------|--|
|    |        |  |         | result <sup>2</sup> |  |
| 1  | Techni | cal conditions or technical specification  | I       | Α                   |  |
| 2  | Progra |  |         |                     |  |
|    | .1     | static testing of prototype, if testing will be carried out at the manufacture                               | П       | Α                   |  |
|    | .2     | thermal tests, if the tests will be carried out at the manufacturer  | Ш       | Α                   |  |
| 3  | Assem  | bly drawing of:  |         |                     |  |
|    | .1     | container <sup>3</sup>   | I       | Α                   |  |
|    | .2     | rear end wall  | I       | Α                   |  |
|    | .3     | front end wall   | I       | Α                   |  |
|    | .4     | side wall  | I       | Α                   |  |
|    | .5     | base   | I       | Α                   |  |
|    | .7     | roof   | I       | Α                   |  |
|    | .8     | insulation   | I       | Α                   |  |
|    | .9     | plates (CSC and CCC)   | I       | Α                   |  |
|    | .10    | marking  | I       | Α                   |  |
| 4  |        | al engineering calculation <sup>4</sup>  | Ш       | Ag                  |  |
| 5  |        | igs indicating dimensions and used materials of (if this information is not o                                | n the a | assembly            |  |
|    | drawin |  | 1       | ı                   |  |
|    | .1     | corner and intermediate posts  | Ш       | Α                   |  |
|    | .2     | upper longitudinal, end and intermediate beams   | Ш       | Α                   |  |
|    | .3     | lower longitudinal, end and intermediate beams   | II      | Α                   |  |
|    | .4     | element to which the CCC requirements apply  | II      | Α                   |  |
|    | .5     | floors (fastening, sealing, dimensions of plywood, boards and  | II      | Α                   |  |
|    |        | configuration of their edges)  |         |                     |  |
|    | .6     | doors with seals   | Ш       | Α                   |  |
|    | .7     | door locks   | Ш       | Α                   |  |
|    | .8     | cargo securing devices   | Ш       | Α                   |  |
| 6  |        | ation about the manufacturer, model, purpose and characteristics of the ration and / or heating installation | II      | FI                  |  |
|    | reinge | ation and 7 or recalling installation  | l       |                     |  |

<sup>&</sup>lt;sup>1</sup> In case of submission of technical documentation in parts, documents marked with the number (I) should be submitted with the first part. Documents marked with the number (II) may be submitted with

| Nº | Document name | Set1 | Review              |
|----|---------------|------|---------------------|
|    |               |      | result <sup>2</sup> |

the second and subsequent parts. The volume of technical documentation provided with the first part may be changed upon the agreement with RS.

- <sup>2</sup> A approved; Ag agreed; FI for information. If necessary, the documents may be approved and/or agreed subject to the implementation of the comments of the RS letter.
- <sup>3</sup> RS may additionally request documents on the floor materials and antiseptic impregnation, coatings and sealing materials used.
- <sup>4</sup> Except for thermally insulated containers.

Notes: 1. Specified in this table documents may not be provided upon the agreement with RS, if all necessary information is contained in other documents, included in the set of technical documentation.

2. Documents containing information about structural elements that are not applicable to a specific container are not submitted to RS.

#### **PART IV. TANK CONTAINERS**

#### 1 GENERAL

5 **Para 1.4.1** is replaced by the following text:

**"1.4.1** The scope of the technical documentation, submitted for consideration, as well as the forms for confirming the compliance of the technical documentation with RS requirements, are specified in Table 1.4.1 and may be changed upon the agreement with RS.

Table 1.4.1

| Nº |          | Document name  | Set1 | Review              |  |
|----|----------|--|------|---------------------|--|
|    | <u> </u> |  |      | result <sup>2</sup> |  |
| 1  |          | Technical conditions or technical specification  |      |                     |  |
| 2  |          | Instruction (manual) for operation   |      |                     |  |
| 3  |          | Calculation of:  |      |                     |  |
|    | .1       | tank container for strength in accordance with the requirements of 2.2.3 (including 2.2.4), by the finite element method or by another method that ensures the reliability of the results obtained | I    | Ag                  |  |
|    | .2       | shell for strength in accordance with the requirements of 3.7, by the finite element method or by another method that ensures the reliability of the results obtained <sup>1</sup>                 | I    | Ag                  |  |
|    | .3       | shell for strength in accordance with the requirements of national and/or international standards applicable to pressure vessels and applicable to tank containers                                 | I    | Ag                  |  |
|    | .4       | required flow capacity of safety devices in accordance with the requirements of 6.7 of the IMDG Code   | I    | Ag                  |  |
|    | .5       | thermotechnical, by method that ensures the reliability of the results obtained <sup>3</sup>   | II   | Ag                  |  |
| 4  | carria   | of dangerous goods classes or list of goods (if required in the rules for the age of goods, national or international regulations) that can be transported hk container <sup>4</sup>               | II   | FI                  |  |
| 5  | Prog     | ram of:  |      |                     |  |
|    | .1       | static testing of the prototype, if testing will be carried out at the manufacturer  | II   | Α                   |  |
|    | .2       | thermal tests (determination of the control retention time and the effectiveness of the insulation system), if the tests will be carried out at the manufacturer <sup>5</sup>                      | II   | A                   |  |
| 6  | Asse     | embly drawing of:  |      |                     |  |
|    | .1       | tank container   | I    | Α                   |  |
|    | .2       | shell  | Ι    | Α                   |  |
|    | .3       | side and end walls   | I    | Α                   |  |
|    | .4       | stiffening rings   | II   | Α                   |  |
|    | .5       | cargo cooling and/or heating systems   | Ш    | Α                   |  |

