



RUSSIAN MARITIME REGISTER OF SHIPPING

CIRCULAR LETTER

No. 340-24-1257c

dated 27.08.2019

Re:

amendments to the Rules for the Classification Surveys of Ships in Service, 2019, ND No. 2-020101-012-E

Item(s) of supervision:

ships and offshore installations in service

Entry-into-force date:

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Appendices:

Appendix 1: information on amendments introduced by the Circular Letter

Appendix 2: text of amendments to Parts I "General Provisions", II "Survey Schedule and Scope", III "Additional Surveys of Ships Depending on Their Purpose and Hull Material", Appendices 1.1 "List of Ship Technical Documentation", 2 "Instructions for Determination of the Technical Condition, Renovation and Repair of the Hulls of Sea-Going Ships", 4 "Instruction on Residual Thickness Measurements of Ship's Elements"

Director General

Konstantin G. Palnikov

Text of CL:

We hereby inform that the Rules for the Classification Surveys of Ships in Service shall be amended due to clarifying interpretations of several provisions of the Rules regarding frequently arising matters and receipt of new normative proposals.

It is necessary to do the following:

1. Familiarize the RS surveyors and interested organizations in the area of the RS Branch Offices' activity with the content of the Circular Letter.
2. Apply the provisions of the Circular Letter during surveys of ships and offshore installations.
3. RS Branch Offices for in-service supervision shall take the actions specified in item 12 of the Table in Appendix 1.

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

Part I: paras 2.1, 5.12.4, 5.12.7 and 7.1.7;

Part II: Table 2.1.1, paras 2.2.1.9, 2.2.3.5.1, 2.3.2.2, 2.4.1.4.8, 2.4.2.2.6, 2.4.2.6.6, 2.5.5.1, 2.5.5.1.1, 2.5.5.1.2, 2.5.5.1.4, 2.5.5.2, 2.5.5.2.1, 2.5.5.2.2, 2.5.5.2.6, 2.5.5.2.7, 2.5.7.4, 2.11.9.2.2 and 2.11.9.2.3, Chapter 2.12, and para 4.9.2;

Part III: paras 1.3.3 and 1.3.4;

Appendix 1.1: para 1.17;

Appendix 2: heading of Appendix 2, para 3.1.7, Section 6;

Appendix 4: paras 4.3.9, 4.4.9 and 7.1.1, and Appendix A.

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

Nos.	Amended paras/chapters/sections	Information on amendments	Number and date of the Circular Letter	Entry-into-force date
1	Part I, Chapter 2.1	The definition of the term "date of build of the ship" has been specified	340-24-1257c of 27.08.2019	01.10.2019
2	Part I, para 5.12.4	References have been specified to the appropriate paras of the RS rules and the requirement for the RHO authorization for review of permissible residual scantlings calculations has been deleted	340-24-1257c of 27.08.2019	01.10.2019
3	Part I, para 5.12.7	Para 5.12.7 is modified in connection with deletion of renovation procedure and introduction of the requirement for checking the availability/updating of information on the permissible scantlings of hull structures and other ship's elements	340-24-1257c of 27.08.2019	01.10.2019
4	Part I, Chapter 7.1	The Chapter has been supplemented with para 7.1.7 containing clarification of the RS surveyor actions when crediting the works performed by service suppliers not having the RS recognition service supplier not having the RS recognition	340-24-1257c of 27.08.2019	01.10.2019
5	Part II, Table 2.1.1	Item 1.4 has been amended in respect of anticorrosive protection	340-24-1257c of 27.08.2019	01.10.2019
6	Part II, para 2.2.1.9	New para 2.2.1.9 has been introduced relating to equal classification and statutory requirements for survey of separate items of technical supervision on the ships covered by IMO resolution A.1120(30), considering provisions of IACS UR Z7 (Rev.28, May 2019)	340-24-1257c of 27.08.2019	01.10.2019

Nos.	Amended paras/chapters/sections	Information on amendments	Number and date of the Circular Letter	Entry-into-force date
7	Part II, para 2.2.3.5.1	The para has been supplemented with requirement for annual tightness test for cargo hold hatch covers on ships over 20 years of age for harmonization with a similar requirement in 2.2.3.6.4, Part II "Carrying Out Classification Surveys of Ships" of the Guidelines	340-24-1257c of 27.08.2019	01.10.2019
8	Part II, para 2.3.2.2	The requirements for intermediate survey of hull for ships over 20 years of age have been specified	340-24-1257c of 27.08.2019	01.10.2019
9	Part II, para 2.4.1.4.8	The para has been supplemented with clarifications of the para provisions application	340-24-1257c of 27.08.2019	01.10.2019
10	Part II, para 2.4.2.2.6	The para has been supplemented with the requirements for survey of lower areas of superstructure/deckhouse walls, structures inside machinery, service, accommodation, working and other similar spaces, enclosed parts of the upper deck plating	340-24-1257c of 27.08.2019	01.10.2019
11	Part II, para 2.4.2.6.6	The para has been supplemented with the requirements for thickness measurements of lower areas of superstructure/ deckhouse walls, enclosed parts of the upper deck plating, structures inside machinery, service, accommodation, working and other similar spaces	340-24-1257c of 27.08.2019	01.10.2019

Nos.	Amended paras/chapters/sections	Information on amendments	Number and date of the Circular Letter	Entry-into-force date
12	Part II, para 2.5.5.1	Applicable requirements have been specified to non-self-propelled ships, as well as berth-connected ships retaining self-propelled ship distinguishing marks in the class notation	340-24-1257c of 27.08.2019	01.10.2019 (The RS Branch Offices for in-service supervision of non-self-propelled ships, for which due dates of bottom survey in dry dock are assigned in accordance with 2.5.5.2.6, shall introduce amendments in accordance with 2.5.5.1.4 (where necessary) not later than 01.10.2019)
13	Part II, para 2.5.5.1.1	Applicable requirements have been specified for non-self-propelled ships, as well as berth-connected ships retaining self-propelled ship distinguishing marks in the class notation	340-24-1257c of 27.08.2019	01.10.2019 (refer to para 12)
14	Part II, para 2.5.5.1.2	Applicable requirements have been specified for non-self-propelled ships, as well as berth-connected ships retaining self-propelled ship distinguishing marks in the class notation	340-24-1257c of 27.08.2019	01.10.2019 (refer to para 12)
15	Part II, para 2.5.5.1.4	The para has been supplemented with clarifications of survey in dry dock	340-24-1257c of 27.08.2019	01.10.2019 (refer to para 12)
16	Part II, para 2.5.5.2	Requirements for non-self-propelled ships have been deleted	340-24-1257c of 27.08.2019	01.10.2019 (refer to para 12)
17	Part II, para 2.5.5.2.1	Requirements for non-self-propelled ships have been deleted	340-24-1257c of 27.08.2019	01.10.2019 (refer to para 12)
18	Part II, para 2.5.5.2.2	Requirements for non-self-propelled ships have been deleted	340-24-1257c of 27.08.2019	01.10.2019 (refer to para 12)
19	Part II, para 2.5.5.2.6	The para has been deleted	340-24-1257c of 27.08.2019	01.10.2019 (refer to para 12)

