

(Draft)

Amendments of the Rules

Pt. 1 Classification and Survey



Hull/Machinery Rule Development Team

- Main Amendments -

(1) Effective date : 1 Mar. 2020 (Date of which the application for survey is submitted)

- The requirements for Conditional Certificate of Classification newly provided.

(2) Effective date : 1 Apr. 2020 (Date of which the application for survey is submitted)

- Amended requirements of anchor/chain cables' range and measurements for ships subject to Extended Dry-docking Interval System(EDD)

(3) Effective date : 1 June 2020 (Date of which the application for survey is submitted)

- Revised Force Majeure requirements regarding the Pandemic such as Coronavirus Disease(COVID-19)

(4) Effective date : 1 Jan. 2021 (Date of which survey is commenced for ships contracted for construction after 1st Jan. 2021)

- Reflected IACS UR Z18(Rev.9 Apr 2020)

- The annual, intermediate & special survey items for towing winch emergency release system has been added.

- Refected IACS UR Z1 (Rev.8 Jul 2020)

- Revised Pt 1, Ch 2, 204. 3 (27) & Deleted Pt 1, Ch 2, 304. 3 (3) of the Rules according to IMO Res. A. 1140(31)

(5) Effective date : 1 July 2021 (Date of which the application for survey is submitted)

- Request from the internal customers
 - Clarified the select or mandatory additional installation notations
 - "Scope of classification" has been newly established to clarify that KR has the authority to interpret KR rules.
 - Clarified the survey requirements for ships subject to the 「Korean Ship Safety Act」 and the 「Korean Fishing Vessel Act」
 - Supplemented the contents of Notation conditions for Self-Unloading Bulk Carrier

- Amendments to unreasonable requirements found when applying Classification Technical Rules
 - Clarified the types of ship(including tank type) subject to ESP applied
 - Introduced the definitions such as "Classification Technical Rules", "Force majeure" and "Cofferdam" have been introduced and corrected the contents of the definition "alternatives" etc.
 - The annual, intermediate & special survey for EGCS has been added.
 - Application for CBM in Annex 1-8 have been added in Rules.
 - Alternative survey requirements for ordinary boiler survey has been added (specific requirements are newly added to the guidance)
 - Moved the Guidances' requirements into the Rules' requirements

(6) Effective date : 1 July 2021 (Date of which the application for survey is submitted)

- To reflect the revision of IACS UR Z7(Rev.28. Corr.1 Dec. 2020).

(1) Effective date : 1 Mar. 2020

(Date of which application for survey is submitted)

Present	Amendments	Reason
<p style="text-align: center;">CHAPTER 1 CLASSIFICATION</p> <p style="text-align: center;">Section 1 ~ 2 <omitted></p> <p style="text-align: center;">Section 3 Classification Survey during Construction</p> <p>301. ~ 306. <omitted></p> <p>307. Stability experiments [See Guidance]</p> <p>1. <omitted></p> <p>2. The <u>stability experiments</u> in above Par 1 are to demonstrate that their intact stability is adequate for the service intended. Adequate intact stability means compliance with standards laid down by the relevant Administration or those of the Society taking into account the ship's size and type. The level of intact stability for ships with a length of 24 m and above <u>in any case</u> should not be less than that provided by <u>Part A of IMO Res.MSC.267(85)(Adoption of the international code on intact stability, 2008(2008 IS Code))</u> as applicable to the type of ship being considered. Where other criteria are accepted by the Administration concerned, these criteria may be used for the purpose of classification. Evidence of approval by the Administration concerned may be accepted for the purpose of classification.</p> <p><hereafter, omitted></p>	<p style="text-align: center;">CHAPTER 1 CLASSIFICATION</p> <p style="text-align: center;">Section 1 ~ 2 <same as the current Rules></p> <p style="text-align: center;">Section 3 Classification Survey during Construction</p> <p>301. ~ 306. <same as the current Rules></p> <p>307. Stability experiments (2020) [See Guidance]</p> <p>1. <same as the current Rules></p> <p>2. The <u>preparation and approval of stability booklets experiments</u> in above Par 1 are to demonstrate that their intact stability is adequate for the service intended. Adequate intact stability means compliance with standards laid down by the relevant Administration or those of the Society taking into account the ship's size and type. The level of intact stability for ships with a length of 24 m and above in any case should not be less than that provided by Part A of IMO Res.MSC.267(85)(Adoption of the international code on intact stability, 2008(2008 IS Code)) as applicable to the type of ship being considered. Where other criteria are accepted by the Administration concerned, these criteria may be used for the purpose of classification. Evidence of approval by the Administration concerned may be accepted for the purpose of classification.</p> <p><hereafter, same as the current Rules></p>	<p>- reflect the opinion by the Stability & Tonnage Team</p>

Present	Amendments	Reason
<p style="text-align: center;">Section 5 Certificates and Reports</p> <p>501. Certificate of Classification <omitted></p> <p>502. Interim Certificate of Classification</p> <ol style="list-style-type: none"> 1. Where ships have undergone a Classification Survey during or after Construction to the satisfaction of the Surveyor, <u>the Interim Certificate of Classification will be issued.</u> 2. <u>Where a single direct voyage to repair yard/survey port or demolition yard, etc. is allowed with the Interim Certificate of Classification instead of the Certificate of Classification, an Interim Certificate of Classification will be issued. 【See Guidance】</u> <p><newly added></p> <p>503. ~ 504. <omitted></p>	<p style="text-align: center;">Section 5 Certificates and Reports</p> <p>501. Certificate of Classification <same as the current Rules></p> <p>502. Interim Certificate of Classification <i>(2020)</i></p> <ol style="list-style-type: none"> 1. Where ships have undergone a Classification Survey during or after Construction to the satisfaction of the Surveyor, <u>the Interim Certificate of Classification will be issued to permit the ship to trade while the Certificate of Classification is prepared.</u> 2. Where a single direct voyage to repair yard/survey port or demolition yard, etc. is allowed with the Interim Certificate of Classification instead of the Certificate of Classification, an Interim Certificate of Classification will be issued. 【See Guidance】 <p><u>503. Conditional Certificate of Classification <i>(2020)</i></u></p> <ol style="list-style-type: none"> 1. <u>A Conditional Certificate of Classification is to be issued where a single direct voyage to a repair yard/survey port/another place of laid-up or demolition yard, etc., in lieu of a Classification Certificate. In this case, "a single direct voyage is allowed" means the cases as specified in 901. 5 or 7.</u> 2. <u>In addition, where deemed necessary by the Society, it issues the Conditional Certificate of Classification as specified by the Society</u> <p>504. 503. ~ 505. 504. <same as the current Rules></p>	<p>- At the request of the Survey Team(SUR3000-2509-2019, 2019.12.23.)</p> <p>- reference of Instructions for Convention Survey</p> <p>- moved to the conditional Certificate of Classification newly provided.</p> <p>- at the request of the Survey Team : the requirements of Conditional Certificate of Classification have been newly provided</p>

Present	Amendments	Reason
<p>505. Keeping of the certificates and survey reports <u>The Certificate of Classification, the Interim Certificate of Classification, Particular Sheets and Survey Reports, etc. are always to be kept on board by the master of the ship and are to be produced when requested by the Surveyor.</u></p> <p>506. <omitted></p> <p>507. Re-issue and return of certificate</p> <ol style="list-style-type: none"> 1. When <u>the Certificate of Classification, the Interim Certificate of Classification, Particular Sheets, or Survey Reports</u> are lost or impaired, or when the items stated in them require alteration, the application for re-issue must be made without delay. 2. When a ship holding <u>the Interim Certificate of Classification</u> is furnished with the Certificate of Classification, when the certificate is re-issued except in the case of its loss, or when the classification is cancelled, the old certificate is to be returned to the Society without delay. <p>508. ~ 509. <omitted></p> <p style="text-align: center;">Section 6 Application for Survey</p> <p>601. ~ 602. <omitted></p> <p>603. Re-issue of certificate <u>The application for re-issue and return of the Classification Certificate, the Interim Classification Certificate, Particular Sheets and Survey Reports are to be made by the Owner.</u></p> <p><hereafter, omitted></p>	<p>506. 505. Keeping of the certificates and survey reports (2020) <u>The Certificate of Classification(incl. the Interim Certificate of Classification or the Conditional Certificate of Classification), Particular Sheets and Survey Reports, etc. are always to be kept on board by the master of the ship and are to be produced when requested by the Surveyor.</u></p> <p>507. 506. (2020) <same as the current Rules></p> <p>507. Re-issue and return of certificate (2020)</p> <ol style="list-style-type: none"> 1. When the Certificate of Classification(<u>incl. the Interim Certificate of Classification or the Conditional Certificate of Classification</u>), Particular Sheets, or Survey Reports are lost or impaired, or when the items stated in them require alteration, the application for re-issue must be made without delay. 2. When a ship holding <u>the Interim Certificate of Classification or the Conditional Certificate of Classification</u>, is furnished with the Certificate of Classification, when the certificate is re-issued except in the case of its loss, or when the classification is cancelled, the old certificate is to be returned to the Society without delay. <p>509. 508. ~ 510. 509. (2020) <same as the current Rules></p> <p style="text-align: center;">Section 6 Application for Survey</p> <p>601. ~ 602. <same as the current Rules></p> <p>603. Re-issue of certificate (2020) <u>The application for re-issue and return of the Classification Certificate(incl. the Interim Certificate of Classification or the Conditional Certificate of Classification), Particular Sheets and Survey Reports are to be made by the Owner.</u></p> <p><hereafter, same as the current Rules></p>	<p>- added the Conditional Certificate of Classification</p>

Present	Amendments	Reason
<p style="text-align: center;">Section 9 Suspension/Withdrawal of Class and Reclassification</p> <p>901. Suspension/Reinstatement of class</p> <p>1. <omitted></p> <p>2. The classification may be suspended in accordance with the Society's suspension procedure. <newly added></p> <p>(1) ~ (6) <omitted></p> <p>(7) in the event of non-payment of fees</p> <p><u>Classification will be reinstated if the cause of such suspension are removed, or upon verification that the overdue survey has been satisfactorily dealt with. Suspension of class decided by the Society takes effect from the date when the condition for suspension of class are met and will remain in effect until such time as the class is reinstated once the due items and/or surveys have been dealt with.</u></p> <p>3.~6. <omitted></p> <p>7. When a vessel is intended for a single voyage from laid-up position to repair yard with any periodical survey overdue, the vessel's class suspension may be held in abeyance and consideration may be given to allow the vessel to proceed on a single direct ballast voyage from the site of lay up to the repair yard, provided the Society finds the vessel in satisfactory condition after surveys, the extent of which are to be based on surveys overdue and duration of lay-up. <u>An Interim Certificate of Classification</u> with conditions for the intended voyage may be issued. This is not applicable to vessels whose class was already suspended prior to being laid-up.</p> <p><hereafter, omitted></p>	<p style="text-align: center;">Section 9 Suspension/Withdrawal of Class and Reclassification</p> <p>901. Suspension/Reinstatement of class</p> <p>1. <same as the current Rules></p> <p>2. The classification may be suspended in accordance with the Society's suspension procedure. <i>(2020)</i></p> <p><u>Classification will be reinstated if the cause of such suspension are removed, or upon verification that the overdue survey has been satisfactorily dealt with. Suspension of class decided by the Society takes effect from the date when the condition for suspension of class are met and will remain in effect until such time as the class is reinstated once the due items and/or surveys have been dealt with.</u></p> <p>(1) ~ (6) <same as the current Rules></p> <p>(7) in the event of non-payment of fees</p> <p>Classification will be reinstated if the cause of such suspension are removed, or upon verification that the overdue survey has been satisfactorily dealt with. Suspension of class decided by the Society takes effect from the date when the condition for suspension of class are met and will remain in effect until such time as the class is reinstated once the due items and/or surveys have been dealt with.</p> <p>3.~6. <same as the current Rules></p> <p>7. When a vessel is intended for a single voyage from laid-up position to repair yard with any periodical survey overdue, the vessel's class suspension may be held in abeyance and consideration may be given to allow the vessel to proceed on a single direct ballast voyage from the site of lay up to the repair yard, provided the Society finds the vessel in satisfactory condition after surveys, the extent of which are to be based on surveys overdue and duration of lay-up. <u>A Conditional An Interim Certificate of Classification</u> with conditions for the intended voyage may be issued. This is not applicable to vessels whose class was already suspended prior to being laid-up. <i>(2020)</i></p> <p><hereafter, same as the current Rules></p>	<p>- at the request of the Survey Team</p> <p>- to be moved to upper part</p>

(2) Effective date : 1 Apr. 2020

(Date of which application for survey is submitted)

Present	Amendments	Reason
<p style="text-align: center;">Section 4 Special Survey (Hull, Equipment and Fire-extinguishing Appliances)</p> <p>401. ~ 402. <omitted></p> <p>403. Requirements of survey (2018)</p> <p>1. <omitted></p> <p>(1) ~ (2) <omitted></p> <p>(3) The anchors and chain cables are to be ranged, examined and the required complement and condition verified. The chain locker, hold-fasts, hawse pipes and chain stoppers are to be examined and pumping arrangements of the chain locker tested. At Special Survey No. 2 and subsequent Special Surveys, chain cables are to be gauged and renewed in cases where their mean diameter is 12 % or more below <u>the original required nominal size.</u> <newly added></p> <p style="text-align: center;">Section 6 Docking Survey</p> <p>601.~ 602. <omitted></p> <p>603. Requirements of survey</p> <p>1. ~ 7. <omitted></p> <p>8. For ships with IWS notation, the requirements to assign the IWS notation specified in 604. 3. (8) are to be confirmed for continuing compliance.</p> <p>9. For ships with EDD notation, the requirements to assign the EDD notation specified in 605. 2. are to be confirmed for continuing compliance. <newly added></p> <p><omitted></p>	<p style="text-align: center;">Section 4 Special Survey (Hull, Equipment and Fire-extinguishing Appliances)</p> <p>401. ~ 402. <same as the current Rules></p> <p>403. Requirements of survey (2018)</p> <p>1. <Same as the current Rules></p> <p>(1) ~ (2) <same as the current Rules></p> <p>(3) The anchors and chain cables are to be ranged, examined and the required complement and condition verified. The chain locker, hold-fasts, hawse pipes and chain stoppers are to be examined and pumping arrangements of the chain locker tested. At Special Survey No. 2 and subsequent Special Surveys, chain cables are to be gauged and renewed in cases where their mean diameter is 12 % or more below the original required nominal size. [See Guidance] (2020)</p> <p style="text-align: center;">Section 6 Docking Survey</p> <p>601.~ 602. <same as the current Rules></p> <p>603. Requirements of survey</p> <p>1. ~ 7. <same as the current Rules></p> <p>8. For ships with IWS notation, the requirements to assign the IWS notation specified in 604. 3. (8) are to be confirmed for continuing compliance.</p> <p>9. For ships with EDD notation, the requirements to assign the EDD notation specified in 605. 2. are to be confirmed for continuing compliance. [See Guidance] (2020)</p> <p><same as the current Rule></p>	<p>- Requested by the Tongyong Branch office and Survey Team (by phone) : In case of ships subject to EED and In-water Survey in lieu of Docking Survey carried out during Special Survey, it is very difficult to examine/test incl. thickness measurement for anchors/chain cables and their system.</p>

Present	Amendments	Reason
<p data-bbox="120 276 954 339">Section 19 Special Requirements for Ships Subject to Korean Ship Safety Act or Fishing Vessels Act</p> <p data-bbox="91 376 972 485">1901. Special requirements for ships subject to Korean Ship Safety Act [See Guidance] <omitted></p> <p data-bbox="91 544 978 692">1902. Special requirements for ships subject to Korean Fishing Vessels Act <newly added> <u>1. ~ 7.</u> <omitted></p>	<p data-bbox="1034 276 1868 339">Section 19 Special Requirements for Ships Subject to Korean Ship Safety Act or Fishing Vessels Act</p> <p data-bbox="1010 376 1899 475">1901. Special requirements for ships subject to Korean Ship Safety Act [See Guidance] <same as the current Rules></p> <p data-bbox="1010 533 1899 719">1902. Special requirements for ships subject to Korean Fishing Vessels Act <u>1. Vessels subject to the Korean Fishing Vessels Act shall apply the relevant laws. And the following 2. to 8. should be applied. (2020)</u> <u>2. 1. ~ 8. 7.</u> <same as the current Rule></p>	<p data-bbox="1921 268 2150 507">- Reflecting the findings of the audit (Ministry of Oceans and Fisheries)</p>

(3) Effective date : 1 June 2020

(Date of which application for survey is submitted)

Present	Amendments	Reason
<p data-bbox="114 236 801 308">Section 9 Suspension/Withdrawal of Class and Reclassification</p> <p data-bbox="91 336 613 363">901. Suspension/Reinstatement of class</p> <p data-bbox="125 384 378 411">1. ~ 5. <omitted></p> <p data-bbox="125 432 819 675">6. If, due to circumstances reasonably beyond the owner's or the Society's control, the vessel is not in a port where the overdue surveys can be completed at the expiry of the periods allowed, the Society may allow the vessel to sail, in class, directly to an agreed discharge port, and if necessary, hence, in ballast, to an agreed port at which the survey will be completed, provided the Society:</p> <p data-bbox="159 687 819 1086"> (1) exams the ship's records; (2) carries out the due and/or overdue surveys and examination of Conditions of Class at the first port of call when there is an unforeseen inability of the Society to attend the vessel in the present port, and (2020) (3) has satisfied itself that the vessel is in condition to sail for one trip to a discharge port and subsequent ballast voyage to a repair facility if necessary.(Where there is unforeseen inability of the Society to attend the vessel in the present port, the master is to confirm that his ship is in condition to sail to the nearest port of call.) </p> <p data-bbox="159 1118 333 1145"><newly added></p>	<p data-bbox="875 236 1883 268">Section 9 Suspension/Withdrawal of Class and Reclassification</p> <p data-bbox="842 336 1364 363">901. Suspension/Reinstatement of class</p> <p data-bbox="875 384 1128 411">1. ~ 5. <omitted></p> <p data-bbox="875 432 1171 459">6. Force Majeure (2020)</p> <p data-bbox="875 480 1917 632">If, due to circumstances reasonably beyond the owner's or the Society's control, the vessel is not in a port where the overdue surveys can be completed at the expiry of the periods allowed, the Society may allow the vessel to sail, in class, directly to an agreed discharge port, and if necessary, hence, in ballast, to an agreed port at which the survey will be completed, provided the Society:</p> <p data-bbox="909 644 1917 1458"> (1) exams the ship's records; (2) carries out the due and/or overdue surveys and examination of Conditions of Class at the first port of call when there is an unforeseen inability of the Society to attend the vessel in the present port, and (2020) (3) has satisfied itself that the vessel is in condition to sail for one trip to a discharge port and subsequent ballast voyage to a repair facility if necessary.(Where there is unforeseen inability of the Society to attend the vessel in the present port, the master is to confirm that his ship is in condition to sail to the nearest port of call.) (4) <u>If, due to force majeure conditions such as Pandemic (e.g. COVID-19), the due survey of the vessel can not be completed at the expiry of the periods allowed, the Society may allow the vessel to sail, in class until the agreed period of postponement under the following conditions: (2020)</u> (A) approval by the relevant flag state (if applicable) (B) exams the ship's records (C) <u>carries out the due and/or overdue surveys and examination of Conditions of Class at the first port of call with available facilities where Surveyor can reasonably attend to complete.</u> (D) <u>review of evidence provided by the Owner confirming that the vessel is in a satisfactory condition in class for the agreed period of postponement (where the Society may request remote survey or acceptable photo, video or other evidence of condition of structures or equipment)</u> (E) <u>obtain written statement from the Master stating that the vessel is in compliance with the Rules and Regulations of the Society and is in condition to satisfactorily continue in service for the agreed period.</u> </p>	<p data-bbox="1951 236 2136 954">* Based on the request from International Relations Team (By an E-mail) : revised force majeure requirements related to COVID-19 Pandemic (Refer to deliberation of KR Committee on Survey Technique and LR rules)</p>

Present	Amendments	Reason
<p>If class has already been automatically suspended in such cases, it may be reinstated subject to the conditions prescribed in this paragraph.</p> <p>Where 'force majeure' means damage to the ship; unforeseen inability of the Society to attend the vessel due to the governmental restrictions on right of access or movement of personnel; unforeseeable delays in port or inability to discharge cargo due to unusually lengthy periods of severe weather, strikes or civil strife; acts of war; or other force majeure. [See Guidance]</p>	<p>If class has already been automatically suspended in such cases, it may be reinstated subject to the conditions prescribed in this paragraph.</p> <p>Where 'force majeure' means damage to the ship; unforeseen inability of the Society to attend the vessel due to the governmental restrictions on right of access or movement of personnel; unforeseeable delays in port or inability to discharge cargo due to unusually lengthy periods of severe weather, strikes or civil strife; acts of war; or other force majeure. <u>(Pandemic such as COVID-19). (2020)</u> [See Guidance]</p>	<p>* Based on the request from International Relations Team (By an E-mail) : revised force majeure requirements related to COVID-19 Pandemic (Refer to deliberation of KR Committee on Survey Technique and LR rules)</p>

(4) Effective date : 1 Jan. 2021

(Date of which survey is commenced for ships contracted for construction after January 1, 2021)

Present	Amendment	Note
<p style="text-align: center;">CHAPTER 2 PERIODICAL AND OTHER SURVEYS</p> <p style="text-align: center;">Section 2 Annual Survey</p> <p>201. to 202. <omitted></p> <p>203. Machinery, electrical installations and additional installations</p> <p style="padding-left: 20px;">1. to 27. <omitted></p> <p>28. In addition to Par 1 through Par 26, relevant requirements of Ch 18 are also to be taken if applicable. (2017)</p> <p><Newly added></p> <p style="text-align: center;"><hereafter, omitted></p>	<p style="text-align: center;">CHAPTER 2 PERIODICAL AND OTHER SURVEYS</p> <p style="text-align: center;">Section 2 Annual Survey</p> <p>201. to 202. <same as present></p> <p>203. Machinery, electrical installations and additional installations</p> <p style="padding-left: 20px;">1. to 27. <same as present></p> <p>28. In addition to Par 1 through Par 27, relevant requirements of Ch 18 are also to be taken if applicable. (2017)</p> <p>29. <u>For the survey for towing winch emergency release system which is specified in Pt 7, Ch 9, Sec 8, the following requirements are to be complied with. (2021)</u></p> <p style="padding-left: 20px;">(1) <u>Operation of the towing winch emergency release system is to be confirmed with the reference to the documented instructions for surveys provided by the manufacturer. Operation of the winch emergency release system under no load condition is to be verified. Where practical, activation of the emergency release system may be confirmed by observation of the winch brake.</u></p> <p style="padding-left: 20px;">(2) <u>The function of the alarms associated with the emergency release system is to be verified, as far as practicable and reasonable.</u></p> <p style="padding-left: 20px;">(3) <u>The condition of the emergency release system is to be visually examined to confirm it remains in satisfactory condition.</u></p> <p style="padding-left: 20px;">(4) <u>The means of emergency release of the towline in the event of a blackout is to be examined, and where additional sources of energy are arranged for this purpose, the sources of energy are to be visually inspected and operationally tested.</u></p> <p style="padding-left: 20px;">(5) <u>It is to be verified that the performance capabilities and operating instructions of the emergency release system are documented and made available on board the ship on which the winch has been installed.</u></p> <p style="text-align: center;"><hereafter, same as present></p>	<p style="text-align: center;">- Reflected IACS UR Z18 (Rev.9 Apr 2020)</p>

Present	Amendment	Note
<p>204. Additional requirements to ship types</p> <p>1. to 2. <omitted></p> <p>3. Liquefied gas carriers : [See Guidance]</p> <p>(1) to (26) <omitted></p> <p>(27) Examining the cargo, bunker, ballast and vent piping systems, <u>including vent masters and flame screens, as far as practicable.</u></p> <p>(28) to (54) <omitted></p> <p style="text-align: center;">Section 3 Intermediate Survey</p> <p>304. Additional requirements to ship types</p> <p>1. to 2. <omitted></p> <p>3. Liquefied gas carriers : [See Guidance]</p> <p>(1) to (2) <omitted></p> <p>(3) Blown through testing with dry air to the distribution piping of the dry chemical powder fire extinguishing systems. <i>(2020)</i></p> <p>(4) to (10) <omitted></p> <p style="text-align: center;"><hereafter, omitted></p>	<p>204. Additional requirements to ship types</p> <p>1. to 2. <same as present></p> <p>3. Liquefied gas carriers : [See Guidance]</p> <p>(1) to (26) <same as present></p> <p>(27) Examining the cargo, bunker, ballast and vent piping systems, including <u>PRVs, vacuum relief valves, vent masts and protective screens, as far as practicable, and confirming that the PRVs are type-approved or marked with date of testing (2021)</u></p> <p>(28) to (54) <same as present></p> <p style="text-align: center;">Section 3 Intermediate Survey</p> <p>304. Additional requirements to ship types</p> <p>1. to 2. <same as present></p> <p>3. Liquefied gas carriers : [See Guidance]</p> <p>(1) to (2) <same as present></p> <p>(3) Blown through testing with dry air to the distribution piping of the dry chemical powder fire extinguishing systems. (2020)</p> <p><u>(3)(4) to (9)(10) <same as present></u></p> <p style="text-align: center;"><hereafter, same as present></p>	<p>- Reflected IACS UR Z1 (Rev.8 Jul 2020)</p> <p>- Reflected IACS UR Z1 (Rev.8 Jul 2020)</p>

Present	Amendment	Note
<p style="text-align: center;">Section 5-1 Special Survey (Machinery, Electrical Installations and Additional Installations)</p> <p>501. <omitted></p> <p>502. Requirements of survey</p> <p>1. <omitted></p> <p>2. Requirements of machinery except for main engines and auxiliary engines (2018)</p> <p>(1) to (13) <omitted></p> <p style="text-align: right;"><u><Newly added></u></p>	<p style="text-align: center;">Section 5-1 Special Survey (Machinery, Electrical Installations and Additional Installations)</p> <p>501. <same as present></p> <p>502. Requirements of survey</p> <p>1. <same as present></p> <p>2. Requirements of machinery except for main engines and auxiliary engines (2018)</p> <p>(1) to (13) <same as present></p> <p>(14) <u>The survey for towing winch emergency release system which is specified in Pt 7, Ch 9, Sec. 8 the following requirements are to be complied with. (2021)</u></p> <p>(A) <u>The Annual Survey requirements are to be carried out, with the additional instructions for special survey provided by the manufacturer, as appropriate, being followed.</u></p> <p>(B) <u>The full functionality of the emergency release system is to be tested to the satisfaction of the surveyor. Testing may be conducted either during a bollard pull test or by applying the load against a strong point on the deck of the tug or the shore that is certified to the appropriate load.</u></p> <p>(C) <u>The emergency release system is to be tested at a towline load that is equal to the lesser of 30% of the maximum design load or 80% of vessel bollard pull in both a normal power condition and power blackout condition to the satisfaction of the surveyor.</u></p> <p style="text-align: center;"><hereafter, same as present></p>	<p>- Reflected IACS UR Z18 (Rev.9 Apr 2020)</p>

(5-1) Effective date : 1 July 2021

(Date of which application for survey is submitted)