| Nº | Document name  |  | Set1 | Review result <sup>2</sup> |  |
|----|--|--|------|----------------------------|--|
|    | .6   | spill box, if several and different, then each                       | Ш    | A                          |  |
|    | .7   | ladder   | II   | A                          |  |
|    | .8   | walkways   | il   | A                          |  |
|    | .9   | insulation   | Ш    | Α                          |  |
|    | .10  | handrails  | Ш    | Α                          |  |
|    | .11  | plates (shell date, CSC and CCC)                                     | I    | Α                          |  |
|    | .12  | marking  | I    | Α                          |  |
| 7  | Drawings indicating dimensions and used materials of (if this information is not on the assemb |  |      |                            |  |
|    | draw   | drawings):   |      |                            |  |
|    | .1   | corner and intermediate posts  | Ш    | Α                          |  |
|    | .2   | attachment points of shell with frame                                | Ш    | Α                          |  |
|    | .3   | upper longitudinal, end and intermediate beams                       | Ш    | Α                          |  |
|    | .4   | lower longitudinal, end and intermediate beams                       | Ш    | Α                          |  |
|    | .6   | manlids and necks (when manufactured at the manufacturer of the tank | Ш    | Α                          |  |
|    |  | container)   |      |                            |  |
|    | .7   | element to which the CCC requirements apply                          | Ш    | Α                          |  |
|    | .8   | pipelines  | Ш    | Α                          |  |
| 8  | Sche   | me with the scope of control of welded joints                        | II   | Ag                         |  |

<sup>&</sup>lt;sup>1</sup> It is allowed not to carry out calculations of the shell for strength in case of strain measurement during testing of the shell for strength. If the calculation has been performed, then for thin-walled tank containers (T1 — T22), the strength test can be carried out without strain gauges.

Notes: 1. Documents specified in this table may not be provided upon the agreement with RS, if all necessary information is contained in other documents, included in the set of technical documentation.

2. Documents containing information about structural elements that are not applicable to a specific

container are not submitted to RS.

### PART V. PLATFORM CONTAINERS AND PLATFORM-BASED CONTAINERS

#### 1 GENERAL

6 **Para 1.4.1** is replaced by the following text:

**"1.4.1** The scope of the technical documentation, submitted for consideration, as well as the forms for confirming the compliance of the technical documentation with the RS requirements, are specified in Table 1.4.1 and may be changed upon the agreement with RS.

Table 1.4.1

| Nº |                      | Наименование документа   | Set <sup>1</sup> | Review              |  |
|----|----------------------|--|------------------|---------------------|--|
|    |                      |  |                  | result <sup>2</sup> |  |
| 1  | Tech                 | nical conditions or technical specification                          | ı                | Α                   |  |
| 2  | Proto                | Prototype static test program, if testing will be carried out at the |                  |                     |  |
|    | manufacture          |  |                  |                     |  |
| 3  | Assembly drawing of: |  |                  |                     |  |
|    | .1                   | container <sup>3</sup>   | I                | Α                   |  |
|    | .2                   | rear end wall  | I                | Α                   |  |

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<sup>&</sup>lt;sup>2</sup> RS may additionally request documents confirming the resistance of the materials of the tank container, its fittings and seals to cargo.

<sup>&</sup>lt;sup>3</sup> For tank container intended for the transportation of refrigerated liquefied gases.

<sup>&</sup>lt;sup>4</sup> In case of submission of technical documentation in parts, documents marked with the number (I) should be submitted with the first part. Documents marked with the number (II) may be submitted with the second and subsequent parts. The volume of technical documentation provided with the first part may be changed upon the agreement with RS.

<sup>&</sup>lt;sup>5</sup> A — approved; Ag — agreed; FI — for information. If necessary, the documents may be approved and/or agreed subject to the implementation of the comments of the RS letter.

| Nº | Наименование документа |  | Set <sup>1</sup> | Review              |
|----|------------------------|--|------------------|---------------------|
|    |                        |  |                  | result <sup>2</sup> |
|    | .3                     | front end wall   | l                | Α                   |
|    | .4                     | side wall  | I                | Α                   |
|    | .5                     | base   | I                | Α                   |
|    | .6                     | сар  | I                | Α                   |
|    | .7                     | plates (CSC and CCC)   | I                | Α                   |
|    | .8                     | marking  | I                | Α                   |
|    | .9                     | cover (type of seams and corners) with a cable and its tips for        | I                | Α                   |
|    |                        | imposing customs stamps and seals                                      |                  |                     |
| 4  | Draw                   | rings indicating dimensions and used materials of (if this information | n is no          | ot on the           |
|    | asse                   | mbly drawings):  |                  |                     |
|    | .1                     | corner and intermediate posts  | Ш                | Α                   |
|    | .2                     | upper longitudinal, end and intermediate beams                         | Ш                | Α                   |
|    | .3                     | lower longitudinal, end and intermediate beams                         | Ш                | Α                   |
|    | .4                     | element to which the CCC requirements apply                            | Ш                | Α                   |
|    | .5                     | floors (fastening, sealing, dimensions of plywood, boards and          | Ш                | Α                   |
|    |                        | configuration of their edges)  |                  |                     |
|    | .6                     | fixing devices for connecting empty identical platform containers      | Ш                | Α                   |
|    |                        | or platforms-based containers with folding end structure into a        |                  |                     |
|    |                        | stack (package)  |                  |                     |
|    | .7                     | turning units and fixing devices of the end walls, if the ends are     | Ш                | Α                   |
|    |                        | folding  |                  |                     |
|    | .8                     | cargo securing devices   | Ш                | Α                   |