Nos.	Amended paras/chapters/sections	Information on amendments	Number and date of the Circular Letter	Entry-into-force date
20	Part II, para 2.5.5.2.7	Reference to 2.5.5.2.6 has been deleted. The para has been renumbered 2.5.5.2.6	340-24-1257c of 27.08.2019	01.10.2019 (refer to para 12)
21	Part II, para 2.5.7.4	Requirements for the fit bolts replacement have been specified	340-24-1257c of 27.08.2019	01.10.2019
22	Part II, para 2.11.9.2.2	The para has been replaced due to specification of the para scope of application	340-24-1257c of 27.08.2019	01.10.2019
23	Part II, para 2.11.9.2.3	The para scope of application has been specified	340-24-1257c of 27.08.2019	01.10.2019
24	Part II, Chapter 2.12	New Chapter 2.12 has been introduced regarding anticorrosive protection	340-24-1257c of 27.08.2019	01.10.2019
25	Part II, para 4.9.2	The para has been supplemented with the requirements for checking that materials and products provided for replacement or repair do not contain asbestos during modernization, repair or conversion of ship	340-24-1257c of 27.08.2019	01.10.2019
26	Part III, Chapter 1.3	Paras 1.3.3.5, 1.3.3.5.1 and 1.3.3.5.2 have been introduced containing requirements for bulk carriers and oil tankers regarding the means of access to structures	340-24-1257c of 27.08.2019	01.10.2019
27	Part III, Chapter 1.3	Paras 1.3.3.6 and 1.3.3.6.1 have been introduced containing requirements regarding the means of access to structures	340-24-1257c of 27.08.2019	01.10.2019
28	Part III, Chapter 1.3	Para 1.3.4.7 has been introduced relating to application of alternative means of access	340-24-1257c of 27.08.2019	01.10.2019
29	Appendix 1.1, Section 1	The Section has been supplemented with paras 1.17, 1.17.1 – 1.17.11 relating to dynamic positioning system documentation	340-24-1257c of 27.08.2019	01.10.2019

Nos.	Amended paras/chapters/sections	Information on amendments	Number and date of the Circular Letter	Entry-into-force date
30	Appendix 2, heading	The heading of the Appendix 2 has been specified in connection with deletion of the term "renovation"	340-24-1257c of 27.08.2019	01.10.2019
31	Appendix 2, para 3.1.7	The para has been replaced due to deleting duplicate requirements in respect of TM Reports	340-24-1257c of 27.08.2019	01.10.2019
32	Appendix 2, Section 6	Section 6 regarding renovation procedure is deleted	340-24-1257c of 27.08.2019	01.10.2019
33	Appendix 4, para 4.3.9	The para has been supplemented with clarifications of actions of the RS surveyor and the TM operator	340-24-1257c of 27.08.2019	01.10.2019
34	Appendix 4, para 4.4.9	The para has been supplemented with the requirement for sending reports drawn up with the use of the "VOLNA" software to the RHO server	340-24-1257c of 27.08.2019	Not later than 01.10.2019
35	Appendix 4, para 7.1.1	Amendments have been made due to specification of the requirements for drawing up TM Report	340-24-1257c of 27.08.2019	Not later than 01.10.2019
36	Appendix 4, Annex A	Mandatory requirements have been introduced relating to procedure for checking available/updated information on permissible scantlings of hull structures	340-24-1257c of 27.08.2019	Not later than 01.10.2019

RULES FOR THE CLASSIFICATION SURVEYS OF SHIPS IN SERVICE, 2019,

No. 2-020101-012-E

PART I. GENERAL PROVISIONS

2.1 DEFINITIONS APPLIED TO ALL SHIPS

1 **Definition of "Date of build of the ship"** is replaced by the following text:

"Date of build of the ship is the date (day, month and year) when the new construction survey process of the Register is actually completed and the Classification Certificate is issued to the ship.

After conversion/modernization is completed, the date of build shall remain assigned to the ship.

Where a complete replacement or addition of a major portion of the ship (e.g., complete forward or after section, a complete main cargo section (which may include a complete cargo hold/tank), a complete deck section of a passenger ship or a hull structure obtained after conversion of a single hull to a double hull ship) is involved as a result of conversion/modernization, the following shall apply:

the date of build (date, month and year) associated with each major portion of the ship shall be indicated where it has been agreed that the newer structure shall be on a different survey cycle;

survey requirements shall be based on the date of build associated with each major portion of the ship;

anniversary dates of the subsequent surveys of the replaced or built-in hull major parts/portions shall be assigned the same as for the whole ship, i.e. one anniversary date for the ship as a whole."

5 ASSESSMENT OF THE SHIP TECHNICAL CONDITION

2 **Para 5.12.4** is replaced by the following text:

"**5.12.4** The permissible residual scantlings calculated using standards specified in 4.2.1 – 4.2.5 of Appendix 2 shall be determined for all hull members, hull cross-sections, parameters of which are regulated by the Rules for Construction and for which the residual thickness measurements shall be performed when the ship is in service. The permissible residual scantlings calculations shall be agreed with the Register. The possibility of introduction of these calculations as permissible wear of hull structures in ship's file shall be finally decided by the RS Branch Office for in-service supervision (refer also to 5.12.9). Requirements for the content of residual scantlings calculations are given in 4.1.11 of Appendix 2 to these Rules. The permissible residual scantlings previously agreed with the Register may be used, including permissible hull section modulus, where no modifications in hull structures are made and all conditions specified in 4.2.2, 4.2.3 and 4.2.5 of Appendix 2, as applicable to the value of permissible residual thickness, are complied with."

3 **Para 5.12.7** is replaced by the following text:

"**5.12.7** The Register bears responsibility for correct wear standards used for technical condition assessment. At that, the provisions of this Chapter, Appendices 2 and 4, including those

regarding the established procedure for checking the availability/updating of information on the permissible scantlings of hull structures and other ship's elements shall be met (refer to Annex A to Appendix 4).".

7 SERVICES PROVIDED BY SERVICE SUPPLIERS AND USED BY RS SURVEYORS DURING SHIPS' SURVEY

7.1 GENERAL

4 The Chapter is supplemented by para 7.1.7 reading as follows:

"**7.1.7** In case the RS surveyor, when carrying out statutory surveys, uses the results of works performed by service suppliers, these service suppliers shall have the RS recognition the Flag State MA or an organization recognized by this MA.

In case the RS surveyor, when carrying out classification surveys, uses the results of works performed by service suppliers, these service suppliers shall have the RS recognition. In some cases (e.g. absence of the RS-recognized organization in the area of a ship submittal to survey, impossibility of a service supplier recognized by the Register to get to a place where the service shall be provided, etc.), the RS surveyor may give a permission to perform such works to an organization having a valid recognition of ACS – IACS member on condition that before commencement of works the survey of organization will be done by the Register on the basis of request from this organization or shipowner to the extent as required by section 8, Part I "General Regulations for Technical Supervision" of RTSCS, except for requirements for practical demonstration and report preparation. The results of survey by RS are to be recorded in the relevant RS Report (form 6.3.19 or form 6.3.29).

In all of the above cases, the shipowner and the service supplier not having the RS recognition nominated by the shipowner shall be warned that, if a service not compliant with the RS requirements and/or international requirements is provided, the works performed will not be accepted by the Register and they shall be performed again by the service supplier recognized by the Register."