Present	Amendment	Note
<p style="text-align: center;">Section 8 Competence and Duties of Surveyors</p> <p>801. Competence of Surveyors [See Guidance]</p> <ol style="list-style-type: none"> The Surveyor can attend <u>the classed ships</u> at all reasonable times. The Surveyor may suspend surveys when the necessary preparations required in the <u>Rules</u> have not been made or any appropriate attendant is not present. <omitted> The Surveyor will notify the survey applicant of his recommendations for repairs or renewals when the hull, machinery or other equipment are in conflict with the requirements of the <u>Rules</u>, damaged, or worn out. Upon this notification the applicant is to carry out the repairs to the satisfaction of the Surveyor. <p>802. Duties of Surveyors</p> <ol style="list-style-type: none"> The Surveyor is to undertake all the surveys on <u>a classed ship</u> for which the application is made <u>and is to report to the Head Office without delay.</u> <omitted> <omitted> <p><newly added></p> <p>804 ~ 807. <omitted></p>	<p style="text-align: center;">Section 8 Competence, and Duties of Surveyors and Responsibility and Scope of Classification (2021)</p> <p>801. Competence of Surveyors [See Guidance]</p> <ol style="list-style-type: none"> <u>Upon receiving an application for survey, t</u>The Surveyor may conduct <u>survey</u> can attend the classed ships at all reasonable times. <i>(2021)</i> The Surveyor may suspend surveys when the necessary preparations required in the <u>Classification Technical</u> Rules have not been made or any appropriate attendant is not present. <i>(2021)</i> <same as the current Rules> The Surveyor will notify the survey applicant of his recommendations for repairs or renewals when the hull, machinery or other equipment are in conflict with the requirements of the <u>Classification Technical</u> Rules, ~. <i>(2021)</i> <p>802. Duties of Surveyors</p> <ol style="list-style-type: none"> The Surveyor is to undertake <u>relevant all the surveys when there is an application for survey of a Classification Survey during/after Construction or on a classed ship or materials, equipments etc. for which the application is made: and is to report to the Head Office without delay.</u> <i>(2021)</i> <same as the current Rules> <p><same as the current Rules></p> <p>804. Scope of Classification (2021)</p> <ol style="list-style-type: none"> The Society is not an insurer or guarantor of the integrity or safety of a vessel or of any of its equipment or machinery. The validity, applicability, and interpretation of any certificate, report, plan or document review or approval are governed by the Rules, Guides and standard of the Society who shall remain the sole judge thereof. The Society only is qualified to apply its Rules and to interpret them. <u>Any reference to them has no effect unless it involves the Society's intervention.</u> The Society accepts no responsibility for the use of information related to its Services which was not provided for the purpose by the Society or with its assistance. <p>8054 ~ 8087. <same as the current Rules></p>	<p>- To be consistent with the current (because it is not only survey the classed ships)</p> <p>- Modified according to the definitions</p> <p>- To be consistent with the current</p> <p>- Requested by the for Business Support Team (refer to the IACS Class requirements as benchmarking)</p> <p>: It is to clarify that the authority to interpret KR's Rules is in the Society.</p> <p>- Refer to 2) & 5) of 4 for "General Terms and Conditions" in the Guidance for Approval of Service Suppliers</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p style="text-align: center;">Section 9 Suspension/Withdrawal of Class and Reclassification</p> <p>901. Suspension/Reinstatement of class</p> <p>1. The classification is automatically suspended.</p> <p>(1) when the Special Survey has not been completed by the due date or by the expiry date of any extension granted in Ch 2, 401. 1 unless the vessel is under attendance for completion of the Special Survey prior to resuming trading by the due date or by the expiry date of any extension granted in Ch 2, 401. 1.</p> <p>(2) when the Annual Survey or Intermediate Survey has not been completed by the end of the corresponding survey time window unless the vessel is under attendance for completion of the Annual Survey or Intermediate Survey by the end of the corresponding survey time window.</p> <p>Classification will be reinstated upon satisfactory completion of the surveys due. 〈Newly added〉</p> <p>Such surveys are to be credited from the date originally due. However, the vessel is disclassified from the date of suspension until the date class is reinstated. 〈See Guidance〉</p>	<p style="text-align: center;">〈Rule〉</p> <p style="text-align: center;">Section 9 Suspension/Withdrawal of Class and Reclassification</p> <p>901. Suspension/Reinstatement of class</p> <p>1. The classification is automatically suspended.</p> <p>(1) ~ (2) 〈same as the current Rules〉</p> <p>Classification will be reinstated upon satisfactory completion of the surveys due. <u>The Special Surveys to be carried out for reinstatement of class are to be based upon the survey requirements at the original date due and not on the age of the vessel when the survey is carried out.</u> Such surveys are to be credited from the date originally due. However, the vessel is disclassified from the date of suspension until the date class is reinstated. <i>(2021)</i> 〈See Guidance〉</p>	<p>- Introduced from Guidances : reflected to the IACS PR 1C A.1.1, A1.2 & A1.3</p>
<p style="text-align: center;">〈Guidance〉</p> <p style="text-align: center;">Section 9 Suspension/Withdrawal of Class and Reclassification</p> <p>901. Suspension/Reinstatement of class 〈See Rule〉</p> <p><u>In application to 901. 1 and 6 of the Rules, the surveys to be carried out for reinstatement of class are to be based upon the survey requirements at the original date due and not on the age of the vessel when the survey is carried out.</u></p>	<p style="text-align: center;">〈Guidance〉</p> <p style="text-align: center;">Section 9 Suspension/Withdrawal of Class and Reclassification</p> <p>901. Suspension/Reinstatement of class 〈See Rule〉</p> <p><u>In application to 901. 1 and 6 of the Rules, the surveys to be carried out for reinstatement of class are to be based upon the survey requirements at the original date due and not on the age of the vessel when the survey is carried out.</u></p>	<p>- Moved into Rules</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p>6. If, due to circumstances reasonably beyond the owner's or the Society's control, the vessel is not in a port where the overdue surveys can be completed at the expiry of the periods allowed, the Society may allow the vessel to sail, in class, directly to an agreed discharge port, and if necessary, hence, in ballast, to an agreed port at which the survey will be completed, provided the Society:</p> <p>(1) ~ (3) 〈omitted〉</p> <p>〈newly added〉</p> <p>If class has already been automatically suspended in such cases, it may be reinstated subject to the conditions prescribed in this paragraph.</p> <p><u>Where 'force majeure' means damage to the ship; unforeseen inability of the Society to attend the vessel due to the governmental restrictions on right of access or movement of personnel; unforeseeable delays in port or inability to discharge cargo due to unusually lengthy periods of severe weather, strikes or civil strife; acts of war; or other force majeure. [See Guidance]</u></p>	<p style="text-align: center;">〈Rule〉</p> <p>6. If, due to circumstances reasonably beyond the owner's or the Society's control, the vessel is not in a port where the overdue surveys can be completed at the expiry of the periods allowed, the Society may allow the vessel to sail, in class, directly to an agreed discharge port, and if necessary, hence, in ballast, to an agreed port at which the survey will be completed, provided the Society:</p> <p>(1) ~ (3) 〈same as the current Rules〉</p> <p><u>The surveys to be carried out for reinstatement of class are to be based upon the survey requirements at the original date due and not on the age of the vessel when the survey is carried out. Such Surveys are to be credited from the date originally due. (2021)</u></p> <p>If class has already been automatically suspended in such cases, it may be reinstated subject to the conditions prescribed in this paragraph. (2021)</p> <p>Where 'force majeure' means damage to the ship; unforeseen inability of the Society to attend the vessel due to the governmental restrictions on right of access or movement of personnel; unforeseeable delays in port or inability to discharge cargo due to unusually lengthy periods of severe weather, strikes or civil strife; acts of war; or other force majeure. [See Guidance]</p>	<p>- Introduced from Guidances : reflected to the IACS PR 1C A1.7</p> <p>- Moved into Definitions of 101.</p>
<p style="text-align: center;">〈Guidance〉</p> <p style="text-align: center;">Section 9 Suspension/Withdrawal of Class and Reclassification</p> <p>901. Suspension/Reinstatement of class [See Rule]</p> <p><u>In application to 901. 1 and 6 of the Rules, the surveys to be carried out for reinstatement of class are to be based upon the survey requirements at the original date due and not on the age of the vessel when the survey is carried out.</u></p>	<p style="text-align: center;">〈Guidance〉</p> <p style="text-align: center;">Section 9 Suspension/Withdrawal of Class and Reclassification</p> <p>901. Suspension/Reinstatement of class [See Rule]</p> <p>In application to 901. 1 and 6 of the Rules, the surveys to be carried out for reinstatement of class are to be based upon the survey requirements at the original date due and not on the age of the vessel when the survey is carried out.</p>	<p>- Moved into Rules</p>

Present	Amendment	Note
<p style="text-align: center;">CHAPTER 2 PERIODICAL AND OTHER SURVEYS</p> <p style="text-align: center;">Section 2 Annual Survey</p> <p>201. to 202. <omitted></p> <p>203. Machinery, electrical installations and additional installations</p> <p style="padding-left: 20px;">1. to 27. <omitted></p> <p style="padding-left: 20px;"><Newly added></p> <p>28. In addition to Par 1 through Par 26, relevant requirements of Ch 18 are also to be taken if applicable. (2017)</p> <p style="text-align: center;">Section 3 Intermediate Survey</p> <p>301. to 302. <omitted></p> <p>303. Machinery, electrical installations and additional installations</p> <p style="padding-left: 20px;">1. to 9. <omitted></p> <p style="padding-left: 20px;"><Newly added></p> <p>10. In addition to Par 1 through Par 8, relevant requirements of Ch 18 are also to be taken if applicable.</p> <p style="text-align: center;"><hereafter, omitted></p>	<p style="text-align: center;">CHAPTER 2 PERIODICAL AND OTHER SURVEYS</p> <p style="text-align: center;">Section 2 Annual Survey</p> <p>201. to 202. <omitted></p> <p>203. Machinery, electrical installations and additional installations</p> <p style="padding-left: 20px;">1. to 27. <same as present></p> <p>28. <u>The Surveys for Exhaust gas emission abatement system(SCR, EGR & EGCS) are to be carried out in accordance with Guidance for Exhaust gas emission abatement system. (2021)</u></p> <p>29. In addition to Par 1 through Par 28 relevant requirements of Ch 18 are also to be taken if applicable. (2021)</p> <p style="text-align: center;">Section 3 Intermediate Survey</p> <p>301. to 302. <same as present></p> <p>303. Machinery, electrical installations and additional installations</p> <p style="padding-left: 20px;">1. to 9. <same as present></p> <p>10. <u>The Surveys for Exhaust gas emission abatement system(SCR, EGR & EGCS) are to be carried out in accordance with Guidance for Exhaust gas emission abatement system. (2021)</u></p> <p>11. In addition to Par 1 through Par 10, relevant requirements of Ch 18 are also to be taken if applicable. (2021)</p> <p style="text-align: center;"><hereafter, same as present></p>	<p>- survey items related to EEAS has been added in the annual survey items.</p> <p>- survey items related to EEAS has been added in the intermediate survey items.</p>

Present	Amendment	Note
<p style="text-align: center;">Section 5-1 Special Survey (Machinery, Electrical Installations and Additional Installations)</p> <p>501. <omitted> 502. Requirements of survey</p> <p>1. <omitted> 2. Requirements of machinery except for main engines and auxiliary engines <i>(2018)</i> (1) to (13) <omitted></p> <p><Newly added></p> <p style="text-align: center;"><hereafter, omitted></p>	<p style="text-align: center;">Section 5-1 Special Survey (Machinery, Electrical Installations and Additional Installations)</p> <p>501. <same as present> 502. Requirements of survey</p> <p>1. <same as present> 2. Requirements of machinery except for main engines and auxiliary engines <i>(2018)</i> (1) to (13) <same as present></p> <p><u>(14) The Surveys for Exhaust gas emission abatement system(SCR, EGR & EGCS) are to be carried out in accordance with Guidance for Exhaust gas emission abatement system. <i>(2021)</i></u></p> <p style="text-align: center;"><hereafter, same as present></p>	<p>- survey items related to EEAS has been added in the special survey items.</p>

Present	Amendment	Note
<p style="text-align: center;">Section 6 Docking Survey</p> <p>601. ~ 604. <omitted></p> <p>605. Extended Dry-docking Interval System</p> <p>1. General</p> <p>(1) ~ (3) <omitted></p> <p>(4) The Owner can apply to join the "Extended Dry-docking Interval System" before the date on which the ship reaches 10 years of age. When the Owner applied to join the "Extended Dry-docking Interval System" after the No.1 Special Survey and the Docking Survey assigned between 10 years to 15 years of age has carried out in dry-dock or on a slipway, the next Docking Surveys can be carried out as Docking Survey and In-water Survey alternately start with In-water Survey.</p> <p><figure attached></p>	<p style="text-align: center;">Section 6 Docking Survey</p> <p>601. ~ 604. <same as the current Rules></p> <p>605. Extended Dry-docking Interval System</p> <p>1. General</p> <p>(1) ~ (3) <same as the current Rules></p> <p>(4) The Owner can apply to join the "Extended Dry-docking Interval System" before the date on which the ship reaches 10 years of age. When the Owner applied to join the "Extended Dry-docking Interval System" after the No.1 Special Survey and the Docking Survey assigned between 10 years to 15 years of age has carried out in dry-dock or on a slipway, the next Docking Surveys can be carried out as Docking Survey and In-water Survey alternately start with In-water Survey. <i>(2021)</i> (refer to below figure)</p> <div style="text-align: center;"> </div> <p>Note : where IS, SS, IWS and DS mean Intermediate Survey, Special Survey, In-water Survey and Docking Survey respectively.</p>	<p>* Added pictures to make the content of the requirements more understandable</p> <p>* For vessels that comply with EDD requirements, including approval of the flag State, it is possible until the ship reaches 15 years of age.</p>

Present	Amendment	Note
<p style="text-align: center;">Section 8 Boiler Survey</p> <p>801. to 802. <omitted></p> <p><Newly added></p> <p style="text-align: center;"><hereafter, omitted></p> <p style="text-align: center;">Section 9 Continuous Survey of Machinery</p> <p>901. to 902. <omitted></p> <p>903. Planned Maintenance System</p> <p>1. to 2. <omitted></p> <p>3. In case the ship under PMS, the condition monitoring equipment(hereinafter referred to as "CM"). approved <u>by the Society shall be</u> in accordance with the Guidance relating to the Rules. 【See Guidance】</p> <p>4. to 6. <omitted></p> <p style="text-align: center;"><hereafter, omitted></p>	<p style="text-align: center;">Section 8 Boiler Survey</p> <p>801. to 802. <same as present></p> <p>803. Survey for ships in which boiler condition monitoring is performed 【See Guidance】</p> <p><u>For ships assigned with the BCM notation in accordance with the Guidance, parts of survey items required in 801.1 may carried out by the chief engineer at alternate surveys. (2021)</u></p> <p style="text-align: center;"><hereafter, same as present></p> <p style="text-align: center;">Section 9 Continuous Survey of Machinery</p> <p>901. to 902. <same as present></p> <p>903. Planned Maintenance System</p> <p>1. to 2. <same as present></p> <p>3. In case the ship under PMS, the condition monitoring equipment(hereinafter referred to as "CM") approved by the Society <u>and Condition Based Maintenance(hereinafter referred to as "CBM") are to be</u> in accordance with the Guidance relating to the Rules. 【See Guidance】 (2021)</p> <p>4. to 6. <same as present></p> <p style="text-align: center;"><hereafter, same as present></p>	<p>- Newly added alternative survey requirements for boiler</p> <p>- Additions to CBM's application criteria in Annex 1-8 have been added.</p>

Present	Amendment	Note
<p style="text-align: center;">Section 19 Special Requirements for Ships Subject to Korean Ship Safety Act or Fishing Vessels Act</p> <p>1901. Special requirements for ships subject to Korean Ship Safety Act [See Guidance]</p> <p>1. ~ 5. <omitted> <newly added></p> <p>6. <omitted> <newly added></p> <p>7. ~ 8. <omitted></p> <p>1902. Special requirements for ships subject to Korean Fishing Vessels Act</p> <p>1. ~ 6. <omitted> <newly added></p> <p>7. <omitted></p>	<p style="text-align: center;">Section 19 Special Requirements for Ships Subject to Korean Ship Safety Act or Fishing Vessels Act</p> <p>1901. Special requirements for ships subject to Korean Ship Safety Act [See Guidance]</p> <p>1. ~ 5. <same as the current Rules></p> <p><u>6. In case of ships's age 15 years and over, docking survey is not to be replaced by In-water Survey at Intermediate Survey. (2021)</u></p> <p>7. 6: <same as the current Rules></p> <p><u>8. According to the Classification Technical Rules, Oil Tanker carrying oil in independent tanks not part of ship's hull such as an asphalt carrier does not fall within the scope of the Enhanced Survey Programme(ESP). But this ship above subject to the 「Korean Ship Safety Act」 is classified as Oil Tankers and the 「Standard for Enhanced Survey」 is applied, Therefore this ship is to be subject to the Enhanced Survey. (2021)</u></p> <p>9. 7: ~ 10. 8: <same as the current Rules></p> <p>1902. Special requirements for ships subject to Korean Fishing Vessels Act</p> <p>1. ~ 6. <same as the current Rules></p> <p><u>7. In case of ships's age 15 years and over, docking survey is not to be replaced by In-water Survey at Intermediate Survey. (2021)</u></p> <p>8. 7: <same as the current Rules></p>	<p>- At the request of Survey Team(SUR 3000-814-2020, 3rd April 2020)</p> <p>: Vessels over 15 years of age cannot be carried out by In-water Survey at IS, but there are cases where applicable laws are missed.</p> <p>- Adjusting No.</p> <p>- Regarding the scope of application of the ESP, the requirements of the Ship Safety Act have been strengthened than those of the Rules of the Society, so the relevant requirements are reflected.</p> <p>- Adjusting No.</p> <p>- Adjusting No.</p>

(5-2) Effective date : 1 July 2021

(Date of which application for survey is submitted) - [for Definitions](#)

Present	Amendment	Note
<p style="text-align: center;">CHAPTER 1 CLASSIFICATION</p> <p style="text-align: center;">Section 1 General</p> <p>101. Definitions (2020) The definitions of terms used in Ch 1, Ch 2 and Ch 3 are to be as specified in the following, unless otherwise specified elsewhere.</p> <p>1. ~ 2. <omitted> <u><newly added></u></p> <p>3. ~ 12. <u><newly added></u></p>	<p style="text-align: center;">CHAPTER 1 CLASSIFICATION</p> <p style="text-align: center;">Section 1 General</p> <p>101. Definitions (2020) The definitions of terms used in Ch 1, Ch 2 and Ch 3 are to be as specified in the following, unless otherwise specified elsewhere.</p> <p>1. ~ 2. <same as the current Rules></p> <p>3. Classification Technical Rules include Rules and Guidance. (2021) <u>(1) Rules</u> means the Rules which have been established/amended by this Society to undertake classification and survey on ships, off-shore units and relevant equipment. <u>(2) Guidance</u> means the Guidance relating to the Rules and other Guidance.</p> <p>4. 3. ~ 13. 12.</p> <p>14. Force majeure means damage to the ship; unforeseen inability of the Society to attend the vessel due to the governmental restrictions on right of access or movement of personnel; unforeseeable delays in port or inability to discharge cargo due to unusually lengthy periods of severe weather, strikes or civil strife; acts of war; or other force majeure. (2021)</p> <p>15. A cofferdam means an empty space arranged so that compartments on each side have no common boundary. The following dedicated tanks are to be separated from adjacent tanks by cofferdams. However, these cofferdams may be omitted provided that the common boundaries of lubricating oil and fuel oil tank have full penetration welds. <u>(1) Fuel oil (2) Lubricating oil (3) Vegetable oil (4) Fresh water</u> <u>The cofferdams are to be provided with the air pipes and with the manholes of adequate size which are well accessible. (2021)</u></p> <p>16. Void space or Void means an enclosed empty space in a ship. (2021)</p>	<p>- Refer to the Procedure for Development of CTR(QP-08), 4. Definitions</p> <p>- Adjusting No.</p> <p>- Moved from Rule Pt 1 Ch 1, 901.6</p> <p>- The need to define definitions for Cofferdam and Void mentioned in S14(Annex 1-16) was identified.</p> <p>- Refer to the Pt 13, Ch 1, Sec. 4 Table 7</p> <p>- From IACS Rec. No. 82 (Surveyors Glossary Hull Terms & Hull Survey Terms)</p>

Present	Amendment	Note
<p style="text-align: center;">CHAPTER 2 PERIODICAL AND OTHER SURVEYS</p> <p style="text-align: center;">Section 1 General</p> <p>101. Definitions The definitions of terms used in Ch 2 and Ch 3 are to be as specified in the followings, unless otherwise specified elsewhere.</p> <p>1. <omitted></p> <p>2-1. A bulk carrier <omitted></p> <p>2-2. A Double Skin Bulk Carrier <omitted> <u><newly added></u></p> <p>3. ~ 20. <omitted></p> <p>21. Enhanced survey programme means, in addition to Ch 2, an enhanced survey method applied for hull structure and piping systems in way of cargo holds/tanks, pump rooms, cofferdams, pipe tunnels, void spaces within the cargo area and all ballast tanks in accordance with Ch 3.</p> <p><omitted></p> <p><u><newly added></u></p> <p>43. Wind and Water Strakes <omitted></p> <p>44. ~ 45. <omitted></p>	<p style="text-align: center;">CHAPTER 2 PERIODICAL AND OTHER SURVEYS</p> <p style="text-align: center;">Section 1 General</p> <p>101. Definitions The definitions of terms used in Ch 2 and Ch 3 are to be as specified in the followings, unless otherwise specified elsewhere.</p> <p>1. <same as the current Rules></p> <p>2-1. A bulk carrier <same as the current Rules></p> <p>2-2. A double Skin Bulk Carrier <same as the current Rules></p> <p>2-3. A self-unloading bulk carrier means a ship which is constructed generally with single deck, double bottom, hopper side tanks and topside tanks and with single or double side skin construction in cargo length area and intended to carry and self-unloading dry cargoes in bulk. For unloading cargoes, the ship is equipped with a conveyor system and is to be complied with the requirements of Pt 7, Ch 3 of the Rules. <i>(2021)</i></p> <p>3. ~ 20. <same as the current Rules></p> <p>21. Enhanced survey programme means, in addition to Ch 2, an enhanced survey method applied for hull structure and piping systems in way of cargo holds/tanks, pump rooms, cofferdams, pipe tunnels, void spaces within the cargo area and all ballast tanks in accordance with Ch 3. <u>In addition, the related programme applies only to ships having integral tanks in the cargo area. And in accordance with Ch 3, 102. 1, the Owner in cooperation with the Society is to work out a specific survey programme prior to the commencement of related surveys. Additionally ships subject to the Korean Ship Safety Act is to be also complied with the requirements of Sec 19, 1901. <i>(2021)</i></u></p> <p><same as the current Rules></p> <p>43. Strake means a course, or row, of shell, deck, bulkhead, or other plating. <i>(2021)</i></p> <p>44. 43: Wind and Water Strakes <same as the current Rules></p> <p>45. 44: ~ 46. 45: <same as the current Rules></p>	<p>- At the request of Busan Branch Office (BSN4700-725-2020, 2nd June 2020)</p> <p>: Self-Unloading Bulk Carrier, the Ship Type notation, is mentioned in Pt 1 of the Rule, but the additional details about the conditions that can be assigned to the Ship Type notation are not mentioned. Therefore, it is necessary to provide more detailed conditions</p> <p>- An E-mail by IACS Survey Panel Chair on 5th OCT 2019)</p> <p>: All the eleven members agreed with the view of RINA that oil tankers carrying oil in independent tanks not part of ship's hull such as asphalt carriers do not fall within the scope of the application of the ESP Code.</p> <p>- Adjusting No.</p> <p>- Adjusting No.</p>

(5-3) Effective date : 1 July 2021

- (Date of which application for survey is submitted)
- Moved the Guidance's requirements into Rule's requirements