<sup>&</sup>lt;sup>1</sup> In case of submission of technical documentation in parts, documents marked with the number (I) should be submitted with the first part. Documents marked with the number (II) may be submitted with the second and subsequent parts. The volume of technical documentation provided with the first part may be changed upon the agreement with RS.

Notes: 1. Documents specified in this Table may not be provided upon the agreement with RS, if all necessary information is contained in other documents, included in the set of technical documentation.

2. Documents containing information about structural elements that are not applicable to a specific container are not submitted to RS.

# PART VI. NON-PRESSURIZED DRY BULK CONTAINERS

#### 1 GENERAL

# 7 **Para 1.4.1** is replaced by the following text:

**"1.4.1** The scope of the technical documentation, submitted for consideration, as well as the forms for confirming the compliance of the technical documentation with the RS requirements, are specified in Table 1.4.1 and may be changed upon the agreement with RS.

Table 1.4.1

| Nº |       | Document name   | Set1 | Review              |
|----|-------|---|------|---------------------|
|    |       |   |      | result <sup>2</sup> |
| 1  | Techi | nical conditions or technical specification   | I    | Α                   |
| 2  | Proto | Prototype static test program, if testing will be carried out at the manufacturer's |      |                     |
| 3  | Asser | mbly drawing of:  |      |                     |
|    | .1    | container <sup>3</sup>  | I    | Α                   |
|    | .2    | rear end wall   | ı    | Α                   |

 $<sup>^2</sup>$  Å — approved; Ag — agreed; FI — for information. If necessary, the documents may be approved and/or agreed subject to the implementation of the comments of the RS letter.

<sup>&</sup>lt;sup>3</sup> RS may additionally request documents on the floor materials and antiseptic impregnation, coatings and sealing materials used.

| Nº | Document name |  | Set1    | Review              |
|----|---------------|--|---------|---------------------|
|    |               |  |         | result <sup>2</sup> |
|    | .3            | front end wall   | I       | Α                   |
|    | .4            | side wall  | ı       | Α                   |
|    | .5            | base   | ı       | Α                   |
|    | .7            | roof   | ı       | Α                   |
|    | .8            | hatch  | ı       | Α                   |
|    | .9            | tables (CSC and CCC)   | ı       | Α                   |
|    | .10           | marking  |         | Α                   |
|    | .11           | cover (type of seams and corners) with a cable and its tips for imposing       | ı       | Α                   |
|    |               | customs stamps and seals   |         |                     |
| 4  | Draw          | ings indicating dimensions and used materials of (if this information is not o | n the a | ssembly             |
|    | drawi         | ngs):  |         |                     |
|    | .1            | corner and intermediate posts  | Ш       | Α                   |
|    | .2            | upper longitudinal, end and intermediate beams                                 | Ш       | Α                   |
|    | .3            | lower longitudinal, end and intermediate beams                                 | Ш       | Α                   |
|    | .4            | element to which the CCC requirements apply                                    | Ш       | Α                   |
|    | .5            | floors (fastening, sealing, dimensions of plywood, boards and                  | Ш       | Α                   |
|    |               | configuration of their edges)  |         |                     |
|    | .6            | doors with seals   | II      | Α                   |
|    | .7            | door locks   | Ш       | Α                   |
|    | .8            | arches for a cover   | II      | Α                   |

<sup>&</sup>lt;sup>1</sup> In case of submission of technical documentation in parts, documents marked with the number (I) should be submitted with the first part. Documents marked with the number (II) may be submitted with the second and subsequent parts. The volume of technical documentation provided with the first part may be changed upon the agreement with RS.

Notes: 1. Documents specified in this table may not be provided upon the agreement with RS, if all necessary information is contained in other documents, included in the set of technical documentation.

2. Documents containing information about structural elements that are not applicable to a specific container are not submitted to RS.

### **PART VII. OFFSHORE CONTAINERS**

#### 1 GENERAL

### 8 **Para 1.4.1** is replaced by the following text:

**"1.4.1** The scope of the technical documentation, submitted for consideration, as well as the forms for confirming the compliance of the technical documentation with the RS requirements, are specified in Table 1.4.1 and may be changed upon the agreement with RS.

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<sup>&</sup>lt;sup>2</sup> A — approved; Ag — agreed; FI — for information. If necessary, the documents may be approved and/or agreed subject to the implementation of the comments of the RS letter.