PART II. SURVEY SCHEDULE AND SCOPE

2 PERIODICAL SURVEYS

2.1 SUMMARIZED SCOPE OF PERIODICAL SURVEYS OF A SHIP IN TABULAR FORM

5 **Table 2.1.1. Item 1.4 "Corrosion protection"**. The text in columns 1 – 19 is replaced by the following:

"**1.4** Anticorrosive protection and coatings. The scope and procedure of survey are determined proceeding from the protection method and type in compliance with the applicable provisions of Part II "Survey Schedule and Scope" and Part III "Additional Surveys of Ships Depending on Their Purpose and Hull Material" (refer to 2.12).".

2.2 ANNUAL SURVEY

6 **Para 2.2.1** is supplemented by the new para 2.2.1.9 as follows:

"**2.2.1.9** For ships covered by requirements of the international conventions and codes (SOLAS-74/78, International Convention on Load Lines, etc.), some requirements for survey of the items of technical supervision apply both to classification and statutory requirements. Thus,

at least, the following requirements mentioned in IMO resolution A.1120(30) apply both to classification and statutory requirements (information on the requirements for survey in compliance with the IMO resolution is available at <http://idocs.rs-class.org>, as well as in the program STORM regarding drawing-up of the Survey Checklist):

- 1) Annual survey
 - 1.1) Load line – 1.2.2.1–1.2.2.15, Annex 2, (refer to 2.3, Part III "Survey of Ships in Compliance with International Conventions, Codes, Resolutions and Rules for the Equipment of Sea-Going Ships" of the Guidelines).
 - 1.2) Hull – 2.2.2.1–2.2.2.8.1, 2.2.2.31–2.2.2.38 (except for 2.2.2.32, 2.2.2.36 and 2.2.2.37), Annex 1.
 - 1.3) Machinery installation, machinery, and electrical installation and equipment – 2.2.2.9 – 2.2.2.30 (except for 2.2.2.19 and 2.2.2.29), Annex 1.
 - 1.4) Fire-fighting equipment and fire protection – 1.2.2.1–1.2.2.17, Annex 1 (1.2.2.16 is applicable for fire protection).
 - 1.5) Additional requirements for oil tankers – 1.2.3.1–1.2.3.9 (except for 1.2.3.8), 2.2.3.1 – 2.2.3.18, Annex 1.
 - 1.6) Additional requirements for chemical tankers – 2.2.4.1, Annex 1 and 1.2.2.1–1.2.2.20 and 1.2.2.22, Annex 5.
 - 1.7) Additional requirements for gas carriers – 2.2.4.1, Annex 1 and 2.2.2.1–2.2.2.31 (except for 2.2.2.27), Annex 5.
- 2) Intermediate survey
In addition to annual survey, the following requirements shall be met:
 - 2.1) Ballast tanks and cargo spaces – 2.3.2.2–2.3.2.4, Annex 1.
 - 2.2) Additional requirements for oil tankers – 2.3.3.2–2.3.3.3, Annex 1.
 - 2.3) Additional requirements for chemical tankers – 1.3.2.2–1.3.2.4, Annex 5.
 - 2.4) Additional requirements for gas carriers – 2.3.2.2–2.3.2.6 (except for 2.3.2.5), Annex 5."

7 **Para 2.2.3.5.1** is supplemented by the following text:

"Tightness tests of cargo hold hatch covers shall be conducted at each annual survey on ships over 20 years of age, as well as where the tightness is questioned."

2.3 INTERMEDIATE SURVEY

8 **Para 2.3.2.2** is supplemented by the following text:

"Where necessary, based on the examination results, the scope of survey and thickness measurements may be extended, if requested by the RS surveyor."

2.4 SPECIAL SURVEY

9 **Para 2.4.1.4.8** is supplemented by the following text:

"When applying this requirement, it shall be taken into account that for ships over 15 years of age the specified scope of each subsequent special survey is the same and does not depend on the further age increase. Along with that, the provisions of 4.6.5.1, Part II "Carrying Out Classification Surveys of Ships" of the Guidelines on reinstatement of class after its suspension due to the undue term of ship submission for special survey, according to which the ship's class may be reinstated based on satisfactory results of survey, where failure to submit was the reason of class suspension not considering age of the ship on the date of actual submission.

Based on the definition of special circumstances in 2.1, Part I "General Provisions" of the Rules, the next period of class for ships over 15 years of age may start from the date of actual completion of such special survey, provided the results of special survey of the ship conducted in the scope prescribed for the ship are satisfactory."

10 **Para 2.4.2.2.6** is replaced by the following text:

"2.4.2.2.6 During survey special attention shall be paid to the following:
areas where hull section varies appreciably and in way of main longitudinals;
shell plating near openings (side ports, side scuttles, scuppers, fittings of systems echo-sounder vibrators and plating under sounding pipes, etc.);
interfaces of structures made of aluminium alloys and those made of steel with a view to assessing corrosion intensity and the condition of insulating pads in joints;
sheer strake, deck stringer and bulwark in way of end bulkheads of superstructures and upper deck breaks;
deck plating in way of hatch corners and long deckhouses, and in the corners of dredging cut in hoppers and open barges;
lower areas of superstructure/deckhouse walls;
structures inside machinery, service, accommodation, working and other similar spaces;
enclosed parts of the upper deck plating.

During survey the provisions of 2.2.2.3.1, Part II "Carrying Out Classification Surveys of Ships" of the Guidelines shall be also taken into consideration.

In oil tankers, the bottom and bulkhead plating in way of cargo piping suction, attachments of protectors and other equipment shall be thoroughly examined from inside the cargo tanks. Beginning from the second special survey, additionally the attention shall be paid to the lower sections of watertight bulkheads, propeller shaft recesses and tunnels, as well as the lower sections of the end bulkheads of superstructures, hatch coamings, ventilator cowls in cargo tanks, ventilator pipes and ventilators."

11 **Para 2.4.2.6.6** is replaced by the following text:

"2.4.2.6.6 In addition to Table 2.4.2.6.2-1, starting from the fourth special survey (ships over 15 years of age), thickness measurements of ventilator pipe coamings and lower parts of platings of all superstructures and deckhouses located on the exposed parts of decks, all exposed parts of decks of superstructures/deckhouses; random thickness measurements of the lower areas of superstructure/deckhouse walls; enclosed parts of the upper deck plating; as well as of members not replaced during repair shall be carried out. When required upon examination results, the RS surveyor may require thickness measurements of ship's hull structures, superstructures/deckhouses, including structures in machinery, service, accommodation, working and other similar spaces."

2.5 SURVEY OF THE OUTSIDE OF THE BOTTOM OF SHIPS AND OFFSHORE INSTALLATIONS

12 **Para 2.5.5.1** is replaced with the following text:

"2.5.5.1 Berth-connected ships, floating facilities being operated in sheltered waters and non-self-propelled ships."

13 **Para 2.5.5.1.1** is replaced with the following text:

"2.5.5.1.1 Provisions of 2.5.5.1.4 – 2.5.5.1.8 shall apply to non-self-propelled ships, steel and reinforced concrete berth-connected ships as well as to floating facilities (hereinafter referred to as "the ships") being operated in sheltered waters such as floating workshops, floating hotels, hostels etc., except for berth-connected ships retaining self-propelled ship distinguishing marks in the class notation (e.g. self-propelled ships used as floating oil/gas storage units), floating docks (refer to 2.5.5.5), berth-connected passenger ships and berth-connected nuclear floating facilities (refer to 2.5.5.4 and 2.5.5.6)."