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p style="text-align: center;">CHAPTER 1 CLASSIFICATION</p> <p style="text-align: center;">Section 1 General</p> <p>102. Classification</p> <p>1. Steel ships built and surveyed in accordance with the Rules of the Society(hereafter referred to as "the Rules") or with the alternatives equivalent to the Rules will be assigned a class designation by the Society and registered in the Register of Ships.</p> <p>〈newly added〉</p> <p>2. ~ 3. 〈omitted〉</p>	<p style="text-align: center;">〈Rule〉</p> <p style="text-align: center;">CHAPTER 1 CLASSIFICATION</p> <p style="text-align: center;">Section 1 General</p> <p>102. Classification</p> <p>1. Steel ships built and surveyed in accordance with the Rules of the Society(hereafter referred to as "the Rules") or with the alternatives equivalent to the Rules will be assigned a class designation by the Society and registered in the Register of Ships.</p> <p><u>2. Tests and Inspections specified in the Rules of the Society are to be carried out under attendance of the Surveyor, unless expressly specified otherwise. (2021)</u></p> <p>3. 2. ~ 4. 3. 〈same as the current Rules〉</p>	<p>- Introduced from Guidances</p> <p>- Adjusting No.</p>
<p style="text-align: center;">〈Guidance〉</p> <p style="text-align: center;">CHAPTER 1 CLASSIFICATION</p> <p style="text-align: center;">Section 1 General</p> <p><u>Tests and Inspections specified in the Rules of the Society are to be carried out under attendance of the Surveyor, unless expressly specified otherwise.</u></p>	<p style="text-align: center;">〈Guidance〉</p> <p style="text-align: center;">CHAPTER 1 CLASSIFICATION</p> <p style="text-align: center;">Section 1 General</p> <p>Tests and Inspections specified in the Rules of the Society are to be carried out under attendance of the Surveyor, unless expressly specified otherwise.</p>	<p>- Moved into Rules</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p>105. Equivalence (2020) [See Guidance]</p> <p>The Society may consider the acceptance of alternatives and novel features which deviate from or are not directly applicable to the Rules, provided that they are deemed to be equivalent to the Rules to the satisfaction to the Society.</p> <p>〈“note” newly added〉</p>	<p style="text-align: center;">〈Rule〉</p> <p>105. Equivalence (2021) [See Guidance]</p> <p>The Society may consider the acceptance of alternatives and novel features which deviate from or are not directly applicable to the Rules, provided that they are “deemed to be equivalent to the Rules to the satisfaction to the Society”.</p> <p>Note : “deemed to be equivalent to the Rules to the satisfaction to the Society” includes the following cases.</p> <p>(1) Where as recognized international standards(ISO, IEC, etc.) or national standards(KS, JIS, ASME, etc.) recognized by the Society, each cited in the Classification Technical Rules</p> <p>(2) Where approved in accordance with Guidance for Approval of Risk-based Ship Design.</p> <p>(3) Where having proven service experience deemed appropriate by the Society. For the purposes of this paragraph, proven in-service experience means having a service record of maintaining the performance without any damage for sufficient period.</p> <p>(4) Where there are records of vessel approved by any Society which is subject to verification of compliance with QSCS(Quality System Certification Scheme) of IACS.</p>	<p>- Introduced from Guidances</p>
<p style="text-align: center;">〈Guidance〉</p> <p>105. Equivalence [See Rule]</p> <p>In application to 104. of the Rules, the term “deemed to be equivalent to the Rules to the satisfaction to the Society” includes the following cases.</p> <p>(1) Where as recognized international standards(ISO, IEC, etc.) or national standards(KS, JIS, ASME, etc.) recognized by the Society, each cited in the Classification Technical Rules (2020)</p> <p>(2) Where approved in accordance with Guidance for Approval of Risk-based Ship Design.</p> <p>(3) Where having proven service experience deemed appropriate by the Society. For the purposes of this paragraph, proven in-service experience means having a service record of maintaining the performance without any damage for sufficient period.</p> <p>(4) Where there are records of vessel approved by any Society which is subject to verification of compliance with QSCS(Quality System Certification Scheme) of IACS. (2020)</p>	<p style="text-align: center;">〈Guidance〉</p> <p>105. Equivalence [See Rule]</p> <p>In application to 104. of the Rules, the term “deemed to be equivalent to the Rules to the satisfaction to the Society” includes the following cases:</p> <p>(1) Where as recognized international standards(ISO, IEC, etc.) or national standards(KS, JIS, ASME, etc.) recognized by the Society, each cited in the Classification Technical Rules (2020)</p> <p>(2) Where approved in accordance with Guidance for Approval of Risk-based Ship Design.</p> <p>(3) Where having proven service experience deemed appropriate by the Society. For the purposes of this paragraph, proven in-service experience means having a service record of maintaining the performance without any damage for sufficient period.</p> <p>(4) Where there are records of vessel approved by any Society which is subject to verification of compliance with QSCS(Quality System Certification Scheme) of IACS. (2020)</p>	<p>- Moved into Rules</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉 Section 2 Character of Classification</p> <p>201. Class notations [See Guidance] The class notations assigned to the ships classed with the Society are to be in accordance with the followings: 〈omitted〉</p> <p>(3) Service restriction notations of machinery The following service restriction notations will be given for ships with machinery and electrical installations found to be in compliance with the Rules: KRM 1 ; For ships unrestricted in service area. KRM 0 ; For ships restricted in service area. 〈omitted〉</p> <p>(8) Additional Special feature notations (2020) 〈omitted〉 〈newly added〉</p>	<p style="text-align: center;">〈Rule〉 Section 2 Character of Classification</p> <p>201. Class notations [See Guidance] The class notations assigned to the ships classed with the Society are to be in accordance with the followings: 〈same as the current Rules〉</p> <p>(3) Service restriction notations of machinery (apply to ships having main propulsion machinery.) (2021) The following service restriction notations will be given for ships with machinery and electrical installations found to be in compliance with the Rules: KRM 1 ; For ships unrestricted in service area. KRM 0 ; For ships restricted in service area. 〈same as the current Rules〉</p> <p>(8) Additional Special feature notations (2020) 〈same as the current Rules〉</p> <p>(9) The details for ship type, special feature notations and additional installations notations of class notations are given in Annex 1-1 of the Guidance. (2021)</p>	<p>– Introduced from Guidances</p> <p>– Introduced from Guidances * Annex 1-1 Character of Classification</p>
<p style="text-align: center;">〈Guidance〉 Section 2 Character of Classification</p> <p>201. Class notations (2020) [See Rule]</p> <p>2. Regulations in 201. (3) of the Rules apply to ships having main propulsion machinery.</p> <p>3. 〈omitted〉</p> <p>4. The details for ship type, special feature notations and additional installations notations of class notations are given in Annex 1-1 of the Guidance. (2020)</p>	<p style="text-align: center;">〈Guidance〉 Section 2 Character of Classification</p> <p>201. Class notations (2021) [See Rule]</p> <p>2. Regulations in 201. (3) of the Rules apply to ships having main propulsion machinery.</p> <p>2. 3. 〈same as the current Rules〉</p> <p>4. The details for ship type, special feature notations and additional installations notations of class notations are given in Annex 1-1 of the Guidance. (2020)</p>	<p>– Moved into Rules</p> <p>– Adjusting No. – Moved into Rules</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉 Section 3 Classification Survey during Construction</p> <p>301. Classification Survey during Construction [See Guidance] For a ship requiring Classification Survey during Construction, the construction, materials, scantlings and workmanship of the hull, equipment and machinery are to be examined in detail in order to ascertain that they meet the appropriate requirements of the Rules. <u>(newly added)</u></p> <p>306. Tests [See Guidance] In the Classification Survey during Construction, hydrostatic, water-tight and performance tests are to be carried out in accordance with the relevant part of the Rules. Also the control systems and measuring device after installation are to receive the necessary tests, as deemed necessary by the Society. <u>(newly added)</u></p>	<p style="text-align: center;">〈Rule〉 Section 3 Classification Survey during Construction</p> <p>301. Classification Survey during Construction [See Guidance] For a ship requiring Classification Survey during Construction, the construction, materials, scantlings and workmanship of the hull, equipment and machinery are to be examined in detail in order to ascertain that they meet the appropriate requirements of the Rules. <u>Furthermore, the hull survey for Classification Survey during Construction for ships subject to Annex 1-12 is to be in accordance with Annex 1-12. (2021)</u></p> <p>306. Tests [See Guidance] In the Classification Survey during Construction, hydrostatic, water-tight and performance tests are to be carried out in accordance with the relevant part of the Rules. Also the control systems and measuring device after installation are to receive the necessary tests, as deemed necessary by the Society. <u>Furthermore, "Procedures for Testing Tanks and Tight Boundaries" is to be followed specified in Annex 1-16. (2021)</u></p>	<p>- Introduced from Guidances * Annex 1-12 "Hull Survey for Classification Survey during Construction"</p> <p>- Introduced from Guidances * Annex 1-16 "Procedure for Testing Tanks and Tight Boundaries"</p>
<p style="text-align: center;">〈Guidance〉 Section 3 Classification Survey during Construction</p> <p>301. Classification Survey during Construction [See Rule] <u>The hull survey for Classification Survey during Construction for ships subject to Annex 1-12 is to be in accordance with Annex 1-12.</u></p> <p>306. Tests [See Rule] <u>Procedures for Testing Tanks and Tight Boundaries is to be followed specified in Annex 1-16. And in application to 306. of the Rules, the term "considered necessary tests" means the tests specified in Pt 6, Ch 2, 302. and 303. of the Rules. (for CMA Ships or UMA Ships as defined in Pt 9, the requirements specified in Pt 9, Ch 3, 204. and 205. of the Rules are to be applied) (2018)</u></p>	<p style="text-align: center;">〈Guidance〉 Section 3 Classification Survey during Construction (2021)</p> <p>301. Classification Survey during Construction [See Rule] The hull survey for Classification Survey during Construction for ships subject to Annex 1-12 is to be in accordance with Annex 1-12.</p> <p>306. Tests [See Rule] Procedures for Testing Tanks and Tight Boundaries is to be followed specified in Annex 1-16. And in application to 306. of the Rules, the term "considered necessary tests" means the tests specified in Pt 6, Ch 2, 302. and 303. of the Rules. (for CMA Ships or UMA Ships as defined in Pt 9, the requirements specified in Pt 9, Ch 3, 204. and 205. of the Rules are to be applied) (2018)</p>	<p>- Moved into Rules</p> <p>- Moved into Rules</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p>307. Stability experiments (2020) [See Guidance]</p> <p>3. Where an loading instrument having a stability computation capability as supplemental use of stability information booklet specified in Par 1 is provided, the test report of representative operational conditions is to be submitted to the Society, and the loading instrument shall cover all stability requirements applicable to the ship such as intact, damage and grain stability, etc. When the stability information include sufficient loading conditions of the ship, some part of the function may be omitted. The instrument is to be confirmed by the Surveyor upon installation in accordance with the test report approved by the Society. <u>〈newly added〉</u></p>	<p style="text-align: center;">〈Rule〉</p> <p>307. Stability experiments (2020) [See Guidance]</p> <p>3. Where an loading instrument having a stability computation capability as supplemental use of stability information booklet specified in Par 1 is provided, the test report of representative operational conditions is to be submitted to the Society, and the loading instrument shall cover all stability requirements applicable to the ship such as intact, damage and grain stability, etc. When the stability information include sufficient loading conditions of the ship, some part of the function may be omitted. The instrument is to be confirmed by the Surveyor upon installation in accordance with the test report approved by the Society. <u>Where a loading instrument is installed onboard, the approval and survey procedures are given in Annex 1-10 of the Guidance. (2021)</u></p>	<p>- Introduced from Guidances * Annex 1-10 "Loading Instrument on Stability"</p>
<p style="text-align: center;">〈Guidance〉</p> <p>307. Stability (2020) [See Rule]</p> <p>3. <u>Where a loading instrument is installed onboard according to requirement in 307. 2 of the Rules, the approval and survey procedures are given in Annex 1-10 of the Guidance. (2020)</u></p>	<p style="text-align: center;">〈Guidance〉</p> <p>307. Stability (2021) [See Rule]</p> <p>3. Where a loading instrument is installed onboard according to requirement in 307. 2 of the Rules, the approval and survey procedures are given in Annex 1-10 of the Guidance. (2020)</p>	<p>- Moved into Rules</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p style="text-align: center;">Section 5 Certificates and Reports</p> <p>505. Keeping of the certificates and survey reports (2019) [See Guidance] The Certificate of Classification, the Interim Certificate of Classification, Particular Sheets and Survey Reports, etc. are always to be kept on board by the master of the ship and are to be produced when requested by the Surveyor. <u>〈newly added〉</u></p> <p style="text-align: center;">Section 6 Application for Survey</p> <p>601. Classification Survey [See Guidance] The application for Classification Survey is to be made by the Builder for a ship during construction and by the Owner for a ship after construction. <u>〈newly added〉</u></p>	<p style="text-align: center;">〈Rule〉</p> <p style="text-align: center;">Section 5 Certificates and Reports</p> <p>505. Keeping of the certificates and survey reports (2021) [See Guidance] The Certificate of Classification, the Interim Certificate of Classification, Particular Sheets and Survey Reports, etc. are always to be kept on board by the master of the ship and are to be produced when requested by the Surveyor. <u>Keeping Method on board is Electronic or hard copy format.</u></p> <p style="text-align: center;">Section 6 Application for Survey</p> <p>601. Classification Survey (2021) [See Guidance] The application for Classification Survey is to be made by the Builder for a ship during construction and by the Owner for a ship after construction. <u>The application is to be submitted in writing to the Society. But, the Society reserves the right to decline the application where deemed necessary by the Society as follows:</u></p> <ol style="list-style-type: none"> 1. <u>Where the requested survey is not progressed after the application has been submitted so the intention of the survey application is not clear</u> 2. <u>Where the survey fees are not paid,</u> 3. <u>The ship is not complied with the requirements of the Society, etc.</u> 	<p>– Introduced from Guidances</p> <p>– Introduced from Guidances : re-arranged</p>
<p style="text-align: center;">〈Guidance〉</p> <p style="text-align: center;">Section 5 Certificates and Reports (2020)</p> <p>505. Keeping of the certificates and survey reports (2019) [See Rule] <u>In application to 505. of the Rules, the keeping method related to "Particular Sheets and "Survey Reports etc. are always to be kept on board by master of the ship" are to be as follows.</u></p> <p>(1) <u>Keeping Method</u> <u>Electronic or hard copy format</u></p> <p style="text-align: center;">Section 6 Application for Survey</p> <p>601. Classification Survey [See Rule] <u>In application to 601. of the Rules, the application for survey is to be submitted in writing to the Society. The Society reserves the right to decline the application for the survey where deemed necessary by the Society such as where the requested survey is not progressed after the application has been submitted so the intention of the survey application is not clear, where the survey fees are not paid, the ship is not complied with the requirements of the Society, etc.</u></p>	<p style="text-align: center;">〈Guidance〉</p> <p style="text-align: center;">Section 5 Certificates and Reports (2020)</p> <p>505. Keeping of the certificates and survey reports (2019) [See Rule] <u>In application to 505. of the Rules, the keeping method related to "Particular Sheets and "Survey Reports etc. are always to be kept on board by master of the ship" are to be as follows.</u></p> <p>(1) <u>Keeping Method</u> <u>Electronic or hard copy format</u></p> <p style="text-align: center;">Section 6 Application for Survey</p> <p>601. Classification Survey [See Rule] <u>In application to 601. of the Rules, the application for survey is to be submitted in writing to the Society. The Society reserves the right to decline the application for the survey where deemed necessary by the Society such as where the requested survey is not progressed after the application has been submitted so the intention of the survey application is not clear, where the survey fees are not paid, the ship is not complied with the requirements of the Society, etc.</u></p>	<p>– Moved into Rules</p> <p>– Moved into Rules</p>

Present	Amendment	Note
<p style="text-align: center;"><Rule></p> <p>602. Periodical and other surveys <u>[See Guidance]</u></p> <p>The application for surveys of ship for the continuation of her classification is to be made by the Owner. <u><newly added></u></p> <p style="text-align: center;">Section 7 Responsibilities and Cooperation Duties of the Owners</p> <p>703. Cooperation of survey</p> <p>4. Where it is intended to use service suppliers for the survey of ship, the service suppliers approved by the Society are used as a general rule, and the approval procedure and items are to be in accordance with the Guidance relating to the Rules. [See Guidance]</p>	<p style="text-align: center;"><Rule></p> <p>602. Periodical and other surveys (2021) [See Guidance]</p> <p>The application for surveys of ship for the continuation of her classification is to be made by the Owner. <u>The application is to be submitted in writing to the Society. But, the Society reserves the right to decline the application where deemed necessary by the Society as follows:</u></p> <p>1. <u>Where the requested survey is not progressed after the application has been submitted so the intention of the survey application is not clear</u></p> <p>2. <u>Where the survey fees are not paid</u></p> <p>3. <u>The procedure for suspension/withdrawal specified in Sec 9 of the Rules is to be applied to the ship, etc.</u></p> <p style="text-align: center;">Section 7 Responsibilities and Cooperation Duties of the Owners</p> <p>703. Cooperation of survey</p> <p>4. Where it is intended to use service suppliers for the survey of ship, the service suppliers approved by the Society are used as a general rule, and the approval procedure and items are to be in accordance with <u>the Guidance for Approval of Service Suppliers. (2021)</u> Guidance relating to the Rules. [See Guidance]</p>	<p>- Introduced from Guidances : re-arranged</p> <p>- Introduced from Guidances</p>
<p style="text-align: center;"><Guidance></p> <p>602. Periodical and other surveys <u>[See Rule]</u></p> <p><u>In application to 602. of the Rules, the application for survey is to be submitted in writing to the Society. The Society reserves the right to decline the application for the survey where deemed necessary by the Society such as where the requested survey is not progressed after the application has been submitted so the intention of the survey application is not clear, where the survey fees are not paid, the procedure for suspension/withdrawal specified in Sec 9 of the Rules is to be applied to the ship, etc.</u></p> <p style="text-align: center;">Section 7 Responsibilities and Cooperation Duties of the Owners (2020)</p> <p>702. Cooperation to survey <u>[See Rule]</u></p> <p>In application to 702. 4 of the Rules, "the Guidance" means the requirements specified in the Guidance for Approval of Service Suppliers. (2019)</p>	<p style="text-align: center;"><Guidance></p> <p>602. Periodical and other surveys [See Rule]</p> <p><u>In application to 602. of the Rules, the application for survey is to be submitted in writing to the Society. The Society reserves the right to decline the application for the survey where deemed necessary by the Society such as where the requested survey is not progressed after the application has been submitted so the intention of the survey application is not clear, where the survey fees are not paid, the procedure for suspension/withdrawal specified in Sec 9 of the Rules is to be applied to the ship, etc.</u></p> <p style="text-align: center;">Section 7 Responsibilities and Cooperation Duties of the Owners (2020)</p> <p>702. Cooperation to survey [See Rule]</p> <p>In application to 702. 4 of the Rules, "the Guidance" means the requirements specified in the Guidance for Approval of Service Suppliers. (2019)</p>	<p>- Moved into Rules</p> <p>- Moved into Rules</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p style="text-align: center;">Section 9 Suspension/Withdrawal of Class and Reclassification</p> <p>901. Suspension/Reinstatement of class</p> <p>2. The classification may be suspended in accordance with the Society's suspension procedure. Classification will be reinstated if the cause of such suspension are removed, or upon verification that the overdue survey has been satisfactorily dealt with. Suspension of class decided by the Society takes effect from the date when the condition for suspension of class are met and will remain in effect until such time as the class is reinstated once the due items and/or surveys have been dealt with. (1) ~ (6) 〈omitted〉 〈newly added〉</p> <p>(7) When failure to report to the Society without delay on the “Reports items” of the Responsibilities and Cooperation Duties of the owner specified in Ch 1, 702. (2020)</p> <p>(8) in the event of non-payment of fees</p>	<p style="text-align: center;">〈Rule〉</p> <p style="text-align: center;">Section 9 Suspension/Withdrawal of Class and Reclassification</p> <p>901. Suspension/Reinstatement of class</p> <p>2. The classification may be suspended in accordance with the Society's suspension procedure. 〈same as the current Rules〉 (1) ~ (6) 〈same as the current Rules〉 (7) <u>When a ship is detained following a Port State Control inspection with serious deficiencies found (2021)</u> (8) <u>When a ship for which statutory certificates have been withdrawn by the relevant Administration or a ship is operating with no certificate of ship's nationality without any special reason (2021)</u> (9) <u>A ship which has been declared(or notified) by an international organization or a national body in violation of internationally approved sanctions provisions, including resolutions of the UN Security Council (2021)</u> (10) (7) When failure to report to the Society without delay on the “Reports items” of the Responsibilities and Cooperation Duties of the owner specified in Ch 1, 702. (2020) (11) (8) in the event of non-payment of fees</p>	<p>- Introduced from Guidances</p>
<p style="text-align: center;">〈Guidance〉</p> <p style="text-align: center;">Section 9 Suspension/Withdrawal of Class and Reclassification</p> <p>902. Withdrawal of class (2018) [See Rule]</p> <p>1. <u>In the case of the following ships classed with the Society, the class of the ships may be suspended or withdrawn through the deliberation of the Classification Committee. (2018)</u> (1) <u>When a ship is detained following a Port State Control inspection with serious deficiencies found</u> (2) <u>When a ship for which statutory certificates have been withdrawn by the relevant Administration or a ship is operating with no certificate of ship's nationality without any special reason</u> (3) <u>A ship which has been declared(or notified) by an international organization or a national body in violation of internationally approved sanctions provisions, including resolutions of the UN Security Council (2018)</u></p>	<p style="text-align: center;">〈Guidance〉</p> <p style="text-align: center;">Section 9 Suspension/Withdrawal of Class and Reclassification</p> <p>902. Withdrawal of class (2018) [See Rule]</p> <p>1. <u>In the case of the following ships classed with the Society, the class of the ships may be suspended or withdrawn through the deliberation of the Classification Committee. (2018)</u> (1) <u>When a ship is detained following a Port State Control inspection with serious deficiencies found</u> (2) <u>When a ship for which statutory certificates have been withdrawn by the relevant Administration or a ship is operating with no certificate of ship's nationality without any special reason</u> (3) <u>A ship which has been declared(or notified) by an international organization or a national body in violation of internationally approved sanctions provisions, including resolutions of the UN Security Council (2018)</u></p>	<p>- Moved into Rules</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p>902. Withdrawal of class 【See Guidance】</p> <p>1. The classification may be withdrawn under the approval of the Classification Committee. (1) ~ (4) 〈omitted〉 〈newly added〉</p> <p>2. Notwithstanding Par 1, the class may be withdrawn from the Society in consequence of a request from the Owner. 〈newly added〉</p>	<p style="text-align: center;">〈Rule〉</p> <p>902. Withdrawal of class (2021) 【See Guidance】</p> <p>1. The classification may be withdrawn under the approval of the Classification Committee. (1) ~ (5) 〈same as the current Rules〉 (6) <u>When a ship is detained following a Port State Control inspection with serious deficiencies found (2021)</u> (7) <u>When a ship for which statutory certificates have been withdrawn by the relevant Administration or a ship is operating with no certificate of ship's nationality without any special reason (2021)</u> (8) <u>A ship which has been declared(or notified) by an international organization or a national body in violation of internationally approved sanctions provisions, including resolutions of the UN Security Council (2021)</u></p> <p>2. Notwithstanding Par 1, the class may be withdrawn from the Society in consequence of a request from the Owner.</p> <p>903. Deferment for Class Withdrawal (2021)</p> <p><u>In the case of a fishing vessel that is in operation for a long period of time, when submitting the survey plan and documents certifying that she is being operated, a longer suspension period may be granted by an approval of the Classification Committee.</u></p>	<p>- Introduced from Guidances</p> <p>- Introduced from Guidances</p>
<p style="text-align: center;">〈Guidance〉</p> <p>902. Withdrawal of class (2018) 【See Rule】</p> <p>1. <u>In the case of the following ships classed with the Society, the class of the ships may be suspended or withdrawn through the deliberation of the Classification Committee. (2018)</u> (1) <u>When a ship is detained following a Port State Control inspection with serious deficiencies found</u> (2) <u>When a ship for which statutory certificates have been withdrawn by the relevant Administration or a ship is operating with no certificate of ship's nationality without any special reason</u> (3) <u>A ship which has been declared(or notified) by an international organization or a national body in violation of internationally approved sanctions provisions, including resolutions of the UN Security Council (2018)</u></p> <p>2. <u>In the case of a fishing vessel that is in operation for a long period of time, when submitting the survey plan and documents certifying that she is being operated, a longer suspension period may be granted by an approval of the Classification Committee. (2018)</u></p>	<p style="text-align: center;">〈Guidance〉</p> <p>902. Withdrawal of class (2018) 【See Rule】</p> <p>1. <u>In the case of the following ships classed with the Society, the class of the ships may be suspended or withdrawn through the deliberation of the Classification Committee. (2018)</u> (1) <u>When a ship is detained following a Port State Control inspection with serious deficiencies found</u> (2) <u>When a ship for which statutory certificates have been withdrawn by the relevant Administration or a ship is operating with no certificate of ship's nationality without any special reason</u> (3) <u>A ship which has been declared(or notified) by an international organization or a national body in violation of internationally approved sanctions provisions, including resolutions of the UN Security Council (2018)</u></p> <p>2. <u>In the case of a fishing vessel that is in operation for a long period of time, when submitting the survey plan and documents certifying that she is being operated, a longer suspension period may be granted by an approval of the Classification Committee. (2018)</u></p>	<p>- Moved into Rules</p> <p>- Moved into Rules</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p style="text-align: center;">Section 13 Classification of Other Installations or Equipment</p> <p>1301.Classification [See Guidance]</p> <p>The Society may, upon application, survey such installations or equipment other than those relating to ship as mobile offshore drilling units, mobile offshore units, fixed offshore structures, dredgers, floating docks and other installations or equipment, and they will be registered to the Society with the issue of Certificate of Classification where they are in satisfaction of the Surveyor. In this case, class notation shall be given to them at the discretion of the Society.</p>	<p style="text-align: center;">〈Rule〉</p> <p style="text-align: center;">Section 13 Classification of Other Installations or Equipment</p> <p>1301.Classification (2021) [See Guidance]</p> <p>The Society may, upon application, survey such installations or equipment other than those relating to ship as mobile offshore drilling units, mobile offshore units, fixed offshore structures, dredgers, floating docks and other installations or equipment, and they will be registered to the Society with the issue of Certificate of Classification where they are in satisfaction of the Surveyor. In this case, Annex 1-1 of the Guidance is to be referred for the assignment of the class notation. class notation shall be given to them at the discretion of the Society.</p>	<p>- Introduced from Guidances</p> <p>* Annex 1-1 Character of Classification</p>
<p style="text-align: center;">〈Guidance〉</p> <p style="text-align: center;">Section 13 Classification of Other Installations or Equipment</p> <p>1301.Classification [See Rule]</p> <p>In application to 1301. of the Rules, Annex 1-1 of the Guidance is to be referred for the assignment of the class notation.</p>	<p style="text-align: center;">〈Guidance〉</p> <p style="text-align: center;">Section 13 Classification of Other Installations or Equipment (2021)</p> <p>1301.Classification [See Rule]</p> <p>In application to 1301. of the Rules, Annex 1-1 of the Guidance is to be referred for the assignment of the class notation.</p>	<p>- Moved into Rules</p>