<sup>&</sup>lt;sup>3</sup> RS may additionally request documents on the floor materials and antiseptic impregnation, coatings and sealing materials used.

|     |  |                                 | abic             | , ,,,,,                    |  |  |
|-----|--|---------------------------------|------------------|----------------------------|--|--|
| Nº  | Наименование докуме  | нта (5                          | Set <sup>1</sup> | Review result <sup>2</sup> |  |  |
| 1   | Technical conditions or technical specification  |                                 | ı                | Α                          |  |  |
| 2   | Instruction (manual) for operation   |                                 | П                | Ag                         |  |  |
| 3   | Calculation of:  |                                 |                  |                            |  |  |
|     | .1 of the strength of the supporting and auxi  | iary structure of an offshore   | ı                | Ag                         |  |  |
|     | container by the finite element method or by   |                                 |                  |                            |  |  |
|     | the reliability of the results obtained in acco  | rdance with the requirements    |                  |                            |  |  |
|     | of 3.1   |                                 |                  |                            |  |  |
|     | .2 of the strength of lifting eyes in accordance v   | vith the requirements of 2.2.2, | I                | Ag                         |  |  |
|     | 2.2.3 and 2.2.4  |                                 |                  |                            |  |  |
|     | .3 of the strength of forklift pockets in accorda  | nce with the requirements of    | I                | Ag                         |  |  |
|     | 3.1.9  |                                 |                  |                            |  |  |
| 4   | Program of:  |                                 |                  |                            |  |  |
|     | .1 prototype testing   |                                 | П                | Α                          |  |  |
|     | .2 series testing  |                                 | П                | Α                          |  |  |
| 5   | Assembly drawing of:   |                                 |                  |                            |  |  |
|     | .1 offshore container  |                                 | I                | Α                          |  |  |
|     | .2 load-bearing structure  |                                 | ı                | Α                          |  |  |
|     | .3 plates  |                                 | ı                | Α                          |  |  |
|     | .4 marking   |                                 | ı                | Α                          |  |  |
| 6   | Drawings indicating dimensions and used materials of (if this information is not on the assembly |                                 |                  |                            |  |  |
|     | drawings):   |                                 |                  |                            |  |  |
|     | .1 corner and intermediate posts   |                                 | II               | Α                          |  |  |
|     | .2 upper longitudinal, end and intermediate be   | ams                             | П                | Α                          |  |  |
|     | .3 lower longitudinal, end and intermediate be   | ams                             | П                | Α                          |  |  |
|     | .4 doors   |                                 | П                | Α                          |  |  |
|     | .6 lids  |                                 | П                | Α                          |  |  |
| .7  | Scheme with the scope of control of welded joints  |                                 | П                | Ag                         |  |  |
| 1 1 |  |                                 |                  |                            |  |  |

<sup>&</sup>lt;sup>1</sup> In case of submission of technical documentation in parts, documents marked with the number (I) should be submitted with the first part. Documents marked with the number (II) may be submitted with the second and subsequent parts. The volume of technical documentation provided with the first part may be changed upon the agreement with RS.

Notes: 1. Documents in this Table documents may not be provided upon the agreement with RS, if all necessary information is contained in other documents, included in the set of technical documentation.

- 2. Documents containing information about structural elements that are not applicable to a specific container are not submitted to RS.
- 3. Additional scope of technical documentation submitted to RS for consideration for an offshore tank container, an offshore thermal container, an offshore container for bulk cargoes without pressure, etc. see Tables 1.4.1 of the relevant Parts of these Rules.

# PART VIII. TANK CONTAINERS WITH FIBER-REINFORCED PLASTICS (FRP) SHELL

# 1 GENERAL

# 9 **Para 1.4.1** is replaced by the following text:

**"1.4.1** The scope of the technical documentation, submitted for consideration, as well as the forms for confirming the compliance of the technical documentation with the RS requirements, are specified in Table 1.4.1 and may be changed upon the agreement with RS.

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<sup>&</sup>lt;sup>2</sup> A — approved; Ag — agreed; FI — for information. If necessary, the documents may be approved and/or agreed subject to the implementation of the comments of the RS letter.