14 **Para 2.5.5.1.2** is replaced by the following text:

"**2.5.5.1.2** Provisions of 2.5.3 shall apply to berth-connected and non self-propelled ships being operated in non-sheltered waters as well as to berth-connected ships retaining self-propelled ship distinguishing marks in the class notation (e.g. ships used as floating oil/gas storage units (FSO/FPSO) regardless of area of operation. At that, notwithstanding the provisions of 2.5.3.3, upon the shipowner's written request, bottom surveys may be carried out as in-water survey according to 2.5.8 as alternative to bottom survey in dry dock by decision of the RS Branch Office for in-service supervision. Such decision shall be made in accordance with 2.5.1.8, provided the compliance of the ship's bottom condition with these Rules may be confirmed by results of overall survey of the ship's bottom structures accessible in all places from inside."

15 **Para 2.5.5.1.4** is supplemented by the following text:

"During periodical surveys of the ship, its dry dock survey is not required, provided internal examination of the compartments as well as diver's examination or in-water survey using underwater television shows that there are no defects, damages and water ingress."

16 **Para 2.5.5.2** is replaced by the following text:

"**2.5.5.2** Ships designed for navigation in fresh waters only and/or in confined port waters only."

17 **Para 2.5.5.2.1.** The sentence "These requirements shall apply to non-self-propelled ships." is deleted.

18 **Para 2.5.5.2.2** is replaced by the following text:

"**2.5.5.2.2** Requirements of 2.5.4 shall apply to ships designed for navigation in fresh waters or confined port waters only classified as group 2 ships."

19 **Para 2.5.5.2.6** is deleted.

20 **Para 2.5.5.2.7.** The text "and 2.5.5.2.6" is deleted. The para is renumbered 2.5.5.2.6.

21 **Para 2.5.7.4.** The last but one paragraph is replaced by the following text:

"In case the fasteners between flanged connections of rudder blade and/or nozzle and rudder shaft are disassembled, measurements and close-up survey of fit bolts shall be carried out. This shall include flaw detection of fit bolts by non-destructive testing approved by RS, if it was required upon measurements and close-up survey. If any defects are found, the fit bolts shall be replaced by the new ones. In this regard, the documents shall be submitted confirming compliance of material of the new fit bolts with that in the as-built documentation."

2.11 SURVEY OF SHAFTING, PROPELLERS AND AMSS

22 **Para 2.11.9.2.2** is replaced by the following text:

"**2.11.9.2.2** In cases where the CPP survey is not covered by 2.10.9.2.3, the survey shall be carried out in accordance with 2.5.7.5."

23 **Para 2.11.9.2.3.** The first paragraph is replaced by the following text:

"**2.11.9.2.3** The CPP survey in dismantled condition shall be carried out at least once in 5 years (may be combined with special or intermediate surveys). The following shall be performed:"

24 Section 2 is supplemented by the new Chapter 2.12 as follows:

"2.12 ANTICORROSIVE PROTECTION AND COATINGS

The scope and procedure of survey are determined proceeding from the protection method and type in compliance with the applicable provisions of Part II "Survey Schedule and Scope" and Part III "Additional Surveys of Ships Depending on Their Purpose and Hull Material". Maintenance, repair and renewal of anticorrosive protection shall be the shipowner's responsibility. It is recommended to restore anticorrosive protective coatings in poor condition or destroyed completely which were applied according to 1.2.5, Part II "Hull" and 6.5, Part XIII "Materials" of the Rules for Construction (refer also to IACS URs Z8 and Z9), applicable provisions of regulation II-1/3-2 of SOLAS-74/78, as amended (IMO resolutions MSC.215(82) and MSC.216(82)), regulation II-1/3-11 of SOLAS-74/78, as amended (IMO resolutions MSC.288(87) and MSC.291(87)).

Sacrificial protection shall be restored in case of poor condition in accordance with documentation on its application and manufacturer's recommendations (in particular, sacrificial protection is required by 12.3, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for Construction).

The main requirements for anticorrosive protection and coatings are given in 1.2.5 and 3.3.5, Part II "Hull" and 6.5, Part XIII "Materials" of the Rules for Construction, as well as in Section 3, Part III "Technical Supervision during Manufacture of Materials" of RTSCS, IACS URs Z8 and Z9, applicable provisions of regulation II-1/3-2 of SOLAS-74, as amended (IMO resolutions MSC.215(82) and MSC.216(82)), regulation II-1/3-11 of SOLAS-74/78, as amended (IMO resolutions MSC.288(87) and MSC.291(87)). Maintenance, repair and renewal of anticorrosive protective coatings applied on structures in accordance with the applicable requirements of the Rules for Construction and international requirements shall be performed in accordance with manufacturer's recommendations, and the applicable requirements of the RS rules (refer to Section 3, Part III "Technical Supervision during Manufacture of Materials" of RTSCS), as well as 2.12.7 of the Guidelines on Technical Supervision of Ships under Construction. A record on the coating application/renewal shall be made by the RS surveyors in the List of Survey's Status for the ships with protective coatings applied/renewed in accordance with the RS rules and international documents, including a reference to the appropriate requirement of the RS rules and/or international standard (in particular, this also applies to the cases described in Appendix 5.2-1, 5.2.4.2, 5.3.3.2.3, 5.4.2.2.3, 5.9.6, 5.12.3.1.2.1.4, 5.12.3.2, 6.1.1.7, 6.2.2.4.5, 6.2.4.2, 6.3.2.3.11, etc., Part III "Technical Supervision during Manufacture of Materials" of RTSCS, as well as 3.3.5, Part II "Hull" and Section 6, Appendix 3 to the Rules for Construction).".

4 OTHER SURVEYS

4.9 SURVEYS ASSOCIATED WITH REPAIR, CONVERSION AND MODERNIZATION OF SHIPS

25 **Para 4.9.2** is supplemented by the following text:

"During modernization, repair or conversion of ships, MODU, FOP and offshore installations, in particular, during replacement of insulation in fire structures and repair/replacement of equipment, regardless of the SOLAS-74 applicability to the ship and irrespective of the date of construction, provisions of IMO circulars MSC.1/Circ.1374, MSC.1/Circ.1379 and MSC.1/Circ.1426, Appendix 48 to the Guidelines and IACS recommendation No. 130, prohibiting installation of the materials and products containing asbestos on board ship (refer to 1.8.21, Part III "Survey of Ships in Compliance with International Conventions, Codes, Resolutions and Rules for the Equipment of Sea-Going Ships" of the Guidelines) and to perform repair and

maintenance using such materials or products, shall be met. The shipowner shall be responsible for ensuring that these provisions are met.

For ships, MODU, FOP and offshore installations constructed or converted before 01.01.2011 (according to IACS UI SC249, with keel laid, or at a similar stage of construction or conversion before 01.07.2012), where materials or products containing asbestos are still found, provisions of IMO circular MSC.1/Circ.1374 (in particular, para 4), as well as the applicable national requirements of the Flag State MA shall be met.

Remark. From 01.10.2008, for all new ships and offshore installations, which design documentation was reviewed for compliance with the Rules for Construction in force after 30.09.2008, the use of asbestos was only permitted by the Rules for Construction:

- for vanes used in rotary vane compressors and rotary vane vacuum pumps;
- in watertight joints and linings used for the circulation of fluids when, at high temperature in excess of 350 °C or pressure in excess of 7 MPa, there is a risk of fire, corrosion or toxicity; and
- in supple and flexible thermal insulation assemblies used for temperatures above 1000 °C.