Present	Amendment	Note
<p style="text-align: center;">(Rule)</p> <p style="text-align: center;">CHAPTER 2 PERIODICAL AND OTHER SURVEYS</p> <p style="text-align: center;">Section 1 General</p> <p>105. Laid-up ships (2018)</p> <p>2. Laid-up survey at the beginning of laid-up are to be performed in accordance with <u>the Guidance relating to the Rules.</u></p> <p>3. In order to put the laid-up ship into service, the ship is to receive the re-commissioning survey in accordance with <u>the Guidance relating to the Rules.</u></p> <p>5. Laid-up attestation may be issued at the request of the Owner provided that the laid-up condition is in satisfactory after the laid-up survey with approved Laid-up Maintenance Program in accordance with <u>the Guidance relating to the Rules.</u></p> <p>106. Tests</p> <p>2. If significant repairs are carried out to main or auxiliary machinery or steering gear, consideration is to be given to a sea trial to attending Surveyor's satisfaction. [See Guidance]</p> <p><u>["note" newly added]</u></p>	<p style="text-align: center;">(Rule)</p> <p style="text-align: center;">CHAPTER 2 PERIODICAL AND OTHER SURVEYS</p> <p style="text-align: center;">Section 1 General</p> <p>105. Laid-up ships (2018)</p> <p>2. Laid-up survey at the beginning of laid-up are to be performed in accordance with <u>Annex 1-17</u> of the Guidance. relating to the Rules: (2021)</p> <p>3. In order to put the laid-up ship into service, the ship is to receive the re-commissioning survey in accordance with <u>Annex 1-17</u> of <u>Guidance.</u> relating to the Rules: (2021)</p> <p>5. Laid-up attestation may be issued at the request of the Owner provided that the laid-up condition is in satisfactory after the laid-up survey with approved Laid-up Maintenance Program in accordance with <u>Annex 1-17</u> of the Guidance. relating to the Rules: (2021)</p> <p>106. Tests</p> <p>2. If "significant repairs" are carried out to main or auxiliary machinery or steering gear, consideration is to be given to a sea trial to attending Surveyor's satisfaction. (2021) [See Guidance]</p> <p><u>Note : "significant repairs" means the repairs may affect on the ship's speed or steering performance such as change of the main propulsion engine or the auxiliary engine, over 10% change of output of the main propulsion engine or the auxiliary engine, change of shape or main dimension of the propeller and change of the steering gear or steering capability.</u></p>	<p>- Clarify the requirements.</p> <p>* Annex 1-17 "Laid-up and recommissioning of ships"</p> <p>- Introduced from Guidances</p>
<p style="text-align: center;">(Guidance)</p> <p style="text-align: center;">CHAPTER 2 PERIODICAL AND OTHER SURVEYS</p> <p style="text-align: center;">Section 1 General</p> <p>106. Tests [See Rule]</p> <p><u>In application to 106. 2 of the Rules, "significant repairs" means the repairs may affect on the ship's speed or steering performance such as change of the main propulsion engine or the auxiliary engine, over 10% change of output of the main propulsion engine or the auxiliary engine, change of shape or main dimension of the propeller and change of the steering gear or steering capability.</u></p>	<p style="text-align: center;">(Guidance)</p> <p style="text-align: center;">CHAPTER 2 PERIODICAL AND OTHER SURVEYS</p> <p style="text-align: center;">Section 1 General (2021)</p> <p>106. Tests [See Rule]</p> <p><u>In application to 106. 2 of the Rules, "significant repairs" means the repairs may affect on the ship's speed or steering performance such as change of the main propulsion engine or the auxiliary engine, over 10% change of output of the main propulsion engine or the auxiliary engine, change of shape or main dimension of the propeller and change of the steering gear or steering capability.</u></p>	<p>- Moved into Rules</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p>107. Repairs</p> <p>2. Any damage in association with wastage over the allowable limits(including buckling, grooving, detachment or fracture), or extensive areas of wastage over the allowable limits, which <u>affects or, in the opinion of the Surveyor, will affect the vessel's structural, watertight or weathertight integrity</u>, is to be promptly and thoroughly repaired. Areas to be considered include; 【See Guidance】</p> <p>(1) side shell frames, their end attachments and adjacent shell plating (2) ~ (8) <omitted></p> <p>〈“note” newly added〉</p>	<p style="text-align: center;">〈Rule〉</p> <p>107. Repairs</p> <p>2. Any damage in association with wastage over the allowable limits(including buckling, grooving, detachment or fracture), or extensive areas of wastage over the allowable limits, which <u>“affects or, in the opinion of the Surveyor, will affect the vessel's structural, watertight or weathertight integrity”</u>, is to be promptly and thoroughly repaired. Areas to be considered include and in this case, see Annex 1-18 of the Guidance for more specific areas. (2021) 【See-Guidance】</p> <p>(1) side shell frames, their end attachments and adjacent shell plating (2) ~ (8) <same as the current Rules></p> <p>Note : <u>“affects or, in the opinion of the Surveyor, will affect the vessel's structural, watertight or weathertight integrity” means the case where the Surveyor considered that the vessel's intended voyages or services are not able to be achieved safely because of the damages in vessel's structure, including buckling, grooving, detachment or fracture, or the lose of vessel's watertight or weathertight integrity.</u></p>	<p>- Introduced from Guidances</p> <p>* Annex 1-18 In case of promptly and thoroughly repaired, Areas to be considered*</p> <p>- Introduced from Guidances</p>
<p style="text-align: center;">〈Guidance〉</p> <p>107. Repairs</p> <p>1. In application to 107. 2 of the Rules, <u>“affects or, in the opinion of the Surveyor, will affect the vessel's structural, watertight or weathertight integrity” means the case where the Surveyor considered that the vessel's intended voyages or services are not able to be achieved safely because of the damages in vessel's structure, including buckling, grooving, detachment or fracture, or the lose of vessel's watertight or weathertight integrity. 【See Rule】</u></p> <p>2. In application to 107. 2 of the Rules, <u>“promptly and thoroughly repaired. Areas to be considered”, in this case, see Annex 1-18 for more specific areas. (2019) 【See Rule】</u></p>	<p style="text-align: center;">〈Guidance〉</p> <p>107. Repairs (2021)</p> <p>1. In application to 107. 2 of the Rules, <u>“affects or, in the opinion of the Surveyor, will affect the vessel's structural, watertight or weathertight integrity” means the case where the Surveyor considered that the vessel's intended voyages or services are not able to be achieved safely because of the damages in vessel's structure, including buckling, grooving, detachment or fracture, or the lose of vessel's watertight or weathertight integrity. 【See Rule】</u></p> <p>2. In application to 107. 2 of the Rules, <u>“promptly and thoroughly repaired. Areas to be considered”, in this case, see Annex 1-18 for more specific areas. (2019) 【See Rule】</u></p>	<p>- Moved into Rules</p> <p>- Moved into Rules</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p>4. Additionally, when a survey results in the identification of structural defects or corrosion, either of which, in the opinion of the Surveyor, will impair the vessel's fitness for continued service, remedial measures are to be implemented before the ship continues in service. [See Guidance] <"note" newly added></p>	<p style="text-align: center;">〈Rule〉</p> <p>4. Additionally, "when a survey results in the identification of structural defects or corrosion, either of which, in the opinion of the Surveyor, will impair the vessel's fitness for continued service", remedial measures are to be implemented before the ship continues in service. <i>(2021)</i> [See Guidance] Note : "when a survey results in the identification of structural defects or corrosion, either of which, in the opinion of the Surveyor, will impair the vessel's fitness for continued service" means the case where the Surveyor considered that the vessel's intended voyages or services are not able to be achieved safely because of defects or corrosion identified from the survey results.</p>	<p>- Introduced from Guidances</p>
<p style="text-align: center;">〈Guidance〉</p> <p>3. In application to 107. 4 of the Rules, "when a survey results in the identification of structural defects or corrosion, either of which, in the opinion of the Surveyor, will impair the vessel's fitness for continued service" means the case where the Surveyor considered that the vessel's intended voyages or services are not able to be achieved safely because of defects or corrosion identified from the survey results. [See Rule]</p>	<p style="text-align: center;">〈Guidance〉</p> <p>3. In application to 107. 4 of the Rules, "when a survey results in the identification of structural defects or corrosion, either of which, in the opinion of the Surveyor, will impair the vessel's fitness for continued service" means the case where the Surveyor considered that the vessel's intended voyages or services are not able to be achieved safely because of defects or corrosion identified from the survey results. [See Rule]</p>	<p>- Moved into Rules</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p>6. Voyage repairs and maintenance</p> <p>(1) Where repairs to hull, machinery or equipment, which affect or may affect classification, are to be carried out by a riding crew during a voyage, they are to be planned in advance. A complete repair procedure including the extent of proposed repair and the need for Surveyor's attendance during the voyage is to be submitted to the Society in advance and the repair procedure is to be in accordance with the separate requirement specified by the Society. Where in any <u>emergency circumstance</u>, emergency repairs are to be effected immediately, the repairs should be documented in the ship's log and submitted thereafter to the Society for use in determining further survey requirements. 【See Guidance】 <u>〈"note" newly added〉</u></p>	<p style="text-align: center;">〈Rule〉</p> <p>6. Voyage repairs and maintenance</p> <p>(1) Where repairs to hull, machinery or equipment, which affect or may affect classification, are to be carried out by a riding crew during a voyage, they are to be planned in advance. A complete repair procedure including the extent of proposed repair and the need for Surveyor's attendance during the voyage is to be submitted to the Society in advance and the repair procedure is to be in accordance with the separate requirement specified by the Society. Where in any <u>"emergency circumstance"</u>, emergency repairs are to be effected immediately, the repairs should be documented in the ship's log and submitted thereafter to the Society for use in determining further survey requirements. <u>(2021) 【See Guidance】</u> Note : <u>"emergency circumstance" means the circumstance which affect or may affect the ships maneuvering, survival, marine pollution or protection of the cargoes directly.</u></p>	<p>- Introduced from Guidances</p>
<p style="text-align: center;">〈Guidance〉</p> <p><u>4. In application to 107. 6 (1) of the Rules, the "emergency circumstance" means the circumstance which affect or may affect the ships maneuvering, survival, marine pollution or protection of the cargoes directly. 【See Rule】</u></p>	<p style="text-align: center;">〈Guidance〉</p> <p>4. In application to 107. 6 (1) of the Rules, the "emergency circumstance" means the circumstance which affect or may affect the ships maneuvering, survival, marine pollution or protection of the cargoes directly. 【See Rule】</p>	<p>- Moved into Rules</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p>108. Wear limit on structural members (2018) [See Guidance]</p> <p>When the thickness of hull structural members or the scantlings of equipment, etc. exceed the wear limit, they have to be renewed with those having the original scantlings or the scantlings <u>considered suitable</u> by the Society. However, when the original scantlings were larger than the required ones, or when <u>deemed appropriate by the Society</u>, these requirements may be modified taking into account of the location, extent, kind of the wear.</p> <p>〈“note” newly added〉</p>	<p style="text-align: center;">〈Rule〉</p> <p>108. Wear limit on structural members (2021) [See Guidance]</p> <p>When the thickness of hull structural members or the scantlings of equipment, etc. exceed the wear limit, they have to be renewed with those having the original scantlings or the scantlings <u>“considered suitable”</u> by the Society. However, when the original scantlings were larger than the required ones, or when <u>“deemed appropriate by the Society”</u>, these requirements may be modified taking into account of the location, extent, kind of the wear.</p> <p>Note : The terms <u>“considered suitable”</u> or <u>“deemed appropriate by the Society”</u> mean to comply with the requirements specified in the Classification Technical Rules such as Pt 2 and Pt 3 etc. of the Rules.</p>	<p>- Introduced from Guidances</p>
<p style="text-align: center;">〈Guidance〉</p> <p><u>108. Wear limit on structural members [See Rule]</u></p> <p><u>In application to 108. of the Rules, the terms “considered suitable” or “deemed appropriate by the Society” mean to comply with the requirements specified in Pt 2 and Pt 3 of the Rules.</u></p>	<p style="text-align: center;">〈Guidance〉</p> <p>108. Wear limit on structural members [See Rule]</p> <p>In application to 108. of the Rules, the terms “considered suitable” or “deemed appropriate by the Society” mean to comply with the requirements specified in Pt 2 and Pt 3 of the Rules.</p>	<p>- Moved into Rules</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p>109. Survey planning meeting and safety meetings (2018)</p> <p>2. Prior to the commencement of any part of the Special, Intermediate and Annual Survey, a survey planning meeting is to be held between the attending Surveyor(s), the Owner's representative in attendance, the thickness measurement firm operator/other service suppliers(as applicable) and the master of the ship or <u>an appropriately qualified representative</u> appointed by the master or company for the purpose to ascertain that all the arrangements envisaged in the survey programme(ESP Vessel only) or regarding the related surveys are in place, so as to ensure the safe and efficient conduct of the survey work to be carried out. (2019) [See Guidance]</p> <p>〈"note" newly added〉</p> <p>110. Procedures for thickness measurements (2018) [See Guidance]</p> <p>1. The required thickness measurements, if not carried out by the Society itself, are to be witnessed by a Surveyor. The Surveyor is to be on board to the extent necessary to control the process. In this case, the control of thickness measurement process is to be <u>in accordance with the separate requirements specified by the Society.</u></p>	<p style="text-align: center;">〈Rule〉</p> <p>109. Survey planning meeting and safety meetings (2018)</p> <p>2. Prior to the commencement of any part of the Special, Intermediate and Annual Survey, a survey planning meeting is to be held between the attending Surveyor(s), the Owner's representative in attendance, the thickness measurement firm operator/other service suppliers(as applicable) and the master of the ship or an appropriately qualified representative appointed by the master or company for the purpose to ascertain that all the arrangements envisaged in the survey programme(ESP Vessel only) or regarding the related surveys are in place, so as to ensure the safe and efficient conduct of the survey work to be carried out. (2021) [See Guidance]</p> <p>Note : "<u>an appropriately qualified representative</u>" means a ship's officer.</p> <p>110. Procedures for thickness measurements (2021) [See Guidance]</p> <p>1. The required thickness measurements, if not carried out by the Society itself, are to be witnessed by a Surveyor. The Surveyor is to be on board to the extent necessary to control the process. In this case, the control of thickness measurement process is to be in accordance with <u>Annex 1-5 of the Guidance</u> the separate requirements specified by the Society.</p>	<p>- Introduced from Guidances</p> <p>- Introduced from Guidances</p> <p>* Annex 1-5 "Thickness Measurement Method for Hull Structural Members"</p>
<p style="text-align: center;">〈Guidance〉</p> <p>109. Survey planing meeting and safety meeting (2018) [See Rule]</p> <p>1. In application to 109. 2 of the Rules, "<u>an appropriately qualified representative</u>" means a ship's officer.</p> <p>110. Procedures for thickness measurements (2018) [See Rule]</p> <p>1. <u>Methods of thickness measurement are to comply with the requirements specified in Annex 1-5 of the Guidance.</u></p>	<p style="text-align: center;">〈Guidance〉</p> <p>109. Survey planing meeting and safety meeting (2018) [See Rule]</p> <p>1. In application to 109. 2 of the Rules, "<u>an appropriately qualified representative</u>" means a ship's officer.</p> <p>110. Procedures for thickness measurements (2018) [See Rule]</p> <p>1. <u>Methods of thickness measurement are to comply with the requirements specified in Annex 1-5 of the Guidance.</u></p>	<p>- Moved into Rules</p> <p>- Moved into Rules</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p>113. Maintaining of dual classed vessel (2019) [See Guidance]</p> <ol style="list-style-type: none"> In case of dual classed vessel, the Classification and Surveys should be maintained in accordance with the agreement adopted by the two Societies. The procedures for maintaining(periodical surveys etc.) dual classed vessel are prescribed in the separate Instruction. <p>〈newly added〉</p> <p>114. Preparations for survey</p> <p>1. Conditions for survey</p> <p>(1) ~ (6) 〈omitted〉</p> <p>(7) In refrigerated cargo spaces the condition of the coating behind the insulation is to be examined at representative locations. The examination may be limited to verification that the protective coating remains effective and that there are no visible structural defects. Where POOR coating condition is found, the examination is <u>to be extended as deemed necessary by the Surveyor</u>. The condition of the coating is to be reported. If indents, scratches, etc., are detected during surveys of shell plating from the outside, insulations in way are to be removed as required by the Surveyor, for further examination of the plating and adjacent frames. [See Guidance]</p> <p>〈“note” newly added〉</p>	<p style="text-align: center;">〈Rule〉</p> <p>113. Maintaining of dual classed vessel (2021) [See Guidance]</p> <ol style="list-style-type: none"> In case of dual classed vessel, the Classification and Surveys should be maintained in accordance with the agreement adopted by the two Societies. The procedures for maintaining(periodical surveys etc.) dual classed vessel are prescribed in the separate Instruction. <u>Even though a dual classed vessel that does not have a written agreement with other Society is treated as double classed vessel.</u> <p>114. Preparations for survey</p> <p>1. Conditions for survey</p> <p>(1) ~ (6) 〈same as the current Rules〉</p> <p>(7) In refrigerated cargo spaces the condition of the coating behind the insulation is to be examined at representative locations. The examination may be limited to verification that the protective coating remains effective and that there are no visible structural defects. Where POOR coating condition is found, the examination is <u>“to be extended as deemed necessary by the Surveyor”</u>. The condition of the coating is to be reported. If indents, scratches, etc., are detected during surveys of shell plating from the outside, insulations in way are to be removed as required by the Surveyor, for further examination of the plating and adjacent frames. (2021) [See Guidance]</p> <p>Note : <u>“to be extended as deemed necessary by the Surveyor” means the extent of insulations to determine the extent of the poor coating condition behind the insulation.</u></p>	<p>- Introduced from Guidances</p> <p>- Introduced from Guidances</p>
<p style="text-align: center;">〈Guidance〉</p> <p>113. Maintaining of dual classed vessel (2019) [See Rule]</p> <ol style="list-style-type: none"> <u>Even though a dual classed vessel that does not have a written agreement with other Society is treated as double classed vessel.</u> <p>114. Preparations for survey</p> <ol style="list-style-type: none"> <u>In application to 113. 1 (7) of the Rules, “to be extended as deemed necessary by the Surveyor” means the extent of insulations to determine the extent of the poor coating condition behind the insulation. (2020) [See Rule]</u> 	<p style="text-align: center;">〈Guidance〉</p> <p>113. Maintaining of dual classed vessel (2019) [See Rule]</p> <ol style="list-style-type: none"> Even though a dual classed vessel that does not have a written agreement with other Society is treated as double classed vessel. <p>114. Preparations for survey</p> <ol style="list-style-type: none"> In application to 113. 1 (7) of the Rules, “to be extended as deemed necessary by the Surveyor” means the extent of insulations to determine the extent of the poor coating condition behind the insulation. (2020) [See Rule] 	<p>- Moved into Rules</p> <p>- Moved into Rules</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p style="text-align: center;">Section 2 Annual Survey</p> <p>203. Machinery, electrical installations and additional installations</p> <p>23. The surveys for water jet propulsion systems and azimuth or ro-tatable thruster are to be carried out in accordance with <u>the Guidance relating to the Rules.</u> 【See Guidance】</p>	<p style="text-align: center;">〈Rule〉</p> <p style="text-align: center;">Section 2 Annual Survey</p> <p>203. Machinery, electrical installations and additional installations</p> <p>23. The surveys for water jet propulsion systems and azimuth or ro-tatable thruster are to be carried out in accordance with the Annex 1-9 of the Guidance. <i>(2021)</i> Guidance relating to the Rules. 【See Guidance】</p>	<p>- Introduced from Guidances</p> <p>* Annex 1-9 Guidance for Survey of Waterjet Propulsion Systems and Azimuth of Rotatable Thruster</p>
<p style="text-align: center;">〈Guidance〉</p> <p>203. Machinery, electrical installations and additional installations</p> <p><u>2.</u> In application to 203. 23 of the Rules, "the Guidance" means the requirements specified in Annex 1-9 of the Guidance. 【See Rule】</p> <p><u>3.</u> ~ <u>4.</u> 〈omitted〉</p>	<p style="text-align: center;">〈Guidance〉</p> <p>203. Machinery, electrical installations and additional installations <i>(2021)</i></p> <p><u>2.</u> In application to 203. 23 of the Rules, "the Guidance" means the requirements specified in Annex 1-9 of the Guidance. 【See Rule】</p> <p><u>2.</u> <u>3.</u> ~ <u>3.</u> <u>4.</u> 〈same as the current Guidances〉</p>	<p>- Moved into Rules</p> <p>- Adjusting No.</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p style="text-align: center;">Section 3 Intermediate Survey</p> <p>301. Due range</p> <p>3. A part of <u>Intermediate Survey items</u> which are additional to the requirements of the Annual Survey may be surveyed either at or between the 2nd and 3rd Annual Survey, except those ships mentioned in Par 1 of which Intermediate Survey is to be carried out every year. 【See Guidance】</p> <p>〈“note” newly added〉</p>	<p style="text-align: center;">〈Rule〉</p> <p style="text-align: center;">Section 3 Intermediate Survey</p> <p>301. Due range</p> <p>3. “A part of Intermediate Survey items” which are additional to the requirements of the Annual Survey may be surveyed either at or between the 2nd and 3rd Annual Survey, except those ships mentioned in Par 1 of which Intermediate Survey is to be carried out every year. <u>(2021)</u> 【See Guidance】</p> <p>Note : “A part of Intermediate Survey items” means the following items among all survey items of Intermediate Survey.</p> <p>(1) <u>Compartments survey(except compartments which are to be surveyed at each periodical survey)</u></p> <p>(2) <u>Thickness measurement</u></p> <p>(3) <u>Docking Survey as a part of Intermediate Survey(except the ships of which Docking Survey is to be carried out at each periodical survey)</u></p> <p>(4) <u>Overhauling survey of machinery(except the ships subject to CMS or PMS)</u></p>	<p>- Introduced from Guidances</p>
<p style="text-align: center;">〈Guidance〉</p> <p style="text-align: center;">Section 3 Intermediate Survey</p> <p>301. Due range 【See Rule】</p> <p><u>In application to 301. 3 of the Rules, "Intermediate Survey items" means the following items among all survey items of Intermediate Survey.</u></p> <p>(1) <u>Compartments survey(except compartments which are to be surveyed at each periodical survey)</u></p> <p>(2) <u>Thickness measurement</u></p> <p>(3) <u>Docking Survey as a part of Intermediate Survey(except the ships of which Docking Survey is to be carried out at each periodical survey)</u></p> <p>(4) <u>Overhauling survey of machinery(except the ships subject to CMS or PMS)</u></p>	<p style="text-align: center;">〈Guidance〉</p> <p style="text-align: center;">Section 3 Intermediate Survey (2021)</p> <p>301. Due range 【See Rule】</p> <p>In application to 301. 3 of the Rules, "Intermediate Survey items" means the following items among all survey items of Intermediate Survey.</p> <p>(1) Compartments survey(except compartments which are to be surveyed at each periodical survey)</p> <p>(2) Thickness measurement</p> <p>(3) Docking Survey as a part of Intermediate Survey(except the ships of which Docking Survey is to be carried out at each periodical survey)</p> <p>(4) Overhauling survey of machinery(except the ships subject to CMS or PMS)</p>	<p>- Moved into Rules</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p>303. Machinery, electrical installations and additional installations At each Intermediate Survey, in addition to all the requirements of Annual Survey, the following requirements are to be complied with.</p> <p>7. The surveys for water jet propulsion systems and azimuth or rotatable thruster are to be carried out in accordance with the <u>Guidance relating to the Rules</u>. 【See Guidance】</p> <p style="text-align: center;">Section 4 Special Survey (Hull, Equipment and Fire-extinguishing Appliances)</p> <p>401. Due range</p> <p>4. The Special Survey including docking survey, compartment survey and thickness measurement may be commenced at the 4th Annual Survey and be progressed with a view to completion by the 5th anniversary date. 【See Guidance】</p> <p>〈“note” newly added〉</p>	<p style="text-align: center;">〈Rule〉</p> <p>303. Machinery, electrical installations and additional installations At each Intermediate Survey, in addition to all the requirements of Annual Survey, the following requirements are to be complied with.</p> <p>7. The surveys for water jet propulsion systems and azimuth or rotatable thruster are to be carried out in accordance with the Annex 1-9 of <u>Guidance relating to the Rules</u>. (2021) 【See Guidance】</p> <p style="text-align: center;">Section 4 Special Survey (Hull, Equipment and Fire-extinguishing Appliances)</p> <p>401. Due range</p> <p>4. The Special Survey including docking survey, compartment survey and thickness measurement may be commenced at the 4th Annual Survey and be progressed with a view to completion by the 5th anniversary date. (2021) 【See Guidance】</p> <p>Note : For passenger ships, submersibles, nuclear ships, hydrofoils, <u>air cushion vehicles and high speed crafts, this requirement does not apply.</u></p>	<p>- Introduced from Guidances * Annex 1-9 Guidance for Survey of Waterjet Propulsion Systems and Azimuth of Rotatable Thruster</p> <p>- Introduced from Guidances</p>
<p style="text-align: center;">〈Guidance〉</p> <p>303. Machinery, electrical installations and additional installations</p> <p>8. In application to 303. 7 of the Rules, "the Guidance" means the requirements specified in Annex 1-9 of the Guidance. 【See Rule】</p> <p style="text-align: center;">Section 4 Special Survey (Hull, Equipment and Fire-extinguishing Appliances)</p> <p>401. Due range</p> <p>2. <u>For passenger ships, submersibles, nuclear ships, hydrofoils, air cushion vehicles and high speed crafts the requirements specified in 401. 4 and 5 of the Rules do not apply.</u> 【See Rule】</p>	<p style="text-align: center;">〈Guidance〉</p> <p>303. Machinery, electrical installations and additional installations (2021)</p> <p>8. In application to 303. 7 of the Rules, "the Guidance" means the requirements specified in Annex 1-9 of the Guidance. 【See Rule】</p> <p style="text-align: center;">Section 4 Special Survey (Hull, Equipment and Fire-extinguishing Appliances)</p> <p>401. Due range (2021)</p> <p>2. <u>For passenger ships, submersibles, nuclear ships, hydrofoils, air cushion vehicles and high speed crafts the requirements specified in 401. 4 and 5 of the Rules do not apply.</u> 【See Rule】</p>	<p>- Moved into Rules</p> <p>- Moved into Rules</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p>5. When the <u>Special Survey</u> is commenced prior to the 4th Annual Survey, the entire survey is to be completed within 15 months if such work is to be credited to the Special Survey. 【See Guidance】 <u>〈“note” newly added〉</u></p>	<p style="text-align: center;">〈Rule〉</p> <p>5. When the “Special Survey is commenced” prior to the 4th Annual Survey, the entire survey is to be completed within 15 months if such work is to be credited to the Special Survey. <i>(2021)</i> 【See Guidance】</p> <p>Note : 1) For <u>passenger ships, submersibles, nuclear ships, hydrofoils, air cushion vehicles and high speed crafts</u>, this requirement does not apply.</p> <p>2) “Special Survey is commenced” means the following items among all survey items of Special Survey.</p> <p>(1) <u>Compartments survey(except compartments which are to be surveyed at each Periodical Survey)</u></p> <p>(2) <u>Thickness measurement</u></p> <p>(3) <u>Docking Survey(except the ships of which Docking Survey is to be carried out at each periodical survey)</u></p> <p>(4) <u>Overhauling survey of machinery(except the ships subject to CMS or PMS)</u></p> <p>(5) <u>Examination of 403. 1 (3) of the Rules</u></p> <p>(6) <u>Examination of Sec 5-2, 3 of the Rules</u></p>	<p>- Introduced from Guidances</p> <p>- Introduced from Guidances</p>
<p style="text-align: center;">〈Guidance〉</p> <p>401. Due range</p> <p>1. In application to 401. 5 of the Rules, “Special Survey” means the following items among all survey items of Special Survey. 【See Rule】</p> <p>(1) <u>Compartments survey(except compartments which are to be surveyed at each Periodical Survey)</u></p> <p>(2) <u>Thickness measurement</u></p> <p>(3) <u>Docking Survey(except the ships of which Docking Survey is to be carried out at each periodical survey)</u></p> <p>(4) <u>Overhauling survey of machinery(except the ships subject to CMS or PMS)</u></p> <p>(5) <u>Examination of 403. 1 (3) of the Rules</u></p> <p>(6) <u>Examination of Sec 5-2, 3 of the Rules</u></p> <p>2. For <u>passenger ships, submersibles, nuclear ships, hydrofoils, air cushion vehicles and high speed crafts</u> the requirements specified in 401. 4 and 5 of the Rules do not apply. 【See Rule】</p> <p>3. ~ 4. 〈omitted〉</p>	<p style="text-align: center;">〈Guidance〉</p> <p>401. Due range <i>(2021)</i></p> <p>1. In application to 401. 5 of the Rules, “Special Survey” means the following items among all survey items of Special Survey. 【See Rule】</p> <p>(1) <u>Compartments survey(except compartments which are to be surveyed at each Periodical Survey)</u></p> <p>(2) <u>Thickness measurement</u></p> <p>(3) <u>Docking Survey(except the ships of which Docking Survey is to be carried out at each periodical survey)</u></p> <p>(4) <u>Overhauling survey of machinery(except the ships subject to CMS or PMS)</u></p> <p>(5) <u>Examination of 403. 1 (3) of the Rules</u></p> <p>(6) <u>Examination of Sec 5-2, 3 of the Rules</u></p> <p>2. For <u>passenger ships, submersibles, nuclear ships, hydrofoils, air cushion vehicles and high speed crafts</u> the requirements specified in 401. 4 and 5 of the Rules do not apply. 【See Rule】</p> <p>1. 3. ~ 2. 4. 〈same as the current Guidances〉</p>	<p>- Moved into Rules</p> <p>- Moved into Rules</p> <p>- Adjusting No.</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p style="text-align: center;">Section 5-1 Special Survey (Machinery, Electrical Installations and Additional Installations)</p> <p>502. Requirements of survey</p> <p>4. In application to 502. 1 (1) of the Rules, the term "deemed necessary by the Surveyor" means the cases as specified in Ch 1, 801. 6 of the Guidance. [See Rule]</p>	<p style="text-align: center;">〈Rule〉</p> <p style="text-align: center;">Section 5-1 Special Survey (Machinery, Electrical Installations and Additional Installations)</p> <p>502. Requirements of survey</p> <p>4. In application to 502. 1 (1) of the Rules, the term "deemed necessary by the Surveyor" means the cases as specified in Annex 1-9 Ch 1, 801. 6 of the Guidance. <i>(2021)</i> [See Rule]</p>	<p>- Introduced from Guidances</p> <p>* Annex 1-9 Guidance for Survey of Waterjet Propulsion Systems and Azimuth of Rotatable Thruster</p>
<p style="text-align: center;">〈Guidance〉</p> <p style="text-align: center;">Section 5-1 Special Survey (Machinery, Electrical Installations and Additional Installations)</p> <p>502. Requirements of survey</p> <p><u>10. In application to 502. 4 of the Rules, "the Guidance" means the requirements specified in Annex 1-9 of the Guidance. [See Rule]</u></p>	<p style="text-align: center;">〈Guidance〉</p> <p style="text-align: center;">Section 5-1 Special Survey (Machinery, Electrical Installations and Additional Installations)</p> <p>502. Requirements of survey <i>(2021)</i></p> <p>10. In application to 502. 4 of the Rules, "the Guidance" means the requirements specified in Annex 1-9 of the Guidance. [See Rule]</p>	<p>- Moved into Rules</p>