| Ne  |     |  |                  | Table 1.4.1 |  |
|---|-----|--|------------------|-------------|--|
| Technical conditions or technical specification   | Nº  | Document name  | Set <sup>1</sup> |             |  |
| 2   | 1   | Technical conditions or technical specification                                  | I                | 1           |  |
| 1   | 2   |  |                  | Ag          |  |
| and 2.2.9 (including 2.2.12, 2.2.13 and 2.2.19), by the finite element method or another method that ensures the reliability of the results obtained  2. shell for strength in accordance with the requirements of 3.3.2.3, by the finite element method or another method that ensures the reliability of the results obtained  3. shell for strength in accordance with the requirements of national and/or international standards applicable to pressure vessels and applicable to tank containers  4. Ithe required capacity of the safety devices  4. List of dangerous goods classes or list of goods (if required in the rules for the carriage of goods, national or international regulations) that can be transported in tank container <sup>3</sup> 5. Prototype static test program, if testing will be carried out at the manufacture  1. Assembly drawing of:  1. Itank container  2. shell (indicating the orientation and reinforcement schemes of PCM I Asstructural layers and materials used)  3. side and end walls  4. stiffening ring  1. A  4. stiffening ring  1. A  5. cargo cooling and/or heating systems  6. spill box, if several and different, then each  7. ladder  8. walkways  1. A  8. walkways  1. II A  1. Drawings indicating dimensions and used materials of (if this information is not on the assembly drawings):  1. In plates (shell data, CSC and CCC)  1. In plates (shell data, end and intermediate beams  4. It were longitudinal, end and intermediate beams  4. It were longitudinal, end and intermediate beams  1. A lower long | 3   | Calculation of:  |                  |             |  |
| and 2.2.9 (including 2.2.12, 2.2.13 and 2.2.19), by the finite element method or another method that ensures the reliability of the results obtained  2. shell for strength in accordance with the requirements of 3.3.2.3, by the finite element method or another method that ensures the reliability of the results obtained  3. shell for strength in accordance with the requirements of national and/or international standards applicable to pressure vessels and applicable to tank containers  4. Ithe required capacity of the safety devices  4. List of dangerous goods classes or list of goods (if required in the rules for the carriage of goods, national or international regulations) that can be transported in tank container <sup>3</sup> 5. Prototype static test program, if testing will be carried out at the manufacture  1. Assembly drawing of:  1. Itank container  2. shell (indicating the orientation and reinforcement schemes of PCM I Asstructural layers and materials used)  3. side and end walls  4. stiffening ring  1. A  4. stiffening ring  1. A  5. cargo cooling and/or heating systems  6. spill box, if several and different, then each  7. ladder  8. walkways  1. A  8. walkways  1. II A  1. Drawings indicating dimensions and used materials of (if this information is not on the assembly drawings):  1. In plates (shell data, CSC and CCC)  1. In plates (shell data, end and intermediate beams  4. It were longitudinal, end and intermediate beams  4. It were longitudinal, end and intermediate beams  1. A lower long |     | .1 tank container for strength in accordance with the requirements of 2.2.8      | I                | Ag          |  |
| Section   Sect            |     |  |                  |             |  |
| 2   shell for strength in accordance with the requirements of 3.3.2.3, by the finite element method or another method that ensures the reliability of the results obtained   3   shell for strength in accordance with the requirements of national and/or international standards applicable to pressure vessels and applicable to tank containers   4   the required capacity of the safety devices   I   Ag   List of dangerous goods classes or list of goods (if required in the rules for the carriage of goods, national or international regulations) that can be transported in tank containers   I   Ag   |     | method or another method that ensures the reliability of the results             |                  |             |  |
| finite element method or another method that ensures the reliability of the results obtained  3 shell for strength in accordance with the requirements of national and/or international standards applicable to pressure vessels and applicable to tank containers  4 the required capacity of the safety devices  4 List of dangerous goods classes or list of goods (if required in the rules for the carriage of goods, national or international regulations) that can be transported in tank container <sup>3</sup> 5 Prototype static test program, if testing will be carried out at the manufacture    1 Ag  6 Assembly drawing of:  1 I tank container  2 shell (indicating the orientation and reinforcement schemes of PCM   1 A structural layers and materials used)  3 side and end walls  4 stiffening ring  |     |  |                  |             |  |
| results obtained 3. shell for strength in accordance with the requirements of national and/or international standards applicable to pressure vessels and applicable to tank containers 4. the required capacity of the safety devices 1. Ag 4. List of dangerous goods classes or list of goods (if required in the rules for the carriage of goods, national or international regulations) that can be transported in tank containers 5. Prototype static test program, if testing will be carried out at the manufacture III A 6. Assembly drawing of: 1. 1 tank container 2. shell (indicating the orientation and reinforcement schemes of PCM I A structural layers and materials used) 3. side and end walls 4. stiffening ring 5. cargo cooling and/or heating systems 1. II A 6. spill box, if several and different, then each 1. I Adder 1. ladder 1. ladder 1. ladder 1. ladder 1. la A walkways 1. II A 1. la handrails 1. II A 1. plates (shell data, CSC and CCC) 1. I Anarking 1. I A 1. pray insulation 1. I Drawings indicating dimensions and used materials of (if this information is not on the assembly drawings): 1. 1 corner and intermediate posts 1. 2 attachment points of shell with frame 1. 3 upper longitudinal, end and intermediate beams 1. 4 lower longitudinal, end and intermediate beams 1. A lower longitudinal, end for the manufacture of the thank container) 1. Program of incoming control of real materials and components submitted by their manufacturers 1. Program of incoming co          |     |  | I                | Ag          |  |