From 01.01.2011, the Rules for Construction prohibit the use of asbestos anywhere, including in the above products. The use of asbestos containing materials in structures, materials and products, machinery installations, machinery or equipment covered by the requirements of Parts VI "Fire Protection", VII "Machinery Installations", VIII "Systems and Piping", IX "Machinery", X "Boilers, Heat Exchangers and Pressure Vessels" and XII "Refrigerating Plants" shall be prohibited.

For ships covered by the SOLAS-74 as amended requirements, the following shall be met:

materials and products for ships built before 01.07.2002 may contain asbestos, but in this case provisions of IMO circular MSC./Circ.1045 "Guidelines for Maintenance and Monitoring of On-Board Materials Containing Asbestos" shall be met.

For ships built on or after 01.07.2002 but before 01.01.2011:

new regulation II-1/3-5 is has been introduced into SOLAS-74as amended, prohibiting installation of materials or products containing asbestos on board all ships, except for the following items:

- for vanes used in rotary vane compressors and rotary vane vacuum pumps;
- in watertight joints and linings used for the circulation of fluids when, at high temperature in excess of 350 °C or pressure in excess of 7 MPa, there is a risk of fire, corrosion or toxicity; and
- in supple and flexible thermal insulation assemblies used for temperatures above 1000 °C.

For ships built on or after 01.01.2011, in accordance with the amendments introduced into SOLAS-74 by IMO resolution MSC.282(86), installation of materials or products containing asbestos is prohibited beginning from 01.01.2011.

Detailed information on application of the above regulation is given in IMO circulars MSC.1/Circ.1379 "Unified Interpretation of SOLAS Regulation II-1/3-5" (concerning asbestos in stores), MSC.1/Circ.1426 "Unified Interpretation of SOLAS Regulation II-1/3-5" (concerning likely components, evidence and documentation), MSC.1/Circ.1374 "Information on Prohibiting the Use of Asbestos on board ships" (includes how to manage asbestos found on ships not in compliance with SOLAS-74), IACS UI SC249 (Appendix 48 to the Guidelines), IACS Recommendation No. 130.

For ships and offshore installations to be accepted into the RS class and not covered by the requirements of SOLAS-74, as amended, the above provisions shall be applied from the date of ship acceptance to the RS class.

Where the RS surveyor reveals that structures, new spare parts, materials and products containing asbestos were installed on the RS-classed ships, MODU, FOP or offshore installations during the period from 01.10.2008 (including after entry into force of IMO circulars MSC.1/Circ.1379 and MSC.1/Circ.1426), RHO shall be informed in each particular case for making a final decision on that case (the following information shall be provided to RHO: documentation on installation/replacement/repair of such materials, equipment and products, agreed upon with RS, date of replacement/repair/installation, the appropriate RS report confirming the RS technical supervision performed. Where necessary, other additional information shall be provided upon the RHO request)."

PART III. ADDITIONAL SURVEYS OF SHIPS DEPENDING ON THEIR PURPOSE AND HULL MATERIAL

1.3 PREPARATIONS FOR SURVEY

26 Paras 1.3.3.5, 1.3.3.5.1 and 1.3.3.5.2 are introduced reading as follows:

1.3.3.5 For oil tankers and bulk carriers covered by the provisions of regulation II-1/3-10 of SOLAS-74, as amended, the Ship Structure Access Manual shall be available on board the ship. Besides, considering the provisions of 2.10 and 2.11 of the Guidelines on Technical Supervision of Ships under Construction, this document is a part of the Ship Construction File, which shall be available on board.

1.3.3.5.1 During survey of **ESP** oil tankers and bulk carriers covered by provisions of regulation II-1/3-10 of SOLAS-74, as amended, with the shipowner ensuring safe conduct of the survey, the RS surveyor shall also be guided by the provisions of the Ship Structure Access Manual and check that such Manual is available on board the ship (refer also to IACS UI SC191 "For the application of amended SOLAS regulation II-1/3-6 (resolution MSC.151(78)) and revised Technical provisions for means of access for inspections (resolution MSC.158(78))", as amended and IACS Recommendation No. 90 "Ship Structure Access Manual" (Rev.1, Apr 2019) version in force).

1.3.3.5.2 In respect of means of access to structures of bulk carriers and oil tankers covered by requirements of regulation II-1/3-10 of SOLAS-74, as amended, except for provisions of SOLAS-74, as amended (refer to IMO resolutions MSC.133(76), MSC.151(78), MSC.158(78), etc.), provisions of IACS UI shall also be met:

SC190 "For Application of SOLAS Regulation II-1/3-6 (Res MSC.134(76)) and Technical Provisions on Permanent Means of Access (Res MSC.133(76)) (Rev.1 Apr 2019)", as amended; SC191, as amended."

27 Paras 1.3.3.6 and 1.3.3.6.1 are introduced reading as follows:

1.3.3.6 In compliance with regulation II-1/3-6 of SOLAS-74, as amended the means of access shall be subject to survey prior to, or in conjunction with, their use when carrying out surveys in compliance with regulation I/10 of SOLAS-74 as amended.

In compliance with IACS UI SC190:

permanent means of access (hereinafter referred to as PMA), including portable equipment and attachments, shall be periodically inspected by the crew or appointed competent person (inspector) of the Company (according to the ISM Code) to confirm that PMA remain in serviceable condition (refer to the PMA Inspection Procedure).

1.3.3.6.1 PMA Inspection Procedure:

.1 any authorized person using PMA and acting as the PMA inspector shall check for obvious damage prior to using the access arrangements. Whilst using PMA, the inspector shall verify the condition of PMA and sections used by close-up examination and note any deterioration in their condition. Should any damage or deterioration be found, the effect of such damage/deterioration shall be assessed as to whether the damage or deterioration affects the safety for the PMA continued use. Damage/deterioration found that is considered to affect the PMA safe use shall be determined as "substantial damage" and measures shall be put in place to ensure that the affected section(s) shall not be further used prior effective repair;

.2 statutory survey of any space that contains PMA shall include verification of the continued effectiveness of PMA in that space. Survey requirements of PMA shall not be expected to exceed the scope and extent of the survey being undertaken. If PMA is found deficient, the scope of survey shall be extended;

.3 records of all inspections shall be established with specific requirements detailed in the ship's Safety Management System. The record shall be readily available to persons using PMA and it is recommended that a copy be attached to the Ship Structure Access Manual. The original records shall include as a minimum the date of the inspection, the name and title of the inspector, a confirmation signature, PMA and sections of PMA inspected, verification of continued

serviceable condition or details of any deterioration or substantial damage found. A file of permits issued shall be maintained for verification."

28 Para 1.3.4.7 is introduced reading as follows:

"**1.3.4.7** In addition to 1.3.4.6, remote inspection techniques are considered alternative means of access, using which the provisions of IACS UI SC190 and SC191, IACS recommendation No. 91 "Guidelines for Approval / Acceptance of Alternative Means of Access" (Rev.3, Apr 2019), as amended, applicable to oil tankers and bulk carriers covered by regulation II-1/3-6 of SOLAS-74 as amended shall be also met."