Present	Amendment	Note
<p style="text-align: center;">(Rule)</p> <p style="text-align: center;">Section 6 Docking Survey</p> <p>603. Requirements of survey</p> <p>2. The shell plating is to be examined for excessive corrosion, or deterioration due to chafing or contact with the ground and for any undue unfairness or buckling. <u>Special attention</u> is to be paid to bilge keels. 【See Guidance】 <"note" newly added></p> <p>6. Visible parts of side thrusters and anti-rolling devices are to be examined. Other propulsion systems which also have manoeuvring characteristics (such as waterjet propulsion systems, azimuth or rotatable thrusters/directional propellers, vertical axis propellers) are to be examined externally with focus on the condition of gear housing, propeller blades, bolt locking and other fastening arrangements and sealing arrangement of propeller blades, propeller shaft and steering column shall be verified. Furthermore the surveys are to be carried out in accordance with <u>the Guidance relating to the Rules</u>. 【See Guidance】</p>	<p style="text-align: center;">(Rule)</p> <p style="text-align: center;">Section 6 Docking Survey</p> <p>603. Requirements of survey</p> <p>2. The shell plating is to be examined for excessive corrosion, or deterioration due to chafing or contact with the ground and for any undue unfairness or buckling. <u>"Special attention"</u> is to be paid to bilge keels. <i>(2021)</i> 【See Guidance】</p> <p>Note : The term <u>"special attention"</u> means a careful examination of the connection between the bilge strakes and the bilge keels.</p> <p>6. Visible parts of side thrusters and anti-rolling devices are to be examined. Other propulsion systems which also have manoeuvring characteristics (such as waterjet propulsion systems, azimuth or rotatable thrusters/directional propellers, vertical axis propellers) are to be examined externally with focus on the condition of gear housing, propeller blades, bolt locking and other fastening arrangements and sealing arrangement of propeller blades, propeller shaft and steering column shall be verified. Furthermore the surveys are to be carried out in accordance with <u>Annex 1-9</u> of the Guidance relating to the Rules. <i>(2021)</i> 【See Guidance】</p>	<p>- Introduced from Guidances</p> <p>- Introduced from Guidances</p> <p>* Annex 1-9 Guidance for Survey of Waterjet Propulsion Systems and Azimuth of Rotatable Thruster</p>
<p style="text-align: center;">(Guidance)</p> <p>603.Requirements of survey</p> <p>1. In application to 603. 2 of the Rules, the term <u>"special attention" means a careful examination of the connection between the bilge strakes and the bilge keels.</u> 【See Rule】</p> <p>2. ~ 4. <omitted></p> <p>5. In application to 603. 6 of the Rules, <u>"the Guidance" means the requirements specified in Annex 1-9 of the Guidance.</u> 【See Rule】</p> <p>6. <omitted></p>	<p style="text-align: center;">(Guidance)</p> <p>603.Requirements of survey <i>(2021)</i></p> <p>1. In application to 603. 2 of the Rules, the term "special attention" means a careful examination of the connection between the bilge strakes and the bilge keels. 【See Rule】</p> <p>1. 2. ~ 3. 4. <same as the current Guidances></p> <p>5. In application to 603. 6 of the Rules, "the Guidance" means the requirements specified in Annex 1-9 of the Guidance. 【See Rule】</p> <p>4. 6. <same as the current Guidances></p>	<p>- Moved into Rules</p> <p>- Adjusting No.</p> <p>- Moved into Rules</p> <p>- Adjusting No.</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p>604. In-water Survey</p> <p>1. The Society may accept an In-water Survey in lieu of the intermediate docking between Special Surveys required in a five year period on ships less than 15 years of age. <u>Special consideration of the Society is to be given</u> to ships of 15 years of age or over before being permitted to have such In-water Survey. For ships with ESP notation of 15 years of age and over, such In-water Surveys are not to be allowed. 【See Guidance】</p> <p>〈“note” newly added〉</p>	<p style="text-align: center;">〈Rule〉</p> <p>604. In-water Survey</p> <p>1. The Society may accept an In-water Survey in lieu of the intermediate docking between Special Surveys required in a five year period on ships less than 15 years of age. <u>“Special consideration of the Society is to be given”</u> to ships of 15 years of age or over before being permitted to have such In-water Survey. For ships with ESP notation of 15 years of age and over, such In-water Surveys are not to be allowed. <i>(2021)</i> 【See Guidance】</p> <p>Note : <u>“Special consideration is to be given” means survey status, latest docking survey reports and thickness measurement records, etc. are to be considered.</u></p>	<p>- Introduced from Guidances</p>
<p style="text-align: center;">〈Guidance〉</p> <p>604. In-water Survey</p> <p>1. In application to 604. 1 of the Rules, <u>survey status, latest docking survey reports and thickness measurement records, etc. are to be considered when special consideration is given.</u> 【See Rule】</p> <p>2. 〈omitted〉</p>	<p style="text-align: center;">〈Guidance〉</p> <p>604. In-water Survey <i>(2021)</i></p> <p>1. In application to 604. 1 of the Rules, survey status, latest docking survey reports and thickness measurement records, etc. are to be considered when special consideration is given. 【See Rule】</p> <p>1. 2. 〈same as the current Guidances〉</p>	<p>- Moved into Rules</p> <p>- Adjusting No.</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p>3. Where an In-water Survey in lieu of the intermediate docking between Special Surveys is desired, the survey procedures are as follows:</p> <p>(8) For a ship with IWS of additional special feature notation, the following requirements are to be complied with, in addition to the requirements specified in preceding (1) to (7).</p> <p>(d) Ships contracted for construction or intended to have IWS notation newly, on or after 1 July 2011, are to be complied with the following requirements additionally.</p> <p>(iii) Markings indicating the position of longitudinal and transverse bulkheads and the names of interior spaces, sea suction and overboard discharge openings on the shell plating below the load water line are to be provided so that the diver is able to orient his/her position relative to the ship. Such markings may be consist of a weld bead or center punch, and a contrasting color coating. Other suitable arrangements or means may be considered as equivalent where <u>deemed appropriate by the Society.</u> [See Guidance] <u>〈"note" newly added〉</u></p>	<p style="text-align: center;">〈Rule〉</p> <p>3. Where an In-water Survey in lieu of the intermediate docking between Special Surveys is desired, the survey procedures are as follows:</p> <p>(8) For a ship with IWS of additional special feature notation, the following requirements are to be complied with, in addition to the requirements specified in preceding (1) to (7).</p> <p>(d) Ships contracted for construction or intended to have IWS notation newly, on or after 1 July 2011, are to be complied with the following requirements additionally.</p> <p>(iii) Markings indicating the position of longitudinal and transverse bulkheads and the names of interior spaces, sea suction and overboard discharge openings on the shell plating below the load water line are to be provided so that the diver is able to orient his/her position relative to the ship. Such markings may be consist of a weld bead or center punch, and a contrasting color coating. Other suitable arrangements or means may be considered as equivalent where <u>"deemed appropriate by the Society".</u> <i>(2021)</i> [-See Guidance] Note : <u>The term "deemed appropriate by the Society" means the cases where name plate, signal device and/or position indicating device, etc. is provided so that the diver is able to orient his/her position relative to the ship.</u></p>	<p>- Introduced from Guidances</p>
<p style="text-align: center;">〈Guidance〉</p> <p>3. In application to 604. 3 (8) (d) (iii) of the Rules, the term "<u>deemed appropriate by the Society</u>" means the cases where name plate, signal device and/or position indicating device, etc. is provided so that the diver is able to orient his/her position relative to the ship. [See Rule]</p>	<p style="text-align: center;">〈Guidance〉</p> <p>3. In application to 604. 3 (8) (d) (iii) of the Rules, the term "<u>deemed appropriate by the Society</u>" means the cases where name plate, signal device and/or position indicating device, etc. is provided so that the diver is able to orient his/her position relative to the ship. [See Rule]</p>	<p>- Moved into Rules</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p style="text-align: center;">Section 7 Surveys of Propeller Shaft and Stern Tube Shaft, Etc.</p> <p>701. General 【See Guidance】</p> <p>2. The surveys for water jet propulsion systems and azimuth or rotatable thruster are to be carried out in accordance with <u>the Guidance relating to the Rules.</u></p>	<p style="text-align: center;">〈Rule〉</p> <p style="text-align: center;">Section 7 Surveys of Propeller Shaft and Stern Tube Shaft, Etc.</p> <p>701. General 【See Guidance】</p> <p>2. The surveys for water jet propulsion systems and azimuth or rotatable thruster are to be carried out in accordance with Annex 1-9 of the Guidance. relating to the Rules. <i>(2021)</i></p>	<p>- Introduced from Guidances</p> <p>* Annex 1-9 Guidance for Survey of Waterjet Propulsion Systems and Azimuth of Rotatable Thruster</p>
<p style="text-align: center;">〈Guidance〉</p> <p style="text-align: center;">Section 7 Surveys of Propeller Shaft and Stern Tube Shaft, Etc.</p> <p>701. General 【See Rule】</p> <p>1. In application to 701. 2 of the Rules, "the Guidance" means the requirements specified in Annex 1-9 of the Guidance.</p> <p>2. ~ 3. 〈omitted〉</p>	<p style="text-align: center;">〈Guidance〉</p> <p style="text-align: center;">Section 7 Surveys of Propeller Shaft and Stern Tube Shaft, Etc.</p> <p>701. General <i>(2021)</i> 【See Rule】</p> <p>1. In application to 701. 2 of the Rules, "the Guidance" means the requirements specified in Annex 1-9 of the Guidance.</p> <p>1. 2. ~ 2. 3. 〈same as the current Guidances〉</p>	<p>- Moved into Rules</p> <p>- Adjusting No.</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p style="text-align: center;">Section 9 Continuous Survey of Machinery</p> <p>902. Survey items [See Guidance]</p> <ol style="list-style-type: none"> 1. The procedure of CMS is to be complied with <u>the Guidance relating to the Rules.</u> 2. Where any machinery installations were overhauled and inspected by the Chief Engineer the overhauled inspections may substitute for the CMS in accordance with <u>the Guidance relating to the Rules.</u> However, for each part of the main internal combustion engine and internal combustion engine to drive main generator among machinery permissible for the Chief Engineer's inspection, open-up survey by the Surveyor for at least one of two CMS cycles is to be carried. 	<p style="text-align: center;">〈Rule〉</p> <p style="text-align: center;">Section 9 Continuous Survey of Machinery</p> <p>902. Survey items [See Guidance]</p> <ol style="list-style-type: none"> 1. The procedure of CMS is to be complied with Annex 1-7 of the Guidance. relating to the Rules. <i>(2021)</i> 2. Where any machinery installations were overhauled and inspected by the Chief Engineer the overhauled inspections may substitute for the CMS in accordance with Annex 1-7 of the Guidance. relating to the Rules. However, for each part of the main internal combustion engine and internal combustion engine to drive main generator among machinery permissible for the Chief Engineer's inspection, open-up survey by the Surveyor for at least one of two CMS cycles is to be carried. <i>(2021)</i> 	<p>- Introduced from Guidances</p> <p>* Annex 1-7 Continuous Machinery Survey Procedure(CMS)</p>
<p style="text-align: center;">〈Guidance〉</p> <p style="text-align: center;">Section 9 Continuous Survey of Machinery</p> <p>902. Survey items [See Rule]</p> <ol style="list-style-type: none"> 1. In application to 902. 1 and 2 of the Rules, "the Guidance" means <u>the requirements specified in Annex 1-7 of the Guidance.</u> 2. ~ 5. 〈omitted〉 	<p style="text-align: center;">〈Guidance〉</p> <p style="text-align: center;">Section 9 Continuous Survey of Machinery</p> <p>902. Survey items <i>(2021)</i> [See Rule]</p> <ol style="list-style-type: none"> 1. In application to 902. 1 and 2 of the Rules, "the Guidance" means the requirements specified in Annex 1-7 of the Guidance. 1. 2. ~ 4. 5. 〈same as the current Guidances〉 	<p>- Moved into Rules</p> <p>- Adjusting No.</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p>903. Planned Maintenance System</p> <p>1. At the request of the Owner, where deemed appropriate by the Society in accordance with <u>the Guidance relating to the Rules</u>, the Planned Maintenance System(hereinafter referred to as "PMS") may be applied by the maintenance procedures scheme as an alternative to the Continuous Machinery Survey(CMS). But passenger ships shall not apply to PMS and the Society may consider a special application for PMS on ships exceeding 15 years old based on their condition. However, where deemed necessary by the Surveyor, the overhaul inspection of the equipment may be required. 【See Guidance】</p> <p>3. In case the ship under PMS, the condition monitoring equipment(hereinafter referred to as "CM"). approved by the Society shall be in accordance with <u>the Guidance relating to the Rules</u>. 【See Guidance】</p>	<p style="text-align: center;">〈Rule〉</p> <p>903. Planned Maintenance System</p> <p>1. At the request of the Owner, where deemed appropriate by the Society in accordance with Annex 1-8 of the Guidance relating to the Rules, the Planned Maintenance System(hereinafter referred to as "PMS") may be applied by the maintenance procedures scheme as an alternative to the Continuous Machinery Survey(CMS). But passenger ships shall not apply to PMS and the Society may consider a special application for PMS on ships exceeding 15 years old based on their condition. However, where deemed necessary by the Surveyor, the overhaul inspection of the equipment may be required. <i>(2021)</i> 【See Guidance】</p> <p>3. In case the ship under PMS, the condition monitoring equipment(hereinafter referred to as "CM"). approved by the Society shall be in accordance with Annex 1-8 of the Guidance. relating to the Rules: <i>(2021)</i> 【See Guidance】</p>	<p>- Introduced from Guidances</p> <p>* Annex 1-8 "Planned Maintenance System Procedure(PMS)</p>
<p style="text-align: center;">〈Guidance〉</p> <p>903. Planned Maintenance System</p> <p>1. <u>In application to 903. 1 of the Rules, "the Guidance" means the requirements specified in Annex 1-8 of the Guidance, and the term "deemed necessary by the Surveyor" means the cases as specified in Ch 1, 801. 6 of the Guidance.</u></p> <p>2. 〈omitted〉</p> <p>3. <u>In application to 903. 3 of the Rules, "the Guidance" means the requirements specified in Annex 1-8 of the Guidance. 【See Rule】</u></p> <p>4. ~ 5. 〈omitted〉</p>	<p style="text-align: center;">〈Guidance〉</p> <p>903. Planned Maintenance System</p> <p>1. In application to 903. 1 of the Rules, "the Guidance" means the requirements specified in Annex 1-8 of the Guidance, and the term "deemed necessary by the Surveyor" means the cases as specified in Ch 1, 801. 6 of the Guidance. <i>(2021)</i> 【See Rule】</p> <p>2. 〈same as the current Guidances〉</p> <p>3. In application to 903. 3 of the Rules, "the Guidance" means the requirements specified in Annex 1-8 of the Guidance. 【See Rule】</p> <p>3. 4. ~ 4. 5. 〈same as the current Guidances〉</p>	<p>- Moved into Rules</p> <p>- Moved into Rules</p> <p>- Adjusting No.</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p>Section 15 Hull Surveys for General Dry Cargo Ships</p> <p>1502. Annual Survey</p> <p>6. Examination of ballast tanks [See Guidance]</p> <p>Examination of ballast tanks when required as a consequence of the results of the Special Survey and Intermediate Survey is to be carried out. When considered necessary by the Surveyor, or where extensive corrosion exists, thickness measurement is to be carried out. ~</p> <p>〈“note” newly added〉</p> <p>1504. Special Survey</p> <p>Table 1.2.8 Minimum requirements for Close-up Survey at Special Survey of General Dry Cargo Ships</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>(NOTES)</p> <p>1) (*1) to (*6) means as follows and are illustrated in Annex 1-6 of the Guidance: [See Guidance]</p> </div>	<p style="text-align: center;">〈Rule〉</p> <p>Section 15 Hull Surveys for General Dry Cargo Ships</p> <p>1502. Annual Survey</p> <p>6. Examination of ballast tanks (2021) [See Guidance]</p> <p>Examination of “ballast tanks when required” as a consequence of the results of the Special Survey and Intermediate Survey is to be carried out. When considered necessary by the Surveyor, or where extensive corrosion exists, thickness measurement is to be carried out. ~</p> <p>Note : the term "ballast tanks when required" means the ballast tanks which are assigned to be internally examined at annual intervals from the results of Intermediate Survey or Special Survey.</p> <p>1504. Special Survey</p> <p>Table 1.2.8 Minimum requirements for Close-up Survey at Special Survey of General Dry Cargo Ships (2021)</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>(NOTES)</p> <p>1) (*1) to (*6) means as follows and are illustrated for the general drawing for Close-up Survey area in Annex 1-6, 1 (1) of the Guidance [See Guidance]</p> </div>	<p>- Introduced from Guidances</p> <p>- Introduced from Guidances</p> <p>* Annex 1-6 “Areas of Close-up Survey, etc.”</p>
<p style="text-align: center;">〈Guidance〉</p> <p>Section 15 Hull Surveys for General Dry Cargo Ships</p> <p>1502. Annual Survey</p> <p>2. In application to 1502. 6 of the Rules, the term "ballast tanks when required" means the ballast tanks which are assigned to be internally examined at annual intervals from the results of Intermediate Survey or Special Survey.</p> <p>3. 〈omitted〉</p> <p>1504. Special Survey (2017)</p> <p>5. In application to Table 1.2.8 NOTES 1) of the Rules, the general drawing for Close-up Survey area is shown in Annex 1-6, 1 (1) of the Guidance. (2017) [See Rule]</p>	<p style="text-align: center;">〈Guidance〉</p> <p>Section 15 Hull Surveys for General Dry Cargo Ships</p> <p>1502. Annual Survey (2021)</p> <p>2. In application to 1502. 6 of the Rules, the term "ballast tanks when required" means the ballast tanks which are assigned to be internally examined at annual intervals from the results of Intermediate Survey or Special Survey.</p> <p>2. 3. 〈same as the current Guidances〉</p> <p>1504. Special Survey (2021)</p> <p>5. In application to Table 1.2.8 NOTES 1) of the Rules, the general drawing for Close-up Survey area is shown in Annex 1-6, 1 (1) of the Guidance. (2017) [See Rule]</p>	<p>- Moved into Rules</p> <p>- Adjusting No.</p> <p>- Moved into Rules</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p style="text-align: center;">Section 16 Hull Surveys for Liquefied Gas Carriers</p> <p>1602. Annual Survey</p> <p>6. Examination of ballast tanks [See Guidance]</p> <p>Examination of <u>ballast tanks when required</u> as a consequence of the results of the Special Survey and Intermediate Survey is to be carried out. When considered necessary by the Surveyor, or where extensive corrosion exists, thickness measurement is to be carried out. If the results of these thickness measurements indicate that substantial corrosion is found, then the extent of thickness measurements is to be increased to determine the extent of areas of substantial corrosion. Table 1.2.5 may be used as guidance for these additional thickness measurements. These extended thickness measurements are to be carried out before the Annual Survey is credited as completed.</p> <p>〈<u>“note” newly added</u>〉</p>	<p style="text-align: center;">〈Rule〉</p> <p style="text-align: center;">Section 16 Hull Surveys for Liquefied Gas Carriers</p> <p>1602. Annual Survey</p> <p>6. Examination of ballast tanks <i>(2021)</i> [See Guidance]</p> <p>Examination of “ballast tanks when required” as a consequence of the results of the Special Survey and Intermediate Survey is to be carried out. When considered necessary by the Surveyor, or where extensive corrosion exists, thickness measurement is to be carried out. If the results of these thickness measurements indicate that substantial corrosion is found, then the extent of thickness measurements is to be increased to determine the extent of areas of substantial corrosion. Table 1.2.5 may be used as guidance for these additional thickness measurements. These extended thickness measurements are to be carried out before the Annual Survey is credited as completed.</p> <p>Note : The term “ballast tanks when required” means the ballast tanks which are assigned to be internally examined at annual intervals from the results of Intermediate Survey or Special Survey.</p>	<p>- Introduced from Guidances</p>
<p style="text-align: center;">〈Guidance〉</p> <p style="text-align: center;">Section 16 Hull Surveys for Liquefied Gas Carriers</p> <p>1602. Annual Survey [See Rule]</p> <p><u>1. In application to 1602. 6 of the Rules, the term “ballast tanks when required” means the ballast tanks which are assigned to be internally examined at annual intervals from the results of Intermediate Survey or Special Survey.</u></p> <p><u>2. 〈omitted〉</u></p>	<p style="text-align: center;">〈Guidance〉</p> <p style="text-align: center;">Section 16 Hull Surveys for Liquefied Gas Carriers</p> <p>1602. Annual Survey <i>(2021)</i> [See Rule]</p> <p>1. In application to 1602. 6 of the Rules, the term “ballast tanks when required” means the ballast tanks which are assigned to be internally examined at annual intervals from the results of Intermediate Survey or Special Survey.</p> <p>1. 2. 〈same as the current Guidances〉</p>	<p>- Moved into Rules</p> <p>- Adjusting No.</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p style="text-align: center;">Section 17 Survey Requirements for Shell and Inner Doors, Etc. of RoRo Ships</p> <p>1702. Annual Survey</p> <p>4. Structural examination [See Guidance] Bow, inner, side shell and stern doors are to be examined with particular attention paid to: (1) ~ (5) 〈omitted〉</p> <p>Whenever a crack is found, an examination with NDT is to be carried out in the surrounding area and for <u>similar items as considered necessary by the Surveyor</u>. 〈“note” newly added〉</p>	<p style="text-align: center;">〈Rule〉</p> <p style="text-align: center;">Section 17 Survey Requirements for Shell and Inner Doors, Etc. of RoRo Ships</p> <p>1702. Annual Survey</p> <p>4. Structural examination (2021) [See Guidance] Bow, inner, side shell and stern doors are to be examined with particular attention paid to: (1) ~ (5) 〈same as the current Rules〉</p> <p>Whenever a crack is found, an examination with NDT is to be carried out in the surrounding area and for <u>“similar items as considered necessary by the Surveyor”</u>. <u>Note : The term “similar items as considered necessary by the Surveyor” means the items where similar crack is suspect because their structure or arrangement is similar to those the crack is found. (2021)</u></p>	<p>- Introduced from Guidances</p>
<p style="text-align: center;">〈Guidance〉</p> <p style="text-align: center;">Section 17 Survey Requirements for Shell and Inner Doors, Etc. of RoRo Ships</p> <p>1702. Annual Survey</p> <p><u>1. In application to 1702. 4 of the Rules, the term “similar items as considered necessary by the Surveyor” means the items where similar crack is suspect because their structure or arrangement is similar to those the crack is found. [See Rule]</u></p> <p>2. ~ 3. 〈omitted〉</p>	<p style="text-align: center;">〈Guidance〉</p> <p style="text-align: center;">Section 17 Survey Requirements for Shell and Inner Doors, Etc. of RoRo Ships</p> <p>1702. Annual Survey</p> <p><u>1. In application to 1702. 4 of the Rules, the term “similar items as considered necessary by the Surveyor” means the items where similar crack is suspect because their structure or arrangement is similar to those the crack is found. [See Rule]</u></p> <p>1. 2. ~ 2. 3. 〈same as the current Guidances〉</p>	<p>- Moved into Rules</p> <p>- Adjusting No.</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p>1703. Special Survey</p> <p>3. The bow, inner, side shell and stern doors are to be surveyed as follows:</p> <p>(1) 〈omitted〉</p> <p>(2) Non-destructive testing and thickness measurements are to be carried out on securing, supporting and locking devices, including welding, to <u>the extent considered necessary by the Surveyor</u>. Whenever a crack is found, an examination with NDT is to be carried out in the surrounding area and for <u>similar items as considered necessary by the Surveyor</u>. 【See Guidance】</p> <p><u>〈“note” newly added〉</u></p>	<p style="text-align: center;">〈Rule〉</p> <p>1703. Special Survey</p> <p>3. The bow, inner, side shell and stern doors are to be surveyed as follows:</p> <p>(1) 〈same as the current Rules〉</p> <p>(2) Non-destructive testing and thickness measurements are to be carried out on securing, supporting and locking devices, including welding, to <u>“the extent considered necessary by the Surveyor”¹⁾</u>. Whenever a crack is found, an examination with NDT is to be carried out in the surrounding area and for <u>“similar items as considered necessary by the Surveyor”²⁾</u>. 【See Guidance】</p> <p>Note 1) <u>The term “the extent considered necessary by the Surveyor” means the securing, supporting and locking devices which have substantial corrosion, significant deformation, fracture, damage or other defect is evident or suspect.</u></p> <p>2) <u>The term “similar items as considered necessary by the Surveyor” means the items where similar crack is suspect because their structure or arrangement is similar to those the crack is found.</u></p>	<p>– Introduced from Guidances</p>
<p style="text-align: center;">〈Guidance〉</p> <p>1703. Special Survey</p> <p>1. In application to 1703. 3 (2) of the Rules, the term <u>“the extent considered necessary by the Surveyor” means the securing, supporting and locking devices which have substantial corrosion, significant deformation, fracture, damage or other defect is evident or suspect.</u></p> <p>2. In application to 1703. 3 (2) of the Rules, the term <u>“similar items as considered necessary by the Surveyor” means the items where similar crack is suspect because their structure or arrangement is similar to those the crack is found.</u> 【See Rule】</p>	<p style="text-align: center;">〈Guidance〉</p> <p>1703. Special Survey</p> <p>1. In application to 1703. 3 (2) of the Rules, the term “the extent considered necessary by the Surveyor” means the securing, supporting and locking devices which have substantial corrosion, significant deformation, fracture, damage or other defect is evident or suspect.</p> <p>2. In application to 1703. 3 (2) of the Rules, the term “similar items as considered necessary by the Surveyor” means the items where similar crack is suspect because their structure or arrangement is similar to those the crack is found. 【See Rule】</p>	<p>– Moved into Rules</p>

Present	Amendment	Note
<p style="text-align: center;">⟨Rule⟩</p> <p>(3) The maximum thickness diminution of hinging arms, securing, supporting and locking devices is to be in accordance with the requirements specified by the Society for primary structures, but is not to be more than 15% of the as-built thickness or <u>the maximum corrosion allowance of the Society</u>, whichever is less. Certain designs may be subject to the Society's special consideration. [See Guidance]</p> <p>⟨"note" newly added⟩</p>	<p style="text-align: center;">⟨Rule⟩</p> <p>(3) The maximum thickness diminution of hinging arms, securing, supporting and locking devices is to be in accordance with the requirements specified by the Society for primary structures, but is not to be more than 15% of the as-built thickness or <u>"the maximum corrosion allowance of the Society"</u>, whichever is less. Certain designs may be subject to the Society's special consideration. (2021) [See Guidance]</p> <p>Note : <u>"the maximum corrosion allowance of the Society" is to be comply with the requirements specified by the maker.</u></p>	<p>- Introduced from Guidances</p>
<p style="text-align: center;">⟨Guidance⟩</p> <p>3. In application to 1703. 3 (3) of the Rules, <u>"the maximum corrosion allowance of the Society" is to be comply with the requirements specified by the maker.</u> [See Rule]</p>	<p style="text-align: center;">⟨Guidance⟩</p> <p>3. In application to 1703. 3 (3) of the Rules, "the maximum corrosion allowance of the Society" is to be comply with the requirements specified by the maker. [See Rule]</p>	<p>- Moved into Rules</p>