| 3   shell for strength in accordance with the requirements of national and/or international standards applicable to pressure vessels and applicable to tank containers   4   the required capacity of the safety devices   1   Ag     4   List of dangerous goods classes or list of goods (if required in the rules for the carriage of goods, national or international regulations) that can be transported in tank containers   II   FI     5   Prototype static test program, if testing will be carried out at the manufacture   II   A     6   Assembly drawing of:   1   Lank container   1   A     1   Lank container   1   A     2   shell (indicating the orientation and reinforcement schemes of PCM   I   A     3   side and end walls   I   A     4   stiffening ring   II   A     5   cargo cooling and/or heating systems   II   A     6   spill box, if several and different, then each   II   A     7   ladder   II   A     8   walkways   II   A     9   insulation   II   A     10   handrails   II   A     11   plates (shell data, CSC and CCC)   I   A     12   marking   II   A     13   Drawings indicating dimensions and used materials of (if this information is not on the assembly drawings);   1   Corner and intermediate posts   II   A     1   corner and intermediate posts   II   A     1   corner and intermediate posts   II   A     3   upper longitudinal, end and intermediate beams   II   A     4   lower longitudinal, end and intermediate beams   II   A     5   demandiation   II   A     6   manilids and necks (when manufactured at the manufacturer of the tank   Container)   II   A     9   Process specifications of the materials used, components and method for monitoring technological defects   II   Ag   Ag     9   Process specifications of raw materials and components submitted by their   II   Ag   Technical specifications of rew materials and components   II   Ag   Technical specifications of rew materials and components   II   Ag   Technical specifications of rew materials and components   II   Ag   Technical specifications of rew mat            |     |  |                  |             |  |
| international standards applicable to pressure vessels and applicable to tank containers  4 the required capacity of the safety devices  1 Ag  List of dangerous goods classes or list of goods (if required in the rules for the carriage of goods, national or international regulations) that can be transported in tank container³  5 Prototype static test program, if testing will be carried out at the manufacture    1 A  6 Assembly drawing of:  1  |     |  |                  |             |  |
| tank containers  4  |     |  |                  | Ag          |  |
| A   |     |  |                  |             |  |
| List of dangerous goods classes or list of goods (if required in the rules for the carriage of goods, national or international regulations) that can be transported in tank container?  5 Prototype static test program, if testing will be carried out at the manufacture II A  6 Assembly drawing of:  1 tank container 2 shell (indicating the orientation and reinforcement schemes of PCM I A structural layers and materials used) 3 side and end walls 4 stiffening ring III A 5 cargo cooling and/or heating systems III A 6 spill box, if several and different, then each III A 7 ladder III A 8 walkways III A 9 insulation III A 10 handralls 11 plates (shell data, CSC and CCC) I A 11 marking III A 11 plates (shell data, CSC and CCC) I A 12 marking III A 1 Drawings indicating dimensions and used materials of (if this information is not on the assembly drawings): 1 corner and intermediate posts 2 attachment points of shell with frame III A 1 lower longitudinal, end and intermediate beams III A 1 lower longitudinal, end and intermediate beams III A 1 lower longitudinal, end and intermediate beams III A 8 pipelines Container) 7 element to which the CCC requirements apply III A 8 Scheme with the scope of control of welded joints III A 8 Scheme with the scope of control of welded joints III A 9 Process specifications of raw materials and components submitted by their III Ag 11 rechnical specifications for FRP shells III Ag 12 Technical specifications for FRP shells III Ag 13 Instructions for FRP quality control and elimination of impermissible process III Ag 14 List of permissible process defects and operational damage in compliance with the calculation and experimental procedures approved by the Register III Ag 15 Test reports for coupon samples 16 Methods for determining the design characteristics of FRP used in the shell I Ag   |     |  | ₩.               |             |  |
| carriage of goods, national or international regulations) that can be transported in tank container³  Prototype static test program, if testing will be carried out at the manufacture II A  Assembly drawing of:  1.1 tank container 2 shell (indicating the orientation and reinforcement schemes of PCM I A structural layers and materials used) 3 side and end walls 4 stiffening ring III A 5 cargo cooling and/or heating systems III A 6 spill box, if several and different, then each III A 8 walkways III A 9 insulation III A 9 insulation III A 10 handrails III A 11 plates (shell data, CSC and CCC) II A 12 marking III A 13 Drawings indicating dimensions and used materials of (if this information is not on the assembly drawings); 11 corner and intermediate posts 2 attachment points of shell with frame 3 upper longitudinal, end and intermediate beams III A 16 manids and necks (when manufactured at the manufacturer of the tank container)  7 element to which the CCC requirements apply III A 8 Scheme with the scope of control of welded joints III A 9 Process specification for the manufacture of a FRP shell with an indication of III Ag 10 Specifications of rRP shells 11 Program of incoming control of raw materials and components submitted by their III Ag 11 Program of incoming control of raw materials and components submitted by their III Ag 12 Technical specifications for FRP shells 13 Instructions for FRP quality control and elimination of impermissible process defects and operational damage in compliance with the scalculation and experimental procedures approved by the Register or with the calculation and experimental procedures approved by the Register or with the calculation and experimental procedures approved by the Register or with the calculation and experimental procedures approved by the Register or with the calculation and experimental procedures approved by the Register or with the calculation and experimental procedures approved by the Register or with the calculation and experimental procedures approved by the R          |     |  | -                |             |  |
| In tank container?  | 4   |  | II               | FI          |  |
| Assembly drawing of:   1  |     |  |                  |             |  |
| 6 Assembly drawing of: 1  |     |  |                  |             |  |
| 1   | 5   | Prototype static test program, if testing will be carried out at the manufacture | "                | A           |  |
| 1   |     |  | <u> </u>         | <u> </u>    |  |
| 2   shell (indicating the orientation and reinforcement schemes of PCM structural layers and materials used)   3   side and end walls   | 6   |  | <del> </del>     |             |  |
| structural layers and materials used)  3. side and end walls  4. stiffening ring  5. cargo cooling and/or heating systems  11   |     |  | <u> </u>         |             |  |
| 3   side and end walls  |     | ]   \  |                  | Α           |  |