APPENDIX 1.1

LIST OF SHIP TECHNICAL DOCUMENTATION

1 SHIP GENERAL DOCUMENTATION

29 The Section is supplemented by paras 1.17, 1.17.1 – 1.17.11 reading as follows:

"**1.17** Dynamic positioning system (hereinafter – DP system) operating manual:

1.17.1 checklist for the DP system check before its operation, taking into account the DP system specific use;

1.17.2 checklist for the DP system checks at regular intervals when dynamically keeping the ship's position and/or heading;

1.17.3 DP operation instructions;

1.17.4 annual survey programme for the DP system to confirm that the system has been maintained in good working order.

On a ship with **DYNPOS-2** or **DYNPOS-3** distinguishing mark in the class notation, the necessary checks shall cover all essential systems and components of the DP system within a scope allowing to confirm that a single failure, as specified in failure mode and effects analysis (FMEA), will not result in loss of the ship's position and/or heading;

1.17.5 initial and special survey programme for the DP system to confirm that the system complies with the approved technical documentation and remains in good working order, including, inter alia, necessary checks and tests according to all FMEA items for the DP systems on ships having **DYNPOS-2** or **DYNPOS-3** distinguishing mark in the class notation;

1.17.6 typical recommendations on checking the DP system operability after failure elimination or the DP system changes;

1.17.7 procedure for the DP system restoring after the ship blackout;

1.17.8 list of critical components of the DP system;

1.17.9 examples of the DP system operating conditions;

1.17.10 guidelines for decision-making during the DP system control, taking into account the DP system specific use (ship type and operational profile), ship service area (weather conditions, currents, depths, etc.);

1.17.11 diagrams showing the ability of the ship having **DYNPOS-2** or **DYNPOS-3** distinguishing mark in the class notation to keep position both with the DP system in fully serviceable condition and after the single worst DP system failure as defined in FMEA."

INSTRUCTIONS FOR DETERMINATION OF THE TECHNICAL CONDITION, RENOVATION AND REPAIR OF THE HULLS OF SEA-GOING SHIPS

30 The heading of the Appendix 2 is replaced by the following:

"INSTRUCTIONS FOR DETERMINATION OF THE TECHNICAL CONDITION AND REPAIR OF THE HULLS OF SEA-GOING SHIPS"

3 FLAW DETECTION OF THE HULL

3.1 GENERAL

31 **Para 3.1.7** is replaced by the following text:

"**3.1.7** The information on wear shall be drawn up as a Report on Thickness Measurements in accordance with the Instruction on Residual Thickness Measurements of Ship's Elements given in Appendix 4. The information on hull deformations and cracks, if any, shall be drawn up using the "VOLNA" software (refer to Section 7 of Appendix 4). In cases specified in 7.1.1 of Appendix 4, a report on residual deformations and cracks may be drawn up in the format given in Appendix 2-1 to the Instructions in the scope specified in 3.2 – 3.4.

When drawing up the Report, provisions of 4.4 of Appendix 4 shall be met."

6 INSTRUCTIONS ON HULL RENOVATION

32 **Section 6** is deleted.

INSTRUCTION ON RESIDUAL THICKNESS MEASUREMENTS OF SHIP'S ELEMENTS

4 PROCEDURE FOR EXAMINATION OF THE SHIP'S HULL

33 **Para 4.3.9** is supplemented by the following text:

"In case information on repair of the ship's hull structures to be repaired upon the flaw detection results is entered by the TM operator, this information cannot be considered by the Register as the official repair information and the RS surveyor cannot draw a conclusion that hull structure repair has been made based on the TM Report provided. The RS surveyor carrying out the ship survey shall examine the extent of repairs made in order to ensure that all the structures to be repaired according to the technical condition assessment results, specified in the flaw detection records, RS reports, have been adequately repaired in accordance with the RS requirements and the repair results have been recorded in the RS documents in the prescribed manner."

34 **Para 4.4.9** is supplemented by the following text:

"The reports drawn up with the use of the "VOLNA" software shall be additionally sent to the RHO server in accordance with the User Manual."

7 FORMS OF TABLES FOR THICKNESS MEASUREMENT RECORDING

35 **Para 7.1.1** is replaced by the following text:

7.1.1 The results of defect parameter measurements shall be drawn up using the "VOLNA" software (refer to 7.3). In case the final report cannot be drawn up by the survey completion time, provisions of 4.4.6 shall be met. In substantiated cases when the "VOLNA" software cannot be used, inter alia, during the final report preparation period allowed by 4.4.6 (e.g. due to unstable Internet operation in the relevant region, website blocking in specific states, national prohibition of the use of specific software, as well as when the thickness measurements are carried out by a TM service supplier having no RS recognition (refer to 4.1.5)), the Head of the RS Branch Office carrying out the ship's survey shall make a final decision on possible drawing-up of the TM report in accordance with 7.2 based on the information provided by the RS surveyor carrying out survey, and TM service supplier. The decision shall be documented and verified/endorsed by the Head of the RS Branch Office. The decision copy shall be attached to the TM Report.

A similar procedure for TM report drawing up without using of software "VOLNA" may be applied to the ships with small as-built thicknesses (3 mm or less).

Forms of tables for drawing up reports in accordance with 7.2 are posted on the RS official website in section "Information for RS customers/Additional information on surveys of ships in service". For MODU, FOP, steel floating docks, ships of inland navigation (for European inland waterways) and small ships, reports shall be drawn up in accordance with 7.2."

Annex A

36 The following text is introduced in Annex A:

“(mandatory)”

Procedure for checking available/updating information on permissible scantlings of hull structures

1 The requirements for application of wear standards are given in Section 5, Part I "General Provisions" and Section 4 of Appendix 2. Wear standards that are inapplicable or not updated (where updating is required) shall not be used. The Register shall be responsible for correct standards applied. At that, in case the calculation of permissible residual scantlings of ship's hull structures is agreed for a ship, the RS Branch Office, which has agreed this calculation, shall be responsible for correct and complete information on permissible scantlings of hull structures.

2 "VOLNA" software server in electronic format using the format required by the Rules and internal RS procedures. The procedure for posting and updating the information on permissible scantlings of metal hull structures of ships shall comply with the Rules (refer to Table 1) and the applicable internal RS procedures. The main file with permissible scantlings of hull structures stored in the ship's file shall have the following format: "reg. No._t.pdf". The file generated by the "VOLNA" software shall comply with the requirements of the "VOLNA" software.

Depending on the standards applied in accordance with 5.12.3, Part I "General Provisions", the following requirements shall be met when generating/including information on permissible scantlings of hull structures.

2.1 The standards according to 4.2.6 of Appendix 2 (refer to 5.12.3.1, Part I "General Provisions"): the file shall at least contain the information on permissible scantlings of hull structures specified in Annex A-1 (only in English). When entering standards into the "VOLNA" software, the option for determining scantlings according to "m₀" shall be selected.

2.2 The standards according to ACS — IACS member rules (if allowed by 5.12.3.2, Part I "General Provisions"): the file shall contain standards received from the losing society when accepting the ship into the RS class, including information on permissible hull section

modulus/ultimate section modulus (if applicable). Reference information on standards according to ACS — IACS member rules is posted on the RS internal website for the RS surveyors. When entering the standards into the "VOLNA" software, the option of standards entry according to the ACS — IACS member rules shall be selected.