Present	Amendment	Note
<p style="text-align: center;">(Rule)</p> <p style="text-align: center;">CHAPTER 3 HULL SURVEYS OF SHIPS SUBJECT TO THE ENHANCED SURVEY PROGRAMME</p> <p style="text-align: center;">Section 1 General</p> <p>102. Preparations for survey</p> <p>1. Survey programme</p> <p>(5) Use may also be made of the process contained in Annex 1-3, Par 1 of the Guidance in conjunction with the preparation of the required survey programme. This process is a recommended tool which may be invoked at the discretion of the Society, <u>when considered necessary and appropriate.</u> [See Guidance]</p> <p><"note" newly added></p>	<p style="text-align: center;">(Rule)</p> <p style="text-align: center;">CHAPTER 3 HULL SURVEYS OF SHIPS SUBJECT TO THE ENHANCED SURVEY PROGRAMME</p> <p style="text-align: center;">Section 1 General</p> <p>102. Preparations for survey</p> <p>1. Survey programme</p> <p>(5) Use may also be made of the process contained in Annex 1-3, Par 1 of the Guidance in conjunction with the preparation of the required survey programme. This process is a recommended tool which may be invoked at the discretion of the Society, <u>"when considered necessary and appropriate".</u> <i>(2021)</i> [See Guidance]</p> <p>Note : <u>The term "when considered necessary and appropriate" means the cases where it may assist in identifying critical structural areas, nomination suspect areas and in focusing attention on structural elements or areas of structural elements which may be particularly susceptible to, or evidence a history of, wastage or damage.</u></p>	<p>- Introduced from Guidances</p>
<p style="text-align: center;">(Guidance)</p> <p style="text-align: center;">CHAPTER 3 HULL SURVEYS OF SHIPS SUBJECT TO THE ENHANCED SURVEY PROGRAMME</p> <p style="text-align: center;">Section 1 General</p> <p>102. Preparations for survey (2018)</p> <p>1. <u>In application to 102. 1 (5) of the Rules, the term "when considered necessary and appropriate" means the cases where it may assist in identifying critical structural areas, nomination suspect areas and in focusing attention on structural elements or areas of structural elements which may be particularly susceptible to, or evidence a history of, wastage or damage.</u> [See Rule]</p> <p>2. <omitted></p>	<p style="text-align: center;">(Guidance)</p> <p style="text-align: center;">CHAPTER 3 HULL SURVEYS OF SHIPS SUBJECT TO THE ENHANCED SURVEY PROGRAMME</p> <p style="text-align: center;">Section 1 General</p> <p>102. Preparations for survey (2021)</p> <p>1. In application to 102. 1 (5) of the Rules, the term "when considered necessary and appropriate" means the cases where it may assist in identifying critical structural areas, nomination suspect areas and in focusing attention on structural elements or areas of structural elements which may be particularly susceptible to, or evidence a history of, wastage or damage. [See Rule]</p> <p>1. 2. <same as the current Guidances></p>	<p>- Moved into Rules</p> <p>- Adjusting No.</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p>103. Documentation on board</p> <p>3. Supporting documents</p> <p>(1) The following additional documentation is to be available onboard.</p> <p>(E) The Owners inspection report with reference to 〔See Guidance〕</p> <p>(a) structural deterioration in general</p> <p>(b) leakages in bulkheads and piping</p> <p>(c) condition of corrosion prevention system, if any</p> <p>〈omitted〉</p> <p>104. Procedures for thickness measurements 〔See Guidance〕</p> <p>1. General (2018)</p> <p>(1) Follow the procedure for thickness measurement of Ch 2, Sec 1 110. (2018)</p>	<p style="text-align: center;">〈Rule〉</p> <p>103. Documentation on board</p> <p>3. Supporting documents</p> <p>(1) The following additional documentation is to be available onboard.</p> <p>(E) The Owners inspection report with reference to <u>(Refer to the Annex 1-4 of the Guidance) (2021)</u> 〔See Guidance〕</p> <p>(a) structural deterioration in general</p> <p>(b) leakages in bulkheads and piping</p> <p>(c) condition of corrosion prevention system, if any</p> <p style="text-align: center;">〈same as the current Rules〉</p> <p>104. Procedures for thickness measurements (2021) 〔See Guidance〕</p> <p>1. General (2018)</p> <p>(1) Follow the procedure for thickness measurement of Ch 2, Sec 1 110. (2018)</p>	<p>– Introduced from Guidances</p> <p>* Annex 1-4 "Owners Inspection Report"</p> <p>– Introduced from Guidances</p>
<p style="text-align: center;">〈Guidance〉</p> <p>103. Documentation on board 〔See Rule〕</p> <p>The Owner's inspection reports specified in 103. 3 (1) (E) of the Rules is shown in Annex 1-4 of the Guidance</p> <p>104. Procedure for thickness measurement 〔See Rule〕</p> <p>Methods of thickness measurement are to be comply with the requirements specified in Annex 1-5 of the Guidance.</p>	<p style="text-align: center;">〈Guidance〉</p> <p>103. Documentation on board 〔See Rule〕</p> <p>The Owner's inspection reports specified in 103. 3 (1) (E) of the Rules is shown in Annex 1-4 of the Guidance</p> <p>104. Procedure for thickness measurement 〔See Rule〕</p> <p>Methods of thickness measurement are to be comply with the requirements specified in Annex 1-5 of the Guidance.</p>	<p>– Moved into Rules</p> <p>– Moved into Rule Ch 2 110.</p>

Present	Amendment	Note
<p style="text-align: center;"><Rule> Section 2 Bulk Carriers</p> <p>202. Annual Survey</p> <p>4. Examination of cargo holds [See Guidance]</p> <p>The examination of cargo holds in Annual Survey is to be in accordance with the follows.</p> <div style="border: 1px solid black; padding: 5px;"> <p>(NOTES)</p> <p>2) When considered necessary by the Surveyor, or where extensive corrosion exists, thickness measurement is to be carried out. If the results of these thickness measurements indicate that substantial corrosion is found, the extent of thickness measurements is to be increased in accordance with <u>the Guidance relating to the Rules.</u> ~. [See Guidance]</p> </div> <p>5. Examination of ballast tanks [See Guidance]</p> <p>Examination of <u>ballast tanks when required</u> as a consequence of the results of the Special Survey and Intermediate Survey is to be carried out. When considered necessary by the Surveyor, or where extensive corrosion exists, thickness measurements are to be carried out. If the results of these thickness measurements indicate that substantial corrosion is found, the extent of thickness measurements is to be increased in accordance with <u>the Guidance relating to the Rules.</u> ~.</p> <p><u><"note" newly added></u></p>	<p style="text-align: center;"><Rule> Section 2 Bulk Carriers</p> <p>202. Annual Survey</p> <p>4. Examination of cargo holds (2021) [See Guidance]</p> <p>The examination of cargo holds in Annual Survey is to be in accordance with the follows.</p> <div style="border: 1px solid black; padding: 5px;"> <p>(NOTES)</p> <p>2) When considered necessary by the Surveyor, or where extensive corrosion exists, thickness measurement is to be carried out. If the results of these thickness measurements indicate that substantial corrosion is found, the extent of thickness measurements is to be increased in accordance with <u>Annex 1-5, Table 14</u> of the Guidance relating to the Rules: ~. (2021) [See Guidance]</p> </div> <p>5. Examination of ballast tanks (2021) [See Guidance]</p> <p>Examination of <u>"ballast tanks when required"</u> as a consequence of the results of the Special Survey and Intermediate Survey is to be carried out. When considered necessary by the Surveyor, or where extensive corrosion exists, thickness measurements are to be carried out. If the results of these thickness measurements indicate that substantial corrosion is found, the extent of thickness measurements is to be increased in accordance with <u>Annex 1-5, Table 14</u> of the Guidance relating to the Rules: ~.</p> <p><u>Note</u> : The term <u>"ballast tanks when required"</u> means the ballast tanks which are assigned to be internally examined at annual intervals from the results of Intermediate Survey or Special Survey.</p>	<p>- Introduced from Guidances * Annex 1-5 "Thickness Measurement Method for Hull Structural Members"</p> <p>- Introduced from Guidances</p>
<p style="text-align: center;"><Guidance> Section 2 Bulk Carriers</p> <p>202. Annual Survey</p> <p>3. In application to 202. 5 of the Rules, the term <u>"ballast tanks when required"</u> means the ballast tanks which are assigned to be internally examined at annual intervals from the results of Intermediate Survey or Special Survey.</p> <p>4. <omitted></p> <p>5. In application to 202. 4 and 5 of the Rules, "the Guidance" means the requirements specified in Annex 1-5, Table 14 of the Guidance. [See Rule]</p> <p>6. <omitted></p>	<p style="text-align: center;"><Guidance> Section 2 Bulk Carriers</p> <p>202. Annual Survey (2021)</p> <p>3. In application to 202. 5 of the Rules, the term <u>"ballast tanks when required"</u> means the ballast tanks which are assigned to be internally examined at annual intervals from the results of Intermediate Survey or Special Survey.</p> <p>3. 4. <same as the current Guidances></p> <p>5. In application to 202. 4 and 5 of the Rules, "the Guidance" means the requirements specified in Annex 1-5, Table 14 of the Guidance. [See Rule]</p> <p>4. 6. <same as the current Guidances></p>	<p>- Moved into Rules</p> <p>- Adjusting No.</p> <p>- Moved into Rules</p> <p>- Adjusting No.</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p>203. Intermediate Survey</p> <p>4. Extent of thickness measurement</p> <p>(1) Bulk carriers exceeding 5 years of age up to 10 years of age, the following is to apply:</p> <p>(c) Where substantial corrosion is found, the extent of thickness measurements is to be increased in accordance with <u>the Guidance</u> relating to the Rules. These extended thickness measurements are to be carried out before the survey is credited as completed. Suspect areas identified at previous surveys are to be examined. Areas of substantial corrosion identified at previous surveys are to have thickness measurements taken. For vessels built under IACS Common Structural Rules(Pt 11 or Pt 13), the identified substantial corrosion areas may be: 【See Guidance】</p>	<p style="text-align: center;">〈Rule〉</p> <p>203. Intermediate Survey</p> <p>4. Extent of thickness measurement</p> <p>(1) Bulk carriers exceeding 5 years of age up to 10 years of age, the following is to apply:</p> <p>(c) Where substantial corrosion is found, the extent of thickness measurements is to be increased in accordance with Annex 1-5, Table 14 of the Guidance relating to the Rules. These extended thickness measurements are to be carried out before the survey is credited as completed. Suspect areas identified at previous surveys are to be examined. Areas of substantial corrosion identified at previous surveys are to have thickness measurements taken. For vessels built under IACS Common Structural Rules(Pt 11 or Pt 13), the identified substantial corrosion areas may be: (2021) 【See Guidance】</p>	<p>- Introduced from Guidances</p> <p>* Annex 1-5 "Thickness Measurement Method for Hull Structural Members"</p>
<p style="text-align: center;">〈Guidance〉</p> <p>203. Intermediate Survey</p> <p>5. In application to 203. 4 (1) (c) of the Rules, "the Guidance" means the requirements specified in Annex 1-5, Table 14 of the Guidance. 【See Rule】</p>	<p style="text-align: center;">〈Guidance〉</p> <p>203. Intermediate Survey (2021)</p> <p>5. In application to 203. 4 (1) (c) of the Rules, "the Guidance" means the requirements specified in Annex 1-5, Table 14 of the Guidance. 【See Rule】</p>	<p>- Moved into Rules</p>

Present	Amendment	Note
<p style="text-align: center;">(Rule)</p> <p>204. Special Survey</p> <p>5. Extent of thickness measurement</p> <p>(2) Provisions for extended measurements for areas with substantial corrosion are given in <u>the Guidance</u> relating to the Rules and as may be additionally specified in the survey programme as required in 102. 1. ~. [See Guidance]</p> <p>(6) ~. The extent of thickness measurements may be reduced by confirming the actual average condition of the structure under the coating provided the Surveyor is satisfied by the Close-up Survey, that there is no structural diminution, and the hard protective coating where applied remains efficient. (2019) [See Guidance]</p> <p>Table 1.3.1 Minimum requirements for Close-up Survey at Special Survey of Bulk Carriers</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>(NOTES)</p> <p>1. (*1) to (*5) means as follows and are illustrated in Annex 1-6 of the Guidance: [See Guidance]</p> </div>	<p style="text-align: center;">(Rule)</p> <p>204. Special Survey</p> <p>5. Extent of thickness measurement</p> <p>(2) Provisions for extended measurements for areas with substantial corrosion are given in Annex 1-5, Table 14 of the Guidance relating to the Rules and as may be additionally specified in the survey programme as required in 102. 1. ~. (2021) [See Guidance]</p> <p>(6) ~. The extent of thickness measurements may be reduced by confirming the actual average condition of the structure under the coating provided the Surveyor is satisfied by the Close-up Survey, that there is no structural diminution, and the hard protective "coating where applied remains efficient". (2021) [See Guidance]</p> <p>Note : "coating where applied remains efficient" means the cases where the coatings are found in a GOOD condition.</p> <p>Table 1.3.1 Minimum requirements for Close-up Survey at Special Survey of Bulk Carriers</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>(NOTES)</p> <p>1. (*1) to (*5) means as follows and are illustrated for the general drawing for Close-up Survey area in Annex 1-6, 1 (2) of the Guidance: (2021) [See Guidance]</p> </div>	<p>- Introduced from Guidances * Annex 1-5 "Thickness Measurement Method for Hull Structural Members"</p> <p>- Introduced from Guidances</p> <p>- Introduced from Guidances * Annex 1-6 "Areas of Close-up Survey, etc."</p>
<p style="text-align: center;">(Guidance)</p> <p>204. Special Survey</p> <p>3. In application to 204. 5 (2) of the Rules, "the Guidance" means the requirements specified in Annex 1-5, Table 14 of the Guidance. [See Rule]</p> <p>4. (omitted)</p> <p>5. In application to 204. 5 (6) of the Rules, the term "coating where applied remains efficient" means the cases where the coatings are found in a GOOD condition. [See Rule]</p> <p>6. In application to Table 1.3.1 NOTES 1 of the Rules, the general drawing for Close-up Survey areas is shown in Annex 1-6, 1 (2) of the Guidance. [See Rule]</p> <p>7. (omitted)</p>	<p style="text-align: center;">(Guidance)</p> <p>204. Special Survey (2021)</p> <p>3. In application to 204. 5 (2) of the Rules, "the Guidance" means the requirements specified in Annex 1-5, Table 14 of the Guidance. [See Rule]</p> <p>3. 4. (same as the current Guidances)</p> <p>5. In application to 204. 5 (6) of the Rules, the term "coating where applied remains efficient" means the cases where the coatings are found in a GOOD condition. [See Rule]</p> <p>6. In application to Table 1.3.1 NOTES 1 of the Rules, the general drawing for Close-up Survey areas is shown in Annex 1-6, 1 (2) of the Guidance. [See Rule]</p> <p>4. 7. (same as the current Guidances)</p>	<p>- Moved into Rules</p> <p>- Adjusting No.</p> <p>- Moved into Rules</p> <p>- Moved into Rules</p> <p>- Adjusting No.</p>