| A stiffening ring   |     |  | +                |             |  |
| .5 cargo cooling and/or heating systems   |     |  | <u> </u>         |             |  |
| Comment   Comm            |     |  |                  |             |  |
| 1   |     |  | _                |             |  |
| 8   walkways   II   A     9   insulation   II   A     10   handrails   II   A     11   plates (shell data, CSC and CCC)   I   A     12   marking   I   A     1   Drawings indicating dimensions and used materials of (if this information is not on the assembly drawings):   1   Corner and intermediate posts   II   A     2   attachment points of shell with frame   II   A     3   upper longitudinal, end and intermediate beams   II   A     4   lower longitudinal, end and intermediate beams   II   A     5   manlids and necks (when manufactured at the manufacturer of the tank container)     7   element to which the CCC requirements apply   II   A     8   Scheme with the scope of control of welded joints   II   Ag     9   Process specification for the manufacture of a FRP shell with an indication of the specifications of the materials used, components and method for monitoring technological defects     10   Specifications of raw materials and components submitted by their manufacturers     11   Program of incoming control of raw materials and components   II   Ag     12   Technical specifications for FRP shells   I   Ag     13   Instructions for FRP quality control and elimination of impermissible process   II   Ag     14   List of permissible process defects and operational damage in compliance with the calculation and experimental procedures approved by the Register   I   FI     16   Methods for determining the design characteristics of FRP used in the shell   I   Ag   |     |  | _                |             |  |
| 9   insulation   II   A   |     |  | _                |             |  |
| 10   handrails  |     |  | _                |             |  |
| 11   plates (shell data, CSC and CCC)   |     |  | _                |             |  |
| 12 marking  |     |  | <del>  ''</del>  |             |  |
| To Drawings indicating dimensions and used materials of (if this information is not on the assembly drawings):  1   |     |  | <del>i</del>     | ·           |  |
| drawings :   1   corner and intermediate posts   1   A   A   .2   attachment points of shell with frame   II   A   .3   upper longitudinal, end and intermediate beams   II   A   .4   lower longitudinal, end and intermediate beams   II   A   .6   manlids and necks (when manufactured at the manufacturer of the tank   container   .7   element to which the CCC requirements apply   II   A   .8   pipelines   II   A   A   .8   Scheme with the scope of control of welded joints   II   Ag   .7   Ag   Process specification for the manufacture of a FRP shell with an indication of the specifications of the materials used, components and method for monitoring technological defects   II   Ag   Ag   Ag   Ag   Ag   Ag   Ag   | 7   |  | on the a         |             |  |
| 1   Corner and intermediate posts   II   A  | •   |  | ,,, ,,,,         | (CCC)       |  |
| 2   attachment points of shell with frame   II   A  |     | 0 7  | II               | Α           |  |
| 3   upper longitudinal, end and intermediate beams  |     |  | II               |             |  |
| 1.4   lower longitudinal, end and intermediate beams  |     |  | II               | Α           |  |
| Container   Cont            |     |  | II               | Α           |  |
| 7   element to which the CCC requirements apply   |     |  | II               | Α           |  |
| 8   pipelines   II   A     8   Scheme with the scope of control of welded joints   II   Ag     9   Process specification for the manufacture of a FRP shell with an indication of the specifications of the materials used, components and method for monitoring technological defects     10   Specifications of raw materials and components submitted by their manufacturers   II   Ag     11   Program of incoming control of raw materials and components   II   A     12   Technical specifications for FRP shells   I   Ag     13   Instructions for FRP quality control and elimination of impermissible process   II   Ag     14   List of permissible process defects and operational damage in compliance with the standards, the use of which has been agreed with the Register, or with the calculation and experimental procedures approved by the Register     15   Test reports for coupon samples   I   FI     16   Methods for determining the design characteristics of FRP used in the shell   I   Ag   |     | container)   |                  |             |  |
| 8   pipelines   II   A     8   Scheme with the scope of control of welded joints   II   Ag     9   Process specification for the manufacture of a FRP shell with an indication of the specifications of the materials used, components and method for monitoring technological defects     10   Specifications of raw materials and components submitted by their manufacturers   II   Ag     11   Program of incoming control of raw materials and components   II   A     12   Technical specifications for FRP shells   I   Ag     13   Instructions for FRP quality control and elimination of impermissible process   II   Ag     14   List of permissible process defects and operational damage in compliance with the standards, the use of which has been agreed with the Register, or with the calculation and experimental procedures approved by the Register     15   Test reports for coupon samples   I   FI     16   Methods for determining the design characteristics of FRP used in the shell   I   Ag   |     | .7 element to which the CCC requirements apply                                   | Ш                | Α           |  |
| 9 Process specification for the manufacture of a FRP shell with an indication of the specifications of the materials used, components and method for monitoring technological defects  10 Specifications of raw materials and components submitted by their manufacturers  11 Program of incoming control of raw materials and components  12 Technical specifications for FRP shells  13 Instructions for FRP quality control and elimination of impermissible process II Ag defects  14 List of permissible process defects and operational damage in compliance with the standards, the use of which has been agreed with the Register, or with the calculation and experimental procedures approved by the Register  15 Test reports for coupon samples  1 FI  16 Methods for determining the design characteristics of FRP used in the shell I Ag  |     | .8 pipelines   |                  |             |  |
| the specifications of the materials used, components and method for monitoring technological defects  10 Specifications of raw materials and components submitted by their II Ag manufacturers  11 Program of incoming control of raw materials and components II A Technical specifications for FRP shells I Ag Instructions for FRP quality control and elimination of impermissible process II Ag defects  14 List of permissible process defects and operational damage in compliance with the standards, the use of which has been agreed with the Register, or with the calculation and experimental procedures approved by the Register  15 Test reports for coupon samples I FI Methods for determining the design characteristics of FRP used in the shell I Ag  |     |  |                  | Ag          |  |