2.3 The standards according to 4.2.1 – 4.2.5 of Appendix 2: the file shall at least contain information in accordance with Appendix 2-4 of Appendix 2 and a copy of the cover page with a stamp confirming the agreement with the Register. If the use of standards determined by calculations agreed prior to 01.01.2015 is allowed on the ship, the file shall at least contain a copy of the cover page with a stamp confirming the agreement with the Register, as well as information on permissible scantlings of hull structures subject to thickness measurements, determined by calculation. Decision on possible application to the ship of the calculations of permissible scantlings of hull structures agreed prior to 01.01.2015 shall be based on compliance with the applicable provisions of 4.2.1 – 4.2.5 of Appendix 2. At that, in case the applicable requirements are not met, the calculation shall be updated and the RS Branch Office that revealed the non-conformity shall inform the shipowner and the RS Branch Office for in-service supervision (if revealed by another RS Branch Office). In this case, the RS Branch Office for in-service supervision shall make an entry in the List of Survey's Status on the necessity to update permissible scantlings of hull structures prior to commencement of the relevant survey, during which thickness measurements are required. When standards are entered into the "VOLNA" software, the option for scantlings determination according to "m₁, m₂" shall be selected.

2.4 For ships, to which the standards according to 5.12.3.4, Part I "General Provisions" apply (i.e. when the appropriate IACS URs S18, S19, S21, S21 A, S22, S31, etc. are applicable), an additional file shall be included in the ship's file, containing information on permissible scantlings of hull structures, which shall be supplemented by the information specifying the structure, standards, appropriate values and calculations for technical condition assessment and repairs, as well as the technical condition assessment procedure determined in accordance with the applicable IACS UR. The file shall have the following format: "reg. No. _S[IACS UR No.].pdf". The appropriate option shall be selected additionally in the "VOLNA" software for entering such standards.

2.5 For ships built in accordance with the IACS Common Structural Rules, information on permissible scantlings of hull structures is shown in structural drawings. Assessment of the technical condition of hull structures of such ships shall be carried out according to the IACS Common Structural Rules. The procedure for determination of permissible scantlings of hull structural members in terms of hull wear described in Appendix 2 to the Rules shall not apply to these ships, except for ship's elements, for which such information is not shown in the drawings. For such ships, the file with information on permissible scantlings to be included in the ship file shall at least contain the following entry: "Information on permissible scantlings of ship's hull structures is shown in the relevant structural drawings. For other ship's elements (in case of lack of information in ship's drawings) the relevant provisions of Appendices 2 and 4 to the Rules for the Classification Surveys of Ships in Service shall be applied.". When entering the wear standards by the use of the "VOLNA" software, the appropriate option for entering such standards according to the IACS Common Structural Rules shall be selected.

2.6 For ships built using materials other than steel and aluminum, the file with information on permissible scantlings of hull structures shall contain requirements from the relevant sections of Part III "Additional Surveys of Ships Depending on their Purpose and Hull Material" (e.g. provisions of Section 15 for glass-reinforced plastic ships, etc.).

2.7 For steel floating docks, the file shall contain information on permissible residual thicknesses determined in accordance with the Instructions for Determination of Technical Condition and Repair of Steel Floating Dock Hulls, as amended.

2.8 For MODU and FOP, the file shall contain information on permissible scantlings of hull structures determined in accordance with Section 19, Part III "Additional Surveys of Ships Depending on their Purpose and Hull Material".

Table 1

**Procedure of RS work with information on permissible scantlings of hull structures
(permissible residual thicknesses)**

Check/updating schedule. Description of actions	Responsible RS Branch Office		
	RS Branch Office/RHO Location, which has performed or agreed calculation of permissible residual thicknesses	RS Branch Office for in-service supervision (where a ship is registered)	RS Branch Office performing survey of a ship requiring thickness measurements
	A	B	C
1. In case of survey of a ship in service not related to acceptance of ship into the RS class	In cases stipulated by the Rules, a responsible person shall send the file prepared in accordance with provisions of para 2, Annex A to the RS Branch Office for in-service supervision and the RS Branch Office performing the survey, not later than in 2 working days from the date of registration and sending of the letter of conclusion	Where necessary (refer to A and C), enter the information received from the RS Branch Offices into the ship's file in accordance with the RS internal procedures not later than in 2 working days from the date of information receipt, update information in the List of Survey's Status in accordance with the RS internal procedures	<p>1) Check the available information on permissible residual thicknesses in the ship's file;</p> <p>2) Check the available warning entries on permissible residual thicknesses in the List of Survey's Status.</p> <p>3) Check updated information on permissible residual thicknesses in accordance with paras 1 and 2, Appendix A. Where necessary, provide updating of information on permissible residual thicknesses, involving the RS Branch Office for in-service supervision and a shipowner (where required), prior to completion of survey. Provide technical condition assessment using updated standards and, where necessary, repair of structures prior to completion of survey.</p> <p>4) Check the available, correct (when correct permissible residual thickness category in doubt) and complete information on permissible residual thicknesses entered by the use of the "VOLNA" software.</p> <p>5) Add/Correct information on permissible residual thicknesses by the use of the "VOLNA" software. Export the supplemented/corrected file to the RHO server prior to completion</p>

			<p>of survey. Where necessary, re-issue the TM Report prior to completion of survey, taking into account the updated standards. 6) Where necessary, introduce missing/ updated information on permissible residual thicknesses together with the set of documents on survey results to the ship's file in the prescribed manner.</p>
<p>Remarks: 1. During surveys, involving the minimum thickness measurements (e.g. annual surveys or, where thickness measurements are carried out in the areas with substantial corrosion, intermediate surveys covered only by IACS UR Z7 or UR Z7.2), entering complete information on wear standards in the "VOLNA" software may be omitted. 2. During special surveys (irrespective of the ship's age and type), as well as intermediate surveys covered by provisions of IACS URs Z7.1 and Z10s), information on ship's elements wear standards shall be entered in the maximum possible scope. 3. At the discretion of the RS surveyor, information on wear standards may be entered in the "VOLNA" software by operators of the TM suppliers recognized by RS, provided that 100 % monitoring by the RS surveyor is provided (the RS surveyor shall be fully responsible for correct information entered). 4. When there are several documents/files containing different permissible residual thickness values on the ship or in the ship's file and there is any doubt in the correct choice, possibility of using certain standards shall be agreed upon with the RS Branch Office for in-service supervision prior to application of the standards on the ship. In case of disputes, RHO shall be contacted. 5. Standards shall be updated involving the shipowner or duly authorized representative of the shipowner. When new calculation is performed, it shall be submitted to the Register for review. The calculation approved by RS shall be submitted to the RS surveyor on board the ship prior to completion of survey.</p>			
<p>2. Initial survey after the ship construction</p>	<p>Refer to para 1, Annex A, if the set of documents approved by the RS includes calculation of permissible scantlings of hull structures</p>	<p>Introduce the applicable information on permissible residual thicknesses in the ship's file not later than in 10 working days after receipt of the set of records upon the survey results from the RS Branch Office performing the initial survey.</p>	<p>–</p>
<p>Note. In case "m₀" standards are used, it is recommended to enter information in the "VOLNA" software during the initial survey. In this case, the file with information on permissible residual thicknesses shall be exported by the RS surveyor to the RHO server in the prescribed manner.</p>			