Present	Amendment	Note
<p style="text-align: center;">(Rule)</p> <p style="text-align: center;">Section 3 Oil Tankers</p> <p>302. Annual Survey</p> <p>5. Examination of ballast tanks [See Guidance] Examination of <u>ballast tanks where required</u> as a consequence of the results of the Special Survey(See 304. 2) and Intermediate Survey(See 303. 3) is to be carried out. When considered necessary by the Surveyor, or when extensive corrosion exists, thickness measurements are to be carried out and if the results of these thickness measurements indicate that substantial corrosion is found, the extent of thickness measurements is to be increased in accordance with the <u>Guidance</u> relating to the Rules. ~.</p> <p><u><"note" newly added></u></p>	<p style="text-align: center;">(Rule)</p> <p style="text-align: center;">Section 3 Oil Tankers</p> <p>302. Annual Survey</p> <p>5. Examination of ballast tanks (2021) [See Guidance] Examination of <u>"ballast tanks where required"</u> as a consequence of the results of the Special Survey(See 304. 2) and Intermediate Survey(See 303. 3) is to be carried out. When considered necessary by the Surveyor, or when extensive corrosion exists, thickness measurements are to be carried out and if the results of these thickness measurements indicate that substantial corrosion is found, the extent of thickness measurements is to be increased in accordance with <u>Annex 1-5, Table 15</u> of the Guidance relating to the Rules. ~.</p> <p><u>Note</u> : The term "<u>ballast tanks when required</u>" means the ballast tanks which are assigned to be internally examined at annual intervals from the results of Intermediate Survey or Special Survey.</p>	<p>- Introduced from Guidances * Annex 1-5 "Thickness Measurement Method for Hull Structural Members"</p>
<p style="text-align: center;">(Guidance)</p> <p style="text-align: center;">Section 3 Oil Tankers</p> <p>302. Annual Survey [See Rule]</p> <p><u>1. In application to 302. 5 of the Rules, the term "ballast tanks when required" means the ballast tanks which are assigned to be internally examined at annual intervals from the results of Intermediate Survey or Special Survey.</u></p> <p><u>2. <omitted></u></p> <p><u>3. In application to 302. 5 of the Rules, "the Guidance" means the requirements specified in Annex 1-5, Table 15 of the Guidance.</u></p>	<p style="text-align: center;">(Guidance)</p> <p style="text-align: center;">Section 3 Oil Tankers</p> <p>302. Annual Survey (2021) [See Rule]</p> <p><u>1. In application to 302. 5 of the Rules, the term "ballast tanks when required" means the ballast tanks which are assigned to be internally examined at annual intervals from the results of Intermediate Survey or Special Survey.</u></p> <p><u>1. 2. <same as the current Guidances></u></p> <p><u>3. In application to 302. 5 of the Rules, "the Guidance" means the requirements specified in Annex 1-5, Table 15 of the Guidance.</u></p>	<p>- Moved into Rules</p> <p>- Adjusting No.</p> <p>- Moved into Rules</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p>304. Special Survey</p> <p>1. General</p> <p>(4) Cargo piping on deck, including crude oil washing(COW) piping, cargo and ballast piping within the spaces specified in (3) above are to be examined and <u>operationally tested to working pressure</u> to attending Surveyor's satisfaction to ensure that tightness and condition remain satisfactory. Special attention is to be given to any ballast piping in cargo tanks and cargo piping in ballast tanks and void spaces, and Surveyors are to be advised on all occasions when this piping, including valves and fittings are opened during repair periods and can be examined internally. (2020) 【See Guidance】</p> <p>〈"note" newly added〉</p>	<p style="text-align: center;">〈Rule〉</p> <p>304. Special Survey</p> <p>1. General</p> <p>(4) Cargo piping on deck, including crude oil washing(COW) piping, cargo and ballast piping within the spaces specified in (3) above are to be examined and <u>"operationally tested to working pressure"</u> to attending Surveyor's satisfaction to ensure that tightness and condition remain satisfactory. Special attention is to be given to any ballast piping in cargo tanks and cargo piping in ballast tanks and void spaces, and Surveyors are to be advised on all occasions when this piping, including valves and fittings are opened during repair periods and can be examined internally. (2021) 【See Guidance】</p> <p>Note : The term "<u>operationally tested to working pressure</u>" means the confirmation of the leakage or excessive vibration, etc.</p>	<p>- Introduced from Guidances</p>
<p style="text-align: center;">〈Guidance〉</p> <p>304. Special Survey</p> <p><u>1. In application to 304. 1 (4) of the Rules, the term "operationally tested to working pressure" means the confirmation of the leakage or excessive vibration, etc. 【See Rule】</u></p> <p><u>2. 〈omitted〉</u></p>	<p style="text-align: center;">〈Guidance〉</p> <p>304. Special Survey (2021)</p> <p>1. In application to 304. 1 (4) of the Rules, the term "operationally tested to working pressure" means the confirmation of the leakage or excessive vibration, etc. 【See Rule】</p> <p>1. 2. 〈same as the current Guidances〉</p>	<p>- Moved into Rules</p> <p>- Adjusting No.</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p>4. Extent of thickness measurement</p> <p>(2) Provisions for extended measurements for areas with substantial corrosion are given in the Guidance relating to the Rules, and as may be additionally specified in the survey programme as required in 102. 1. ~. 【See Guidance】</p> <p>(6) In case where two or three sections are to be measured, at least one is to include a ballast tank within 0.5 <i>L</i> amidships. In case of oil tankers of 130 m in length and upwards(i.e. length for freeboard(<i>L_f</i>) as defined in Pt 3, Ch 1, 103.) and more than 10 years of age, for the evaluation of the ship's longitudinal strength as required in 106. 1 (2), the sampling method of thickness measurements is given in the Guidance relating to the Rules. 【See Guidance】</p> <p>Table 1.3.4 Minimum requirements for Close-up Survey at Special Survey of Oil Tankers, Ore/Oil Ships and etc.¹⁾ 【See Guidance】</p> <div style="border: 1px solid black; padding: 5px;"> <p>(NOTES)</p> <p>1) (*1) to (*6) mean as follows and are illustrated in Annex 1-6 of the Guidance: 【See Guidance】</p> </div>	<p style="text-align: center;">〈Rule〉</p> <p>4. Extent of thickness measurement</p> <p>(2) Provisions for extended measurements for areas with substantial corrosion are given in Annex 1-5, Table 15 of the Guidance relating to the Rules, and as may be additionally specified in the survey programme as required in 102. 1. ~. (2021) 【See Guidance】</p> <p>(6) In case where two or three sections are to be measured, at least one is to include a ballast tank within 0.5 <i>L</i> amidships. In case of oil tankers of 130 m in length and upwards(i.e. length for freeboard(<i>L_f</i>) as defined in Pt 3, Ch 1, 103.) and more than 10 years of age, for the evaluation of the ship's longitudinal strength as required in 106. 1 (2), the sampling method of thickness measurements is given in Annex 1-5, Par 6 of the Guidance relating to the Rules. (2021) 【See Guidance】</p> <p>Table 1.3.4 Minimum requirements for Close-up Survey at Special Survey of Oil Tankers, Ore/Oil Ships and etc.¹⁾ 【See Guidance】</p> <div style="border: 1px solid black; padding: 5px;"> <p>(NOTES)</p> <p>1) (*1) to (*6) mean as follows and are illustrated for the general drawing for Close-up Survey area in Annex 1-6, 1, (3) of the Guidance: (2021) 【See Guidance】</p> </div>	<p>- Introduced from Guidances * Annex 1-5 "Thickness Measurement Method for Hull Structural Members"</p> <p>- Introduced from Guidances * Annex 1-6 "Areas of Close-up Survey, etc."</p>
<p style="text-align: center;">〈Guidance〉</p> <p>3. In application to 304. 4 (2) of the Rules, "the Guidance" means the requirements specified in Annex 1-5, Table 15 of the Guidance. 【See Rule】</p> <p>4. 〈omitted〉</p> <p>5. In application to 304. 4 (6) of the Rules, "the Guidance" means the requirements specified in Annex 1-5, Par 6 of the Guidance. 【See Rule】</p> <p>6. ~ 7. 〈omitted〉</p> <p>8. In application to Table 1.3.4 NOTES 1) of the Rules, the general drawing for Close-up Survey areas is shown in Annex 1-6, 1 (3) of the Guidance. 【See Rule】</p> <p>9. 〈omitted〉</p>	<p style="text-align: center;">〈Guidance〉</p> <p>3. In application to 304. 4 (2) of the Rules, "the Guidance" means the requirements specified in Annex 1-5, Table 15 of the Guidance. 【See Rule】</p> <p>2. 4. 〈same as the current Guidances〉</p> <p>5. In application to 304. 4 (6) of the Rules, "the Guidance" means the requirements specified in Annex 1-5, Par 6 of the Guidance. 【See Rule】</p> <p>3. 6. ~ 4. 7. 〈same as the current Guidances〉</p> <p>8. In application to Table 1.3.4 NOTES 1) of the Rules, the general drawing for Close-up Survey areas is shown in Annex 1-6, 1 (3) of the Guidance. 【See Rule】</p> <p>5. 9. 〈same as the current Guidances〉</p>	<p>- Moved into Rules</p> <p>- Adjusting No.</p> <p>- Moved into Rules</p> <p>- Adjusting No.</p> <p>- Moved into Rules</p> <p>- Adjusting No.</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p style="text-align: center;">Section 4 Chemical Tankers</p> <p>402. Annual Survey</p> <p>5. Examination of ballast tanks [See Guidance]</p> <p>Examination of <u>ballast tanks where required</u> as a consequence of the results of the Special Survey(See 404. 2) and Intermediate Survey (See 403. 3) is to be carried out. When considered necessary by the Surveyor, or when extensive corrosion exists, thickness measurements are to be carried out and if the results of these thickness measurements indicate that substantial corrosion is found, the extent of thickness measurements is to be increased in accordance with the Guidance relating to the Rules. These extended thickness measurements are to be carried out before the survey is credited as completed. Suspect areas identified at previous surveys are to be examined. Areas of substantial corrosion identified at previous surveys are to have thickness measurements taken.</p> <p>〈“note” newly added〉</p>	<p style="text-align: center;">〈Rule〉</p> <p style="text-align: center;">Section 4 Chemical Tankers</p> <p>402. Annual Survey</p> <p>5. Examination of ballast tanks (2021) [See Guidance]</p> <p>Examination of “ballast tanks where required” as a consequence of the results of the Special Survey(See 404. 2) and Intermediate Survey (See 403. 3) is to be carried out. When considered necessary by the Surveyor, or when extensive corrosion exists, thickness measurements are to be carried out and if the results of these thickness measurements indicate that substantial corrosion is found, the extent of thickness measurements is to be increased in accordance with Annex 1-5, Table 16 of the Guidance relating to the Rules. These extended thickness measurements are to be carried out before the survey is credited as completed. Suspect areas identified at previous surveys are to be examined. Areas of substantial corrosion identified at previous surveys are to have thickness measurements taken.</p> <p>Note : The term "ballast tanks when required" means the ballast tanks which are assigned to be internally examined at annual intervals from the results of Intermediate Survey or Special Survey.</p>	<p>- Introduced from Guidances</p> <p>* Annex 1-5 “Thickness Measurement Method for Hull Structural Members”</p> <p>- Introduced from Guidances</p>
<p style="text-align: center;">〈Guidance〉</p> <p style="text-align: center;">Section 4 Chemical Tankers</p> <p>402. Annual Survey [See Rule]</p> <p>1. In application to 402. 5 of the Rules, the term "ballast tanks when required" means the ballast tanks which are assigned to be internally examined at annual intervals from the results of Intermediate Survey or Special Survey.</p> <p>2. 〈omitted〉</p> <p>3. In application to 402. 5 of the Rules, "the Guidance" means the requirements specified in Annex 1-5, Table 16 of the Guidance.</p>	<p style="text-align: center;">〈Guidance〉</p> <p style="text-align: center;">Section 4 Chemical Tankers</p> <p>402. Annual Survey (2021) [See Rule]</p> <p>1. In application to 402. 5 of the Rules, the term "ballast tanks when required" means the ballast tanks which are assigned to be internally examined at annual intervals from the results of Intermediate Survey or Special Survey.</p> <p>1. 2. 〈same as the current Guidances〉</p> <p>3. In application to 402. 5 of the Rules, "the Guidance" means the requirements specified in Annex 1-5, Table 16 of the Guidance.</p>	<p>- Moved into Rules</p> <p>- Adjusting No.</p> <p>- Moved into Rules</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p>404. Special Survey</p> <p>1. General</p> <p>(4) Cargo piping on deck and cargo and ballast piping within the spaces specified in (3) above are to be examined and <u>operationally tested to working pressure</u> to attending Surveyor's satisfaction to ensure that tightness and condition remain satisfactory. Special attention is to be given to any ballast piping in cargo tanks and cargo piping in ballast tanks and void spaces, and Surveyors are to be advised on all occasions when this piping, including valves and fittings are opened during repair periods and can be examined internally. (2020) 【See Guidance】</p> <p>〈"note" newly added〉</p>	<p style="text-align: center;">〈Rule〉</p> <p>404. Special Survey</p> <p>1. General</p> <p>(4) Cargo piping on deck and cargo and ballast piping within the spaces specified in (3) above are to be examined and <u>"operationally tested to working pressure"</u> to attending Surveyor's satisfaction to ensure that tightness and condition remain satisfactory. Special attention is to be given to any ballast piping in cargo tanks and cargo piping in ballast tanks and void spaces, and Surveyors are to be advised on all occasions when this piping, including valves and fittings are opened during repair periods and can be examined internally. (2021) 【See Guidance】</p> <p><u>Note</u> : The term "operationally tested to working pressure" means <u>the confirmation of the leakage or excessive vibration, etc.</u></p>	<p>- Introduced from Guidances</p>
<p style="text-align: center;">〈Guidance〉</p> <p>404. Special Survey</p> <p>1. In application to 404. 1 (4) of the Rules, the term "<u>operationally tested to working pressure</u>" means the confirmation of the leakage or excessive vibration, etc. 【See Rule】</p> <p>2. ~ 3. 〈omitted〉</p>	<p style="text-align: center;">〈Guidance〉</p> <p>404. Special Survey</p> <p>1. In application to 404. 1 (4) of the Rules, the term "<u>operationally tested to working pressure</u>" means the confirmation of the leakage or excessive vibration, etc. 【See Rule】</p> <p>1. 2. ~ 2. 3. 〈same as the current Guidances〉</p>	<p>- Moved into Rules</p> <p>- Adjusting No.</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p>4. Extent of Thickness Measurement</p> <p>(2) Provisions for extended measurements for areas with substantial corrosion are given in the Guidance relating to the Rules, and as may be additionally specified in the survey programme as required in 102. 1. ~. [See Guidance]</p> <p>Table 1.3.7 Minimum requirements for Close-up Survey at Special Survey of Chemical Tankers¹⁾ [See Guidance]</p> <p>1) Single Skin Chemical Tankers</p> <div style="border: 1px solid black; padding: 5px;"> <p>(NOTES)</p> <p>1) (*A) to (*D) mean as follows and are illustrated in Annex 1-6 of the Guidance: [See Guidance]</p> </div> <p>Table 1.3.7 Minimum requirements for Close-up Survey at Special Survey of Chemical Tankers¹⁾ (continued) [See Guidance]</p> <p>2) Double Skin Chemical Tankers</p> <div style="border: 1px solid black; padding: 5px;"> <p>(NOTES)</p> <p>1) (*1) to (*7) mean as follows and are illustrated in Annex 1-6 of the Guidance:</p> </div>	<p style="text-align: center;">〈Rule〉</p> <p>4. Extent of Thickness Measurement</p> <p>(2) Provisions for extended measurements for areas with substantial corrosion are given in Annex 1-5, Table 16 of the Guidance relating to the Rules, and as may be additionally specified in the survey programme as required in 102. 1. ~. (2021) [See Guidance]</p> <p>Table 1.3.7 Minimum requirements for Close-up Survey at Special Survey of Chemical Tankers¹⁾ [See Guidance]</p> <p>1) Single Skin Chemical Tankers</p> <div style="border: 1px solid black; padding: 5px;"> <p>(NOTES)</p> <p>1) (*A) to (*D) mean as follows and are illustrated for the general drawing for Close-up Survey area in Annex 1-6 of the Guidance: (2021) [See Guidance]</p> </div> <p>Table 1.3.7 Minimum requirements for Close-up Survey at Special Survey of Chemical Tankers¹⁾ (continued) [See Guidance]</p> <p>2) Double Skin Chemical Tankers</p> <div style="border: 1px solid black; padding: 5px;"> <p>(NOTES)</p> <p>1) (*1) to (*7) mean as follows and are illustrated for the general drawing for Close-up Survey area in Annex 1-6 of the Guidance: (2021)</p> </div>	<p>– Introduced from Guidances * Annex 1-5 "Thickness Measurement Method for Hull Structural Members"</p> <p>– Introduced from Guidances * Annex 1-6 "Areas of Close-up Survey, etc."</p> <p>– Introduced from Guidances</p>
<p style="text-align: center;">〈Guidance〉</p> <p>4. In application to 404. 4 (2) of the Rules, "the Guidance" means the requirements specified in Annex 1-5, Table 16 of the Guidance. [See Rule]</p> <p>5. ~ 7. 〈omitted〉</p> <p>8. In application to Table 1.3.7 NOTES 1) of the Rules, the general drawing for Close-up Survey areas is shown in Annex 1-6, 1 (4) of the Guidance. [See Rule]</p> <p>9. 〈omitted〉</p>	<p style="text-align: center;">〈Guidance〉</p> <p>4. In application to 404. 4 (2) of the Rules, "the Guidance" means the requirements specified in Annex 1-5, Table 16 of the Guidance. [See Rule]</p> <p>4. 5. ~ 6. 7. 〈same as the current Guidances〉</p> <p>8. In application to Table 1.3.7 NOTES 1) of the Rules, the general drawing for Close-up Survey areas is shown in Annex 1-6, 1 (4) of the Guidance. [See Rule]</p> <p>7. 9. 〈same as the current Guidances〉</p>	<p>– Moved into Rules</p> <p>– Adjusting No.</p> <p>– Moved into Rules</p> <p>– Adjusting No.</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p style="text-align: center;">Section 5 Double Hull Oil Tankers</p> <p>502. Annual Survey</p> <p>5. Examination of ballast tanks [See Guidance]</p> <p>Examination of <u>ballast tanks where required</u> as a consequence of the results of the Special Survey(See 504. 2) and Intermediate Survey(See 503. 3) is to be carried out. When considered necessary by the Surveyor, or when extensive corrosion exists, thickness measurements are to be carried out and if the results of these thickness measurements indicate that substantial corrosion is found, the extent of thickness measurements is to be increased in accordance with <u>the Guidance</u> relating to the Rules. ~.</p> <p>〈“note” newly added〉</p>	<p style="text-align: center;">〈Rule〉</p> <p style="text-align: center;">Section 5 Double Hull Oil Tankers</p> <p>502. Annual Survey</p> <p>5. Examination of ballast tanks <i>(2021)</i> [See Guidance]</p> <p>Examination of “<u>ballast tanks where required</u>” as a consequence of the results of the Special Survey(See 504. 2) and Intermediate Survey(See 503. 3) is to be carried out. When considered necessary by the Surveyor, or when extensive corrosion exists, thickness measurements are to be carried out and if the results of these thickness measurements indicate that substantial corrosion is found, the extent of thickness measurements is to be increased in accordance with Annex 1-5, Table 17 of the Guidance relating to the Rules. ~.</p> <p>Note : The term “<u>ballast tanks when required</u>” means the ballast tanks which are assigned to be internally examined at annual intervals from the results of Intermediate Survey or Special Survey.</p>	<p>- Introduced from Guidances</p> <p>* Annex 1-5 “Thickness Measurement Method for Hull Structural Members”</p> <p>- Introduced from Guidances</p>
<p style="text-align: center;">〈Guidance〉</p> <p style="text-align: center;">Section 5 Double Hull Oil Tankers</p> <p>502. Annual Survey [See Rule]</p> <p>1. In application to 502. 5 of the Rules, the term “<u>ballast tanks when required</u>” means the ballast tanks which are assigned to be internally examined at annual intervals from the results of Intermediate Survey or Special Survey.</p> <p>2. 〈omitted〉</p> <p>3. In application to 502. 5 of the Rules, “<u>the Guidance</u>” means the requirements specified in Annex 1-5, Table 17 of the Guidance.</p>	<p style="text-align: center;">〈Guidance〉</p> <p style="text-align: center;">Section 5 Double Hull Oil Tankers</p> <p>502. Annual Survey <i>(2021)</i> [See Rule]</p> <p>1. In application to 502. 5 of the Rules, the term “ballast tanks when required” means the ballast tanks which are assigned to be internally examined at annual intervals from the results of Intermediate Survey or Special Survey.</p> <p>1. 2. 〈same as the current Guidances〉</p> <p>3. In application to 502. 5 of the Rules, “the Guidance” means the requirements specified in Annex 1-5, Table 17 of the Guidance.</p>	<p>- Moved into Rules</p> <p>- Adjusting No.</p> <p>- Moved into Rules</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p>504. Special Survey</p> <p>1. General</p> <p>(4) Cargo piping on deck, including crude oil washing(COW) piping, cargo and ballast piping within the spaces specified in (3) above are to be examined and <u>operationally tested to working pressure</u> to attending Surveyor's satisfaction to ensure that tightness and condition remain satisfactory. Special attention is to be given to any ballast piping in cargo tanks and cargo piping in ballast tanks and void spaces, and Surveyors are to be advised on all occasions when this piping, including valves and fittings are opened during repair periods and can be examined internally. (2020) 【See Guidance】</p> <p>〈"note" newly added〉</p>	<p style="text-align: center;">〈Rule〉</p> <p>504. Special Survey</p> <p>1. General</p> <p>(4) Cargo piping on deck, including crude oil washing(COW) piping, cargo and ballast piping within the spaces specified in (3) above are to be examined and <u>"operationally tested to working pressure"</u> to attending Surveyor's satisfaction to ensure that tightness and condition remain satisfactory. Special attention is to be given to any ballast piping in cargo tanks and cargo piping in ballast tanks and void spaces, and Surveyors are to be advised on all occasions when this piping, including valves and fittings are opened during repair periods and can be examined internally. (2021) 【See Guidance】</p> <p>Note : The term "operationally tested to working pressure" means <u>the confirmation of the leakage or excessive vibration, etc.</u></p>	<p>- Introduced from Guidances</p>
<p style="text-align: center;">〈Guidance〉</p> <p>504. Special Survey</p> <p><u>1. In application to 504. 1 (4) of the Rules, the term "operationally tested to working pressure" means the confirmation of the leakage or excessive vibration, etc. 【See Rule】</u></p> <p>2. 〈omitted〉</p>	<p style="text-align: center;">〈Guidance〉</p> <p>504. Special Survey</p> <p>1. In application to 504. 1 (4) of the Rules, the term "operationally tested to working pressure" means the confirmation of the leakage or excessive vibration, etc. 【See Rule】</p> <p>1. 2. 〈same as the current Guidances〉</p>	<p>- Moved into Rules</p> <p>- Adjusting No.</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p>4. Extent of thickness measurement</p> <p>(2) Provisions for extended measurements for areas with substantial corrosion are given in the <u>Guidance</u> relating to the Rules, and as may be additionally specified in the survey programme as required in 102. 1. ~. [See Guidance]</p> <p>(6) In case where two or three sections are to be measured, at least one is to include a ballast tank within 0.5 <i>L</i> amidships. In case of oil tankers of 130 m in length and upwards(i.e. length for freeboard(<i>L_f</i>) as defined in Pt 3, Ch 1, 103.) and more than 10 years of age, for the evaluation of the ship's longitudinal strength as required in 106. 1 (2), the sampling method of thickness measurements is given in the <u>Guidance</u> relating to the Rules. In case of ships built under IACS Common Structural Rules for Bulk Carriers and Oil Tankers(Pt 13), for the evaluation of the ship's longitudinal strength as required in 106. 1 (4), the sampling method of thickness measurements is given in the <u>Guidance</u> relating to the Rules. [See Guidance]</p> <p style="text-align: center;">Table 1.3.10 Minimum requirements for Close-up Survey at Special Survey of Double Hull Oil Tankers¹⁾ [See Guidance]</p> <div style="border: 1px solid black; padding: 5px;"> <p>(NOTES)</p> <p>1) (*1) to (*7) mean as follows and are illustrated in Annex 1-6 of the Guidance: [See Guidance]</p> </div>	<p style="text-align: center;">〈Rule〉</p> <p>4. Extent of thickness measurement</p> <p>(2) Provisions for extended measurements for areas with substantial corrosion are given in Annex 1-5, Table 17 of the <u>Guidance</u> relating to the Rules, and as may be additionally specified in the survey programme as required in 102. 1. ~. (2021) [See Guidance]</p> <p>(6) In case where two or three sections are to be measured, at least one is to include a ballast tank within 0.5 <i>L</i> amidships. In case of oil tankers of 130 m in length and upwards(i.e. length for freeboard(<i>L_f</i>) as defined in Pt 3, Ch 1, 103.) and more than 10 years of age, for the evaluation of the ship's longitudinal strength as required in 106. 1 (2), the sampling method of thickness measurements is given in Annex 1-5, 6 of the <u>Guidance</u> relating to the Rules. In case of ships built under IACS Common Structural Rules for Bulk Carriers and Oil Tankers(Pt 13), for the evaluation of the ship's longitudinal strength as required in 106. 1 (4), the sampling method of thickness measurements is given in Annex 1-5, 6 of the <u>Guidance</u> relating to the Rules. (2021) [See Guidance]</p> <p style="text-align: center;">Table 1.3.10 Minimum requirements for Close-up Survey at Special Survey of Double Hull Oil Tankers¹⁾ [See Guidance]</p> <div style="border: 1px solid black; padding: 5px;"> <p>(NOTES)</p> <p>1) (*1) to (*7) mean as follows and are illustrated for the general drawing for Close-up Survey area in Annex 1-6, 1 (5) of the Guidance: (2021) [See Guidance]</p> </div>	<p>- Introduced from Guidances</p> <p>* Annex 1-5 "Thickness Measurement Method for Hull Structural Members"</p> <p>- Introduced from Guidances</p> <p>- Introduced from Guidances</p> <p>* Annex 1-6 "Areas of Close-up Survey, etc."</p>
<p style="text-align: center;">〈Guidance〉</p> <p>3. In application to 504. 4 (2) of the Rules, "the <u>Guidance</u>" means the requirements specified in Annex 1-5, Table 17 of the Guidance. [See Rule]</p> <p>4. 〈omitted〉</p> <p>5. In application to 504. 4 (6) of the Rules, "the <u>Guidance</u>" means the requirements specified in Annex 1-5, 6 of the Guidance. [See Rule]</p> <p>6. ~ 7. 〈omitted〉</p> <p>8. In application to Table 1.3.10 NOTES 1) of the Rules, the general drawing for Close-up Survey area is shown in Annex 1-6, 1 (5) of the Guidance. [See Rule]</p> <p>9. 〈omitted〉</p>	<p style="text-align: center;">〈Guidance〉</p> <p>3. In application to 504. 4 (2) of the Rules, "the <u>Guidance</u>" means the requirements specified in Annex 1-5, Table 17 of the Guidance. [See Rule]</p> <p>2. 4. 〈same as the current Guidances〉</p> <p>5. In application to 504. 4 (6) of the Rules, "the <u>Guidance</u>" means the requirements specified in Annex 1-5, 6 of the Guidance. [See Rule]</p> <p>3. 6. ~ 4. 7. 〈same as the current Guidances〉</p> <p>8. In application to Table 1.3.10 NOTES 1) of the Rules, the general drawing for Close-up Survey area is shown in Annex 1-6, 1 (5) of the Guidance. [See Rule]</p> <p>5. 9. 〈same as the current Guidances〉</p>	<p>- Moved into Rules</p> <p>- Adjusting No.</p> <p>- Moved into Rules</p> <p>- Adjusting No.</p> <p>- Moved into Rules</p> <p>- Adjusting No.</p>

Present	Amendment	Note
<p style="text-align: center;"><Rule> Section 6 Double Skin Bulk Carriers</p> <p>602. Annual Survey</p> <p>4. Examination of cargo holds [See Guidance]</p> <p>The examination of cargo holds in Annual Survey is to be in accordance with the follows.</p> <div style="border: 1px solid black; padding: 5px;"> <p>(NOTES)</p> <p>1. When considered necessary by the Surveyor, or where extensive corrosion exists, thickness measurement is to be carried out. If the results of these thickness measurements indicate that substantial corrosion is found, the extent of thickness measurements is to be increased in accordance with <u>the Guidance</u> relating to the Rules. ~. [See Guidance]</p> </div> <p>5. Examination of ballast tanks [See Guidance]</p> <p>Examination of <u>ballast tanks when required</u> as a consequence of the results of the Special Survey and Intermediate Survey is to be carried out. When considered necessary by the Surveyor, or where extensive corrosion exists, thickness measurements are to be carried out. If the results of these thickness measurements indicate that Substantial Corrosion is found, the extent of thickness measurements is to be increased in accordance with <u>the Guidance</u> relating to the Rules. ~.</p> <p><u><"note" newly added></u></p>	<p style="text-align: center;"><Rule> Section 6 Double Skin Bulk Carriers</p> <p>602. Annual Survey</p> <p>4. Examination of cargo holds (2021) [See Guidance]</p> <p>The examination of cargo holds in Annual Survey is to be in accordance with the follows.</p> <div style="border: 1px solid black; padding: 5px;"> <p>(NOTES)</p> <p>1. When considered necessary by the Surveyor, or where extensive corrosion exists, thickness measurement is to be carried out. If the results of these thickness measurements indicate that substantial corrosion is found, the extent of thickness measurements is to be increased in accordance with <u>Annex 1-5, Table 18 of the Guidance relating to the Rules.</u> ~. [See Guidance]</p> </div> <p>5. Examination of ballast tanks (2021) [See Guidance]</p> <p>Examination of "ballast tanks when required" as a consequence of the results of the Special Survey and Intermediate Survey is to be carried out. When considered necessary by the Surveyor, or where extensive corrosion exists, thickness measurements are to be carried out. If the results of these thickness measurements indicate that Substantial Corrosion is found, the extent of thickness measurements is to be increased in accordance with <u>Annex 1-5, Table 18 of the Guidance relating to the Rules.</u> ~.</p> <p><u>Note</u> : The term "ballast tanks when required" means the ballast tanks which are assigned to be internally examined at annual intervals from the results of Intermediate Survey or Special Survey.</p>	<p>- Introduced from Guidances * Annex 1-5 "Thickness Measurement Method for Hull Structural Members"</p> <p>- Introduced from Guidances</p>
<p style="text-align: center;"><Guidance> Section 6 Double Skin Bulk Carriers</p> <p>602. Annual Survey</p> <p>3. In application to 602. 5 of the Rules, the term "ballast tanks when required" means the ballast tanks which are assigned to be internally examined at annual intervals from the results of Intermediate Survey or Special Survey.</p> <p>4. <omitted></p> <p>5. In application to 602. 4 and 5 of the Rules, "the Guidance" means the requirements specified in Annex 1-5, Table 18 of the Guidance. [See Rule]</p>	<p style="text-align: center;"><Guidance> Section 6 Double Skin Bulk Carriers</p> <p>602. Annual Survey</p> <p>3. In application to 602. 5 of the Rules, the term "ballast tanks when required" means the ballast tanks which are assigned to be internally examined at annual intervals from the results of Intermediate Survey or Special Survey.</p> <p>3. 4. <same as the current Guidances></p> <p>5. In application to 602. 4 and 5 of the Rules, "the Guidance" means the requirements specified in Annex 1-5, Table 18 of the Guidance. [See Rule]</p>	<p>- Moved into Rules</p> <p>- Adjusting No.</p> <p>- Moved into Rules</p>

Present	Amendment	Note
<p style="text-align: center;">〈Rule〉</p> <p>603. Intermediate Survey</p> <p>4. Extent of thickness measurements</p> <p>(1) Double skin bulk carriers exceeding 5 years of age up to 10 years of age, the following is to apply:</p> <p>(c) Where Substantial Corrosion is found, the extent of thickness measurements is to be increased in accordance with the requirements of <u>the Guidance</u> relating to the Rules. ~. <u>[See Guidance]</u></p> <p>604. Special Survey</p> <p>5. Extent of thickness measurements</p> <p>(2) Provisions for extended measurements for areas with substantial corrosion are given in <u>the Guidance</u> relating to the Rules and as may be additionally specified in the survey programme as required in 102. 1. ~. <u>[See Guidance]</u></p>	<p style="text-align: center;">〈Rule〉</p> <p>603. Intermediate Survey</p> <p>4. Extent of thickness measurements</p> <p>(1) Double skin bulk carriers exceeding 5 years of age up to 10 years of age, the following is to apply:</p> <p>(c) Where Substantial Corrosion is found, the extent of thickness measurements is to be increased in accordance with the requirements of Annex 1-5, Table 18 of the Guidance relating to the Rules. ~. <u>(2021)</u> -[See Guidance]</p> <p>604. Special Survey</p> <p>5. Extent of thickness measurements</p> <p>(2) Provisions for extended measurements for areas with substantial corrosion are given in Annex 1-5, Table 18 of the Guidance relating to the Rules and as may be additionally specified in the survey programme as required in 102. 1. ~. <u>(2021)</u> -[See Guidance]</p>	<p>- Introduced from Guidances * Annex 1-5 "Thickness Measurement Method for Hull Structural Members"</p> <p>- Introduced from Guidances</p>
<p style="text-align: center;">〈Guidance〉</p> <p>603. Intermediate Survey</p> <p>5. In application to 603. 4 (1) (c) of the Rules, "the Guidance" means the requirements specified in Annex 1-5, Table 18 of the Guidance. <u>[See Rule]</u></p> <p>604. Special Survey</p> <p>3. In application to 604. 5 (2) of the Rules, "the Guidance" means the requirements specified in Annex 1-5, Table 18 of the Guidance. <u>[See Rule]</u></p>	<p style="text-align: center;">〈Guidance〉</p> <p>603. Intermediate Survey (2021)</p> <p>5. In application to 603. 4 (1) (c) of the Rules, "the Guidance" means the requirements specified in Annex 1-5, Table 18 of the Guidance. <u>[See Rule]</u></p> <p>604. Special Survey (2021)</p> <p>3. In application to 604. 5 (2) of the Rules, "the Guidance" means the requirements specified in Annex 1-5, Table 18 of the Guidance. <u>[See Rule]</u></p>	<p>- Moved into Rules</p> <p>- Moved into Rules</p>

Present	Amendment	Note
<p style="text-align: center;"><Rule></p> <p>(6) ~. The extent of thickness measurements may be reduced by sufficiently confirming the actual average condition of the structure under the coating provided the Surveyor is satisfied by the Close-up Survey, that there is no structural diminution, and the hard protective <u>coating where applied remains efficient</u>. (2019) [See Guidance] <"note" newly added></p> <p>Table 1.3.13 Minimum requirements for Close-up Survey at Special Survey for Double Skin Bulk Carriers [See Guidance]</p> <p>1) Excluding ore carriers</p> <div style="border: 1px solid black; padding: 5px;"> <p>(NOTES)</p> <p>1. (*1) to (*5) means as follows and are illustrated in <u>Annex 1-6</u> of the Guidance. [See Guidance]</p> </div> <p>Table 1.3.13 Minimum requirements for Close-up Survey at Special Survey for Double Skin Bulk Carriers (continued) [See Guidance]</p> <p>2) Ore carriers</p> <div style="border: 1px solid black; padding: 5px;"> <p>(NOTES)</p> <p>1. (*1), (*3), (*4) and (*5) means as follows and are illustrated in <u>Annex 1-6</u> of the Guidance.</p> </div>	<p style="text-align: center;"><Rule></p> <p>(6) ~. The extent of thickness measurements may be reduced by sufficiently confirming the actual average condition of the structure under the coating provided the Surveyor is satisfied by the Close-up Survey, that there is no structural diminution, and the hard protective <u>"coating where applied remains efficient"</u>. (2021) [See Guidance] Note : The term "<u>coating where applied remains efficient</u>" means the cases where the coatings are found in a GOOD condition.</p> <p>Table 1.3.13 Minimum requirements for Close-up Survey at Special Survey for Double Skin Bulk Carriers [See Guidance]</p> <p>1) Excluding ore carriers</p> <div style="border: 1px solid black; padding: 5px;"> <p>(NOTES)</p> <p>1. (*1) to (*5) means as follows and are illustrated for the <u>general drawing for Close-up Survey area</u> in <u>Annex 1-6, 1 (6)</u> of the Guidance. (2021) [See Guidance]</p> </div> <p>Table 1.3.13 Minimum requirements for Close-up Survey at Special Survey for Double Skin Bulk Carriers (continued) [See Guidance]</p> <p>2) Ore carriers</p> <div style="border: 1px solid black; padding: 5px;"> <p>(NOTES)</p> <p>1. (*1), (*3), (*4) and (*5) means as follows and are illustrated for the <u>general drawing for Close-up Survey area</u> in <u>Annex 1-6, 1 (6)</u> of the Guidance. (2021)</p> </div>	<p>- Introduced from Guidances</p> <p>- Introduced from Guidances</p> <p>* Annex 1-6 "Areas of Close-up Survey, etc."</p>
<p style="text-align: center;"><Guidance></p> <p>4. <omitted></p> <p>5. In application to 604. 5 (6) of the Rules, the term "<u>coating where applied remains efficient</u>" means the cases where the coatings are found in a GOOD condition. [See Rule]</p> <p>6. <omitted></p> <p>7. In application to Table 1.3.13 NOTES 1 of the Rules, the general <u>drawing for Close-up Survey area</u> is shown in Annex 1-6, 1 (6) of the Guidance. [See Rule]</p> <p>8. <omitted></p>	<p style="text-align: center;"><Guidance></p> <p>3. 4. <same as the current Guidances></p> <p>5. In application to 604. 5 (6) of the Rules, the term "<u>coating where applied remains efficient</u>" means the cases where the coatings are found in a GOOD condition. [See Rule]</p> <p>4. 6. <same as the current Guidances></p> <p>7. In application to Table 1.3.13 NOTES 1 of the Rules, the general <u>drawing for Close-up Survey area</u> is shown in Annex 1-6, 1 (6) of the Guidance. [See Rule]</p> <p>5. 8. <same as the current Guidances></p>	<p>- Adjusting No.</p> <p>- Moved into Rules</p> <p>- Adjusting No.</p> <p>- Moved into Rules</p> <p>- Adjusting No.</p>

(6) Effective date : 1 July. 2021

(Date of which application for survey is submitted)

Present	Amendment	Note
<p style="text-align: center;">CHAPTER 1 CLASSIFICATION</p> <p style="text-align: center;">Section 1 ~ Section 3 <omitted></p> <p style="text-align: center;">Section 4 Special Survey (Hull, Equipment and Fire-extinguishing Appliances)</p> <p>401. ~ 402. <omitted></p> <p>403. Requirements of survey (2018)</p> <p>1. The Special Survey is to include, in addition to the requirements of the Annual Survey, examination, tests and checks of sufficient extent to ensure that the hull, equipment and related piping, as required in (9), are in satisfactory condition and is fit for the intended purpose for the new period of class of 5 years to be assigned, subject to proper maintenance and operation and the periodical surveys being carried out at the due dates. The examinations of the hull are to be supplemented by <u>testing and thickness measurements</u> as required in (9) and (12), to ensure that the structural integrity remains effective. The aim of the examination is to discover substantial corrosion, significant deformation, fractures, damages, or other structural deterioration, that may be present. 【See Guidance】</p> <p>(1) ~ (18) <omitted></p> <p><hereafter, omitted></p>	<p style="text-align: center;">CHAPTER 1 CLASSIFICATION</p> <p style="text-align: center;">Section 1 ~ Section 3 <same as the current Rules></p> <p style="text-align: center;">Section 4 Special Survey (Hull, Equipment and Fire-extinguishing Appliances)</p> <p>401. ~ 402. <same as the current Rules></p> <p>403. Requirements of survey (2018)</p> <p>1. The Special Survey is to include, in addition to the requirements of the Annual Survey, examination, tests and checks of sufficient extent to ensure that the hull, equipment and related piping, as required in (9), are in satisfactory condition and is fit for the intended purpose for the new period of class of 5 years to be assigned, subject to proper maintenance and operation and the periodical surveys being carried out at the due dates. The examinations of the hull are to be supplemented by testing and thickness measurements <u>and tank testing</u> as required in (9) and (12) <u>and (13)</u>, to ensure that the structural integrity remains effective. The aim of the examination is to discover substantial corrosion, significant deformation, fractures, damages, or other structural deterioration, that may be present. <u>(2021)</u> 【See Guidance】</p> <p>(1) ~ (18) <same as the current Rules></p> <p><hereafter, same as the current Rules></p>	<p>- to reflect the Corr. 2.2.2 of IACS UR Z7(Rev.28 May 2019 Corr.1 Dec. 2020)</p> <p>: This modification is to correct a reference from (9) to (13). And para.(9) is regarding the examination for piping systems.</p>

Amended Guidance Relating to the Rules for the Classification of Steel Ships

(Part 1 Classification and Surveys)



Hull/Machinery Rule Development Team

- Main Amendments -

(1) Effective date : 1 Jan. 2021 (Date of which the application for Survey is submitted)

- Revised Ch 2, 202. 3 (4) of the Rules according to IMO Res. A. 1140(31)
- Reflection of Request for Establishment/Revision of Classification Technical Rules (YSU4700-428-2020, SUR3000-2185-2020, SUR3000-2565-2020)

(2) Effective date : 1 July 2021 (Date of which application for survey is submitted)

- Requests from the internal customers
 - Clarified the ambiguous requirements related to the Extended Dry-docking Interval System (EDD)
 - The notation for ships built in accordance with new IGC code has been newly added.
 - Added “Pole and Liner” to the special feature notation related to Fishing Vessel
- Amendments to unreasonable requirements found when applying Classification Technical Rules
 - Clarified the tank type of Oil Tanker subject to Enhanced Survey Programme(ESP)
 - Moved the Guidances’ requirements into the Rules’ requirements and deleted them accordingly
- Amendments for Boiler Survey
 - Internal inspection for Boiler is required at boiler survey based on IACS UR Z18.
 - Alternative survey requirements of which chief engineer carried out internal inspection of water-steam side of boiler and the corresponding notation have been added.