| technological defects  10 Specifications of raw materials and components submitted by their II Ag manufacturers  11 Program of incoming control of raw materials and components II A Technical specifications for FRP shells  12 Technical specifications for FRP shells  13 Instructions for FRP quality control and elimination of impermissible process II Ag defects  14 List of permissible process defects and operational damage in compliance with the standards, the use of which has been agreed with the Register, or with the calculation and experimental procedures approved by the Register  15 Test reports for coupon samples  1 FI  16 Methods for determining the design characteristics of FRP used in the shell I Ag   | 9   |  | II               | Ag          |  |
| 10 Specifications of raw materials and components submitted by their II Ag manufacturers  11 Program of incoming control of raw materials and components II A 12 Technical specifications for FRP shells I Ag 13 Instructions for FRP quality control and elimination of impermissible process II Ag defects  14 List of permissible process defects and operational damage in compliance with the standards, the use of which has been agreed with the Register, or with the calculation and experimental procedures approved by the Register  15 Test reports for coupon samples I FI Methods for determining the design characteristics of FRP used in the shell I Ag  |     |  |                  |             |  |
| manufacturers  11 Program of incoming control of raw materials and components  12 Technical specifications for FRP shells  13 Instructions for FRP quality control and elimination of impermissible process II Ag defects  14 List of permissible process defects and operational damage in compliance with II Ag the standards, the use of which has been agreed with the Register, or with the calculation and experimental procedures approved by the Register  15 Test reports for coupon samples  16 Methods for determining the design characteristics of FRP used in the shell I Ag  |     |  |                  |             |  |
| 11       Program of incoming control of raw materials and components       II       A         12       Technical specifications for FRP shells       I       Ag         13       Instructions for FRP quality control and elimination of impermissible process defects       II       Ag         14       List of permissible process defects and operational damage in compliance with the standards, the use of which has been agreed with the Register, or with the calculation and experimental procedures approved by the Register       II       Ag         15       Test reports for coupon samples       I       FI         16       Methods for determining the design characteristics of FRP used in the shell       I       Ag   | 10  |  | II               | Ag          |  |
| 12 Technical specifications for FRP shells 13 Instructions for FRP quality control and elimination of impermissible process II Ag defects 14 List of permissible process defects and operational damage in compliance with the standards, the use of which has been agreed with the Register, or with the calculation and experimental procedures approved by the Register 15 Test reports for coupon samples 16 Methods for determining the design characteristics of FRP used in the shell I Ag   | 4.4 |  | <del> </del>     |             |  |
| 13 Instructions for FRP quality control and elimination of impermissible process II Ag defects  14 List of permissible process defects and operational damage in compliance with the standards, the use of which has been agreed with the Register, or with the calculation and experimental procedures approved by the Register  15 Test reports for coupon samples  16 Methods for determining the design characteristics of FRP used in the shell I Ag   |     |  |                  |             |  |
| defects  14 List of permissible process defects and operational damage in compliance with the standards, the use of which has been agreed with the Register, or with the calculation and experimental procedures approved by the Register  15 Test reports for coupon samples  16 Methods for determining the design characteristics of FRP used in the shell I Ag  |     |  |                  |             |  |
| 14 List of permissible process defects and operational damage in compliance with the standards, the use of which has been agreed with the Register, or with the calculation and experimental procedures approved by the Register  15 Test reports for coupon samples  16 Methods for determining the design characteristics of FRP used in the shell  1 Ag  | 13  |  | "                | Ag          |  |
| the standards, the use of which has been agreed with the Register, or with the calculation and experimental procedures approved by the Register  15 Test reports for coupon samples  16 Methods for determining the design characteristics of FRP used in the shell  1 Ag   | 14  |  | II               | Aa          |  |
| calculation and experimental procedures approved by the Register  15 Test reports for coupon samples  16 Methods for determining the design characteristics of FRP used in the shell I Ag   | '-  |  | "                |             |  |
| 15 Test reports for coupon samples I FI 16 Methods for determining the design characteristics of FRP used in the shell I Ag   |     |  |                  |             |  |
| 16 Methods for determining the design characteristics of FRP used in the shell I Ag   | 15  |  |                  | FI          |  |
|   |     |  | I                |             |  |
|   |     |  |                  | <u> </u>    |  |

| Nº | Document name | Set1 | Review              |
|----|---------------|------|---------------------|
|    |               |      | result <sup>2</sup> |

- <sup>1</sup> In case of submission of technical documentation in parts, documents marked with the number (I) should be submitted with the first part. Documents marked with the number (II) may be submitted with the second and subsequent parts. The volume of technical documentation provided with the first part may be changed upon the agreement with RS.
- <sup>2</sup> A approved; Ag agreed; FI for information. If necessary, the documents may be approved and/or agreed subject to the implementation of the comments of the RS letter.
- <sup>3</sup> RS may additionally request documents confirming the resistance of the materials of the tank container, its fittings and seals to cargo.
- Notes: 1. Specified in this table documents may not be provided upon the agreement with RS, if all necessary information is contained in other documents, included in the set of technical documentation.

  2. Documents containing information about structural elements that are not applicable to a specific container are not submitted to RS.

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