<p>3. Acceptance of ship into the RS class</p>	<p>In cases stipulated by the Rules, a responsible person shall send the file prepared in accordance with provisions of para 2, Annex A to the Branch Office for in-service supervision and the RS Branch Office authorized to perform the survey to accept the ship into the RS class not later than in 2 working days from the date of registration and sending of the letter of conclusion</p>	<p>Enter the information received in the ship's file in accordance with the RS internal procedures not later than in 2 working days from the date of information receipt</p>	<p>In cases when survey involving thickness measurements is prescribed upon the RHO authorization:</p> <ol style="list-style-type: none"> 1) provide application of standards in accordance with para 1, Annex A, as well as Section 5, Part II "Carrying Out Classification Surveys of Ships" of the Guidelines; 2) check the availability of correct information on permissible residual thicknesses in the Enhanced Survey Programme (for ships having ESP distinguishing mark in the class notations. Where necessary, provide entering of any necessary corrections (refer to 1.3, Part III "Additional Surveys of Ships Depending on Their Purpose and Hull Material" of the Rules); 3) enter the standards by the use of the "VOLNA" software. Export the file to the RHO server by the use of the "VOLNA" software (refer to the Notes to item 1 of the Table); 4) send the file containing permissible residual thickness, prepared in accordance with para 2, Annex A to RHO together with the set of records upon the survey results. RHO, after checking that the conditions of assignment of class to the ship are met regarding the permissible scantlings, shall send the information on permissible residual thicknesses received to the RS Branch Office for in-service supervision to be introduced into the ship's file
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<p>4. Annually in the ship's file</p>	<p>1) Check the available information in the ship's file and on the internal site in the "VOLNA" software. 2) Check updated information on permissible residual thicknesses, as well as available translation into English (where applicable, refer to 4.11, Appendix 2). 3) Provide introduction of missing/updated information into the ship's file. In case the ship survey is performed simultaneously with the ship's file check, the RS Branch Office performing survey shall be informed on the permissible residual thickness changes made</p>	
<p>Notes: 1. The up-to-date status of information shall be checked in accordance with provisions of paras 1 and 2, Annex A. 2. Where necessary, standards shall be updated involving the shipowner or duly authorized representative of the shipowner. In case new calculation shall be performed, it shall be submitted to the Register for review. Information on permissible scantlings from the approved calculation shall be introduced into the ship's file by the RS Branch Office, which has reviewed and agreed the calculation. The file shall be introduced in the ship's file in the prescribed manner. 3. In case the standards cannot be timely updated due to objective reasons, an entry warning may be made in the permissible residual thickness file of the ship's file and in the List of Survey's Status that the standards have not been updated and shall be updated not later than in 1 month prior to commencement of survey. 4. When translation of permissible residual thickness information into English is not available, information on permissible residual thickness shall be translated and the information translated shall be subsequently introduced in the ship's file in the prescribed manner. Translation shall be performed by RS. 5. In case the information on permissible residual thicknesses is not available on the RS internal website in the "VOLNA" software, provide adding of the information (if it is found according to the ship's file that the TM Report was issued by the use of the "VOLNA" software) involving the RS Branch Office performing supervision of thickness measurements on the ship or the RS Branch Office performing thickness measurements by itself (whichever is applicable).</p>		

	<p>6. In case the information on permissible residual thicknesses is not available on the RHO server and the reports of thickness measurements on the ship were not drawn up by the use of the "VOLNA" software, provide entering of the standards into the "VOLNA" software by the RS Branch Office for in-service supervision itself. Information may be entered into the "VOLNA" software by the RS Branch Office for in-service supervision based on information in the ship's file, without attending the ship. At that, information entry shall be suspended if the information is insufficient (necessary drawings, calculations are not available) or in case of doubts regarding information reliability.</p>		
<p>5. Transfer of ship from the RS class to ACS class</p>	<p>–</p>	<p>To ensure that requirements of para A.2.3bis, IACS PR1A (regarding the losing society forwarding information on permissible scantlings of hull structures to the gaining society) are met when receiving from RHO the request on the ship transfer into the ACS class, the following procedure shall be complied with: forward information on permissible residual thicknesses to the gaining society immediately (in 5 working days for main hull structures wear standards, in 12 working days for results of assessment according to IACS URs S19, S31, etc., if applicable). The information shall be submitted in English. In case information on permissible residual thicknesses is not translated into English, translation shall be performed by the RHO Location responsible for translation not later than the specified due dates mentioned above minus one working day necessary for</p>	<p>–</p>

		<p>forwarding the information to ACS by the responsible RHO Location).</p> <p>At that, information on permissible residual thicknesses entered by the use of the "VOLNA" software may be taken into account (where applicable).</p>	
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Annex A-1

Wear standards according to 4.2.6 of Appendix 2 (i.e. using factor m_0).

PERMISSIBLE SCANTLINGS OF HULL STRUCTURES

1. The permissible residual hull girder section modulus for deck and bottom is equal to 90 % of as-built value.
2. The permissible residual thickness of plates and framing members is stated in table.

No		Permissible thickness		
		Total corrosion	Local corrosion (grooving etc.)	Pitting corrosion
1. Plating				
1.1	<p><i>Midship region (0.4L*)</i></p> <ul style="list-style-type: none"> - Upper strength deck - Continuous hatch coaming - Second continuous deck located above 0.75D** from the base plane; trunk deck; another continuous deck adjacent to the hatch coaming top of the cargo hold, with the adjacent side plating - Sheerstrake - Upper and lower strakes of inner side - Upper and lower strakes of longitudinal bulkhead - Plate keel - Bottom with bilge - Top-side and hopper tanks - Inner bottom throughout the length 	0,80t***	0,70t	0.30t, but not less than 3.0 mm
1.2	- Hull elements, as listed under 1.1, outside the midship region as well as any elements anywhere along the hull length:			
	- For ships operating in unrestricted areas of navigation and ships having the distinguishing marks for restricted areas of navigation RI, RII in their class notations	0,70t	0,60t	
	- For ships, having the distinguishing marks for restricted areas of navigation R2-RSN, R3-RSN, R3, R2-RSN(4,5) in their class notations	0,75t	0,65t	
1.3	Structural members in the areas as follows: <ul style="list-style-type: none"> - ice strengthening - strengthening of ships mooring at sea - strengthening in regions to which extreme hydrodynamic pressures are applied 	0,80t	0,70t	
2. Framing				
2.1	The main and web framing in way of strengthening mentioned in 1.3	0,80t	0,50t	0.30t, but not less than 3.0 mm
2.2	Longitudinals of upper strength deck, sheerstrake, upper and lower strakes of inner side and longitudinal bulkheads, top-side and hopper tanks, inner bottom and bottom amidships, as well as all web framing	0,75t		
2.3	Longitudinals, as listed under 2.2, outside the midship region as well as any others girders anywhere along the hull length	0,70t		
2.4	Transverse corrugated bulkhead	0,65t		

*L = design ship's length in accordance with the RS Rules.

**D = depth in midship region.

***t = as-built thickness of hull structural members.

Structural Diminution Allowances to be used during Ship Survey in Accordance with RS Rules.

The norms apply to ships whose RS class *has not been changed* since their construction.

Application of the present norms is to be affirmed by RS Head Office (Hull Department) in case of:

- major modernization/conversion of hull structure,
- new tonnage;
- new mark of navigation area; new ice category mark etc."