(3) Effective date : 1 July 2021 (Contracts for construction are signed on or after 1 July 2021)

- IACS UR L5(Rev. 4) and previous revisions have been totally reflected to the Guidance Annex 1-10

(4) Effective date : 1 July 2021 (Date of which the application for survey is submitted)

- To revise remarks for Oil tanker of ship type notation

(5) Effective date : 1 July 2021 (The contract date for ship construction)

- To reflect the revision of IACS Z23(Rev. 7 Oct 2020)
 - A global unified standard is required to improve the installation and maintenance of Pressure-Rated MCT/Transit systems.
 - In order to properly maintain Ship structures and promote vessel safety during water ingress, a better method is necessary to document and manage installation, maintenance, and repair of MCT/Transit systems.
 - a procedure was added to Paragraph 7.4 for accepting the use of a recognized fabrication standard in lieu of Rec. 47 in UR Z23
 - Table 1 of UR Z23 was updated with term “NDT” to be replaced with “NDE”
 - Table 1 were updated with the term “Rec. 20” being replaced with “UR W33”

(1) Effective date : 1 Jan. 2021

(Date of which application for survey is submitted)

Present	Amendment	Remark
<p style="text-align: center;">CHAPTER 2 PERIODICAL AND OTHER SURVEYS</p> <p style="text-align: center;">Section 2 Annual Survey</p> <p>202. Hull, equipment and fire-extinguishing appliances</p> <p>1. to 2. <omitted></p> <p>3. In application to 202. 2 of the Rules, the following items are to be surveyed. [See Rule] (2017)</p> <p>(1) to (2) <omitted></p> <p>(4) Checking the operational readiness and maintenance of fire fighting systems.</p> <p>(5) to (16) <omitted></p> <p style="text-align: center;"><hereafter, omitted></p>	<p style="text-align: center;">CHAPTER 2 PERIODICAL AND OTHER SURVEYS</p> <p style="text-align: center;">Section 2 Annual Survey</p> <p>202. Hull, equipment and fire-extinguishing appliances</p> <p>1. to 2. <omitted></p> <p>3. In application to 202. 2 of the Rules, the following items are to be surveyed. [See Rule] (2017)</p> <p>(1) to (2) <omitted></p> <p>(4) Checking the operational readiness and maintenance of fire fighting systems.(SOLAS 74/00 Reg.II-2/14) (SOLAS 74/88/91 Reg.II-2/21) (2021)</p> <p>(5) to (16) <same as present></p> <p style="text-align: center;"><hereafter, same as present></p>	<p>- Reflected IACS UR Z1 (Rev.8 Jul 2020)</p>

Present	Amendment	Remark
<p style="text-align: center;">CHAPTER 2 Periodical and Other Surveys Section 7 Surveys of Propeller Shaft and Stern Tube Shaft, Etc.</p> <p>701. General [See Rule] (Omitted)</p> <p>3. In application to 701. 3 (19) of the Rules, a ships with oil lubricated stern tube bearing applying an approved Condition Monitoring Scheme is to be comply with the followings and is to be assigned an additional installation notation of STCM. [See Rule] (2017)</p> <p>(Omitted)</p> <p>(2) The following are carried out at each shaft survey due date required by 702. 3 (1) of the Rules (A) Survey required by 702. 1 (2) (A) or (B) of the Rules (B) Survey required by 702. 1 (2) (D) (E) (F) and (G) of the Rules</p> <p style="text-align: center;">⟨hereafter, omitted⟩</p>	<p style="text-align: center;">CHAPTER 2 Periodical and Other Surveys Section 7 Surveys of Propeller Shaft and Stern Tube Shaft, Etc.</p> <p>701. General [See Rule] (Omitted)</p> <p>3. In application to 701. 3 (19) of the Rules, a ships with oil lubricated stern tube bearing applying an approved Condition Monitoring Scheme is to be comply with the followings and is to be assigned an additional installation notation of STCM. [See Rule] (2017)</p> <p>(Omitted)</p> <p>(2) The following are carried out at each shaft survey due date required by 702. 3 (1) of the Rules (A) <u>For Method 2, survey required by 702. 1 (2) (A) or (B), (C) (D) (E) (F) and (G) of the Rules. (2021)</u> (B) <u>For Method 3, survey required by 702. 1 (3) (A) (B) (C) (D) and (E) of the Rules. (2021)</u></p> <p style="text-align: center;">⟨hereafter, same as present⟩</p>	<p>(Amendment) –Clarify requirements according to survey method (SUR3000-2565-2020)</p>

Present	Amendment	Remark
<p>(2) Azimuth or rotatable thruster (2017) <omitted></p> <p>(E) Propeller Shaft Surveys and Gear unit Surveys (2019) Inspections and surveys specified in the following (a) through (e) are to be carried out. (a) ~ (c) <omitted> (d) Review of service records including the followings; (2019) (i) <u>lubricating oil analysis records</u> (ii) written statement of operating condition from the chief engineer (e) <omitted></p> <p><omitted></p> <p><Newly added></p>	<p>(2) Azimuth or rotatable thruster (2017) <same as present></p> <p>(E) Propeller Shaft Surveys and Gear unit Surveys (2019) Inspections and surveys specified in the following (a) through (e) are to be carried out. (a) ~ (c) <same as present> (d) Review of service records including the followings; (2019) (i) <u>lubricating oil analysis records (according to manufacturer's recommendation or a recognised standards) (2021)</u> (ii) written statement of operating condition from the chief engineer (e) <same as present></p> <p><same as present></p> <p>(F) <u>Extension of shaft survey (2021)</u> <u>(a) Where requested by ship's owner/manager, after survey of the (e), the survey interval may be prolonged for not more than 3 months from the due date.</u> <u>(b) The extension survey should normally be carried out within 1 month of the shaft survey due date and the extension counts from the shaft survey due date.</u> <u>(c) Where extension survey is carried out more than 1 month prior to the shaft survey due date, then the period of extension counts from the date of the extension survey was completed.</u> <u>(d) In addition to (a), where postponement of the docking survey is possible in accordance with Ch 2, Sec 6, 602. of the Rules, further extension may be considered to the extent that postponement of the docking survey is possible.</u> <u>(e) In addition to the annual survey items in subparagraph (A), when extending surveys under (a) and (d), the following items should be satisfactorily verified.</u> (i) <u>Review of service records. (Include lubricating oil analysis records)</u> (ii) <u>Verification of no reported repairs by grinding or welding of shaft and/or propeller.</u> (iii) <u>Confirmation from the Chief Engineer that the shafting arrangement is in good working condition.</u></p> <p><hereafter, same as present></p>	<p>(Amendment) - Newly added Extension of shaft survey (SUR3000-2185-2020)</p>

(2) Effective date : 1 July 2021

(Date of which application for survey is submitted)

Present	Amendment	Note
<p style="text-align: center;">CHAPTER 2 PERIODICAL AND OTHER SURVEYS</p> <p style="text-align: center;">Section 1 ~ Section 5 <omitted></p> <p style="text-align: center;">Section 6 Docking Survey</p> <p>601. ~ 604. <omitted></p> <p>605. Extended Dry-docking Interval System</p> <p>1. <omitted></p> <p>2. In application to 605. 1 (6) of the Rules, the term "if it is determined that a dry-docking is necessary" means the following cases and so on. 【See Rule】</p> <p>(1) where the necessary requirements for Extended Dry-docking Interval System are not comply with</p> <p>(2) where Docking Survey is necessary from the result of In-water Survey <u>reveals damage or deterioration that requires repair</u></p> <p>(3) where withdrawal for application of the Extended Dry-docking Interval System is requested by the Owner</p> <p>(4) where Docking Survey is necessary from the results of re-consideration for application of the approved Extended Dry-docking Interval System where the Owner or flag is changed</p> <p><hereafter, omitted></p>	<p style="text-align: center;">CHAPTER 2 PERIODICAL AND OTHER SURVEYS</p> <p style="text-align: center;">Section 1 ~ Section 5 <same as the current Guidances></p> <p style="text-align: center;">Section 6 Docking Survey</p> <p>601. ~ 604. <same as the current Guidances></p> <p>605. Extended Dry-docking Interval System</p> <p>1. <same as the current Guidances></p> <p>2. In application to 605. 1 (6) of the Rules, the term "if it is determined that a dry-docking is necessary" means the following cases and so on. 【See Rule】</p> <p>(1) where the necessary requirements for Extended Dry-docking Interval System are not comply with 605. 2 of the Rules. (2021)</p> <p>(2) where Docking Survey is necessary from the result of In-water Survey <u>reveals damage or deterioration that requires repairs that affect the vessel's fitness for continued service. (2021)</u></p> <p>(3) where withdrawal for application of the Extended Dry-docking Interval System is requested by the Owner</p> <p>(4) where Docking Survey is necessary from the results of re-consideration for application of the approved Extended Dry-docking Interval System where the Owner or flag is changed</p> <p><hereafter, same as the current Guidances></p>	<p>- Compared to Korean version, missing parts were added</p> <p>- At the request of Survey Team(SUR 3000-814- 2020, 3rd April 2020) : To clarify the requirements, the interpretation of each Surveyor is ambiguous about the degree of damage.</p>

Present	Amendment	Note
<p style="text-align: center;">Section 8 Boiler Survey</p> <p>801. to 802. <omitted></p> <p style="text-align: center;"><Newly added></p>	<p style="text-align: center;">Section 8 Boiler Survey</p> <p>801. to 802. <same as present></p> <p>803. Survey of ships monitoring boiler condition (2021)</p> <p>1. General</p> <p>(1) For ships operating on approved PMS survey scheme, the BCM notation as an additional special feature notation may be assigned provided that boilers are fitted with monitoring systems and alarm systems and maintained in accordance with Par 2.</p> <p>(2) The additional class notation BCM may be assigned for oil/gas fired boilers, exhaust gas boilers and steam generators to new ships or existing ships.</p> <p>(3) For ships having the BCM notation, the alternative survey carried out by the chief engineer may be accepted for water-steam side of boiler at alternate boiler surveys specified in 803. of Rules.</p> <p>(4) Documentation is to be submitted as following.</p> <p>(A) Salinometers, oil content meters in the feed water/condensate water systems, sampling points and period and method of sampling. (for approval)</p> <p>(B) In case of an exhaust gas boiler, the arrangement of the exhaust gas differential pressure monitoring device. (for approval)</p> <p>(C) The instructions for Boiler water, feed water and condensate water monitoring and treatment. (for approval)</p> <p>(D) Maintenance jobs to be applied to planned maintenance system. (for approval)</p> <p>(E) Plan for monitoring of boiler water and conservation during boiler idling or stand by. (for reference)</p>	<p>- Newly added alternative survey requirements for boiler</p>

Present	Amendment	Note
	<p><u>2. Ships can be assigned the BCM notation are to be satisfied the following requirements.</u></p> <p>(1) <u>Boiler conditions during construction survey</u></p> <p>(A) <u>The boiler is to have a sound structural integrity.</u></p> <p>(B) <u>The boiler is to have no plugged tubes, deformations or other sign of damages.</u></p> <p>(C) <u>The boiler is to be free of soot in furnace, and scales, sludge in water side.</u></p> <p>(D) <u>PMS record shows no failure or no lack of maintenance.</u></p> <p>(2) <u>System requirement</u></p> <p>(A) <u>Means for adding/dosing chemicals at appropriate places in the system, and at suitable intervals is to be provided.</u></p> <p>(B) <u>Means for taking representative samples from appropriate sampling points, at suitable temperature (e.g. sample cooler installed) is to be provided.</u></p> <p>(C) <u>Means for detecting salt in the condensate water is to be provided and connected to the alarm system.</u></p> <p>(D) <u>Means for detecting oil in the condensate water is to be provided and connected to the alarm system.</u></p> <p>(3) <u>Maintenance requirement</u></p> <p>(A) <u>Boiler feed water and condensate water monitoring and chemical treatment are implemented and conducted according to maker's recommendation at least every 24 hours. Quality of boiler water is to also be maintained and documented in accordance with maker's recommendation.</u></p> <p>(B) <u>Recording from boiler and feed water monitoring is kept updated onboard and sent to vendor providing analysis of feed water and condensate water at regular intervals not exceeding 12 months. Results and recommendations from the analysis are to be followed up and kept onboard, ready and available for review by the Surveyor.</u></p>	

Present	Amendment	Note
	<p>(C) <u>Internal inspection of the water side of the boiler is to be conducted by the chief engineer at regular intervals not exceeding 12 months. Specific job in the PMS is to be implemented. Mirrors, CCTVs, endoscopes, and cameras may be used for internal inspection. When direct visual internal inspection is not feasible due to the limited size of the internal spaces, such as for small boilers and/or narrow internal spaces, this may be replaced by a hydrostatic pressure test.</u></p> <p>(D) <u>Furnace/fire side is to be inspected by the chief engineer every 6 months as a minimum. Specific job in the PMS is to be implemented.</u></p> <p>(E) <u>Maintenance of the boiler, burner and control systems as recommended by the makers is implemented in PMS.</u></p> <p>(F) <u>In case of installations of two or more boilers, where boilers are not in use for a prolonged period, procedures for boiler water monitoring are to be established and followed up accordingly for the boilers.</u></p> <p>(G) <u>Provisions to monitor exhaust gas differential pressure on exhaust gas boilers are to be provided. U-tube manometer may be used for monitoring exhaust gas differential pressure.</u></p> <p>(4) <u>Classification Survey</u></p> <p>(A) <u>Surveys are to be carried out as the followings:</u></p> <p>(a) <u>Complete boiler survey according to Ch 2, Sec 8. of the Rules,</u></p> <p>(b) <u>Confirming that the boiler is free of plugged tubes, deformations or other sign of damages,</u></p> <p>(c) <u>Confirming that the boiler is free of soot, scale and sludge,</u></p> <p>(d) <u>Confirming that feed water and condensate water monitoring and treatment has been implemented, and</u></p> <p>(e) <u>Confirming applicable maintenance jobs in PMS.</u></p>	

Present	Amendment	Note
	<p><u>(B) Where applicable, equivalent methods, as the followings, may considered for verifying a condition of the boiler as required by (A).</u></p> <p><u>(a) Prior to assignment of the BCM notation, the followings are to be confirmed to verify a satisfactory condition of the boiler detailed in (1):</u></p> <p><u>(i) Boiler survey to the satisfaction of the Society in conjunction with review of photographic/video evidence of condition of steam and water side of the boiler.</u></p> <p><u>(ii) Review of documented history of internal inspections, repair and maintenance, and</u></p> <p><u>(iii) Review of boiler water management records and comments from service providers.</u></p> <p><u>(b) Historic evidence of satisfactory boiler water treatment capable of providing a protective layer is submitted.</u></p> <p><u>(c) Statement from the ship's chief engineer confirms that the boiler is free of defects.</u></p> <p><u>(C) BCM Record File</u> <u>The file is to be kept on board, updated with the records of inspection pictures, findings and repairs.</u></p> <p><u>3. Periodical survey</u></p> <p><u>(1) The ships assigned with BCM notation may be allowed for the chief engineer to carry out and document the inspection of the water/steam side of the boiler at alternate surveys. The documentation is to be presented to the Surveyor.</u></p> <p><u>(2) Annual survey</u></p> <p><u>(A) Review of planed jobs conducted in PMS</u></p> <p><u>(B) Review of the BCM record file.</u></p> <p><u>(C) Verification of satisfactory function of alarm devices for detecting seawater and oil contamination.</u></p> <p><u>(3) Alternative Boiler survey in accordance with BCM notation</u></p> <p><u>(A) The internal survey on the water-steam side may be carried out by the chief engineer with the following conditions:</u></p>	

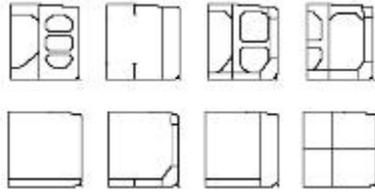
Present	Amendment	Note
	<p>(a) <u>annual surveys required in (2) have been carried out satisfactory.</u></p> <p>(b) <u>The chief engineer's internal inspection of the water-steam side has been carried out prior to the attendance of the surveyor. The inspection of the boiler is to be recorded in the log book.</u></p> <p>(c) <u>Proper documentation is presented to the Surveyor, regarding the satisfactory condition of the water-steam side. Good quality photographs or video marked with date and time may be considered as part of the documentation.</u></p> <p>(d) <u>A statement signed by the chief engineer that the internal water-steam side has been satisfactory examined, and that damages, scales or sludge have not been observed.</u></p> <p>(e) <u>Chief engineer's qualifications are satisfactorily verified by the Surveyor.</u></p> <p>(B) <u>The survey required in Ch 2, Sec 8 of the Rules are to be carried out in the presence of the Surveyor other than the water-steam side inspection.</u></p> <p>(3) <u>Boiler survey other than alternative boiler survey</u></p> <p>(A) <u>Survey in accordance with Ch 2, Sec 8 of the Rules are to be carried out.</u></p> <p style="text-align: center;">⟨hereafter, same as present⟩</p>	

Annex 1-1 Character of Classification

1. Class Notation

1.1 Ship Type and Special Feature Notations

- Reflected the draft revision of Ch 2, 101.21(Enhanced Survey Programme) of the Rules

Ship Types	Special Feature Notations	Remarks
1. Oil Tanker (Double Hull) ⁽²⁻²⁾ (Double Hull)(EXP) ⁽²⁻³⁾ (FAC) ⁽¹⁾ (FAO) ⁽¹⁾ (FBC) ⁽¹⁾ (CSR) ⁽²⁻⁵⁾	<u>Crude Product</u> <u>Crude/Product</u> <u>Product/Asphalt</u> <u>Asphalt</u> ⁽²⁻⁴⁾	<p>⁽¹⁾ : The notations FA, FB, FAC, FAO and FBC in rows 1, 3, 4, 8, 9 and 18 of the first column imply: FA : Flash point above 60°C FB : Flash point of 60°C and below FAC : FA with controlled tank vents FAO : FA with open tank vents FBC : FB with controlled tank vents</p> <p>⁽²⁻¹⁾ : The notation "ESP" shall be assigned to ships which are constructed generally with integral tanks and intended primarily to carry oil in bulk. This type notation shall be assigned to tankers of both single and double hull construction, as well as tankers with alternative structural arrangements, e.g. mid-deck designs. (Typical midship sections are given in Fig 1)</p> <p>Note: Oil Tankers that do not comply with MARPOL I/19 may be subject to international and/or national regulations requiring phase out under MARPOL I/20 and/or MARPOL I/21.</p>  <p>Fig 1 Typical midship sections of Oil Tanker 'ESP'</p> <p>⁽²⁻²⁾ ~ ⁽²⁻³⁾ (omitted)</p> <p>⁽²⁻⁴⁾ : This notation shall be assigned to ships of which all cargo tanks are independent type and the additional requirements for Oil Tanker 'ESP' and Oil Tanker(Double Hull) 'ESP' specified in Pt 1 of the Rules are not to be applied. (2019)</p> <p>⁽²⁻⁵⁾ : This notation shall be assigned to ships comply with the requirements specified in Pt 12 or Pt 13 of the Rules. (2019)</p>

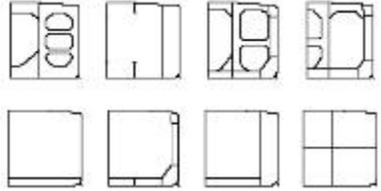
Amendment

Note

Annex 1-1 Character of Classification

1. Class Notation

1.1 Ship Type and Special Feature Notations

Ship Types	Special Feature Notations	Remarks
1. Oil Tanker 'ESP' ⁽²⁻¹⁾ (Double Hull) ⁽²⁻²⁾ (Double Hull)(EXP) ⁽²⁻³⁾ (FAC) ⁽¹⁾ (FAO) ⁽¹⁾ (FBC) ⁽¹⁾ (CSR) ^{(2-4) (2-5)}	Crude Product Crude/Product Product/Asphalt Asphalt Asphalt ⁽²⁻⁴⁾	<p>⁽¹⁾ : The notations FA, FB, FAC, FAO and FBC in rows 1, 3, 4, 8, 9 and 18 of the first column imply: FA : Flash point above 60°C FB : Flash point of 60°C and below FAC : FA with controlled tank vents FAO : FA with open tank vents FBC : FB with controlled tank vents</p> <p>⁽²⁻¹⁾ : The notation "ESP" shall be assigned to ships which are constructed generally with integral tanks and intended primarily to carry oil in bulk. This type notation shall be assigned to tankers of both single and double hull construction, as well as tankers with alternative structural arrangements, e.g. mid-deck designs. (Typical midship sections are given in Fig 1)</p> <p>Note: <u>1) Oil Tankers that do not comply with MARPOL I/19 may be subject to international and/or national regulations requiring phase out under MARPOL I/20 and/or MARPOL I/21.</u> <u>2) Oil Tankers carrying oil in independent tanks not part of ship's hull such as asphalt carriers do not fall within the scope of the Enhanced Survey Programme(ESP). (2021)</u></p>  <p>Fig 1 Typical midship sections of Oil Tanker 'ESP'</p> <p>⁽²⁻²⁾ ~ ⁽²⁻³⁾ (same as the current Guidances)</p> <p>⁽²⁻⁴⁾ : This notation shall be assigned to ships of which all cargo tanks are independent type and the additional requirements for Oil Tanker 'ESP' and Oil Tanker(Double Hull)'ESP' specified in Pt 1 of the Rules are not to be applied. (2019)</p> <p>⁽²⁻⁴⁾ (2-5) : This notation shall be assigned to ships comply with the requirements specified in Pt 12 or Pt 13 of the Rules. (2019)</p>

- Reflected the draft revision of Ch 2, 101.21(Enhanced Survey Programme) of the Rules

Present						Note																													
<table border="1"> <thead> <tr> <th>Ship Types</th> <th colspan="5">Special Feature Notations</th> <th>Remarks</th> </tr> </thead> <tbody> <tr> <td rowspan="4">2-1. Liquefied Gas Carrier (2017)</td> <td>A</td> <td>B</td> <td>(C)</td> <td>D or P</td> <td>IMO Code⁽⁵⁾</td> <td rowspan="4"> ⁽⁴⁾ : The notation "LPG" shall be assigned to liquefied gas carriers carrying only propane and butane. However, the names of the following cargoes, instead of propane and butane, may be given for vessels carrying cargoes other than propane and butane under the approval of the Society. (Example) : Ammonia, Butadiene, Propylene, VCM, Ethylene Oxide, Ethylene, etc. ⁽⁵⁾ : As shown in the following: <u><newly added></u> 1) The notation "IGC" shall be appended to vessels built in compliance with the requirements given in Pt 7, Ch 5 of the Rules and constructed on or after 1 July, 1986. 2) The notation "GC" shall be appended to vessels built in compliance with the IMO Res.A328(IX). 3) The notation "GCX" shall be appended to vessels built in compliance with the IMO Res.A329(IX). 4) For the ships except the above, additional notation is not assigned. </td> </tr> <tr> <td>1G 2G 2PG 3G</td> <td>2I 3M 3S 1A 1B 1C</td> <td>(R) (P) (RP)</td> <td>Design Pressure, Minimum Temperature and Specific Gravity(SG)</td> <td>(IGC) (GC) (GCX)</td> </tr> <tr> <td colspan="4"></td> <td>Name of Liquefied Gas when exclusively carried</td> </tr> <tr> <td colspan="5">LPG⁽⁴⁾</td> </tr> </tbody> </table>						Ship Types	Special Feature Notations					Remarks	2-1. Liquefied Gas Carrier (2017)	A	B	(C)	D or P	IMO Code ⁽⁵⁾	⁽⁴⁾ : The notation "LPG" shall be assigned to liquefied gas carriers carrying only propane and butane. However, the names of the following cargoes, instead of propane and butane, may be given for vessels carrying cargoes other than propane and butane under the approval of the Society. (Example) : Ammonia, Butadiene, Propylene, VCM, Ethylene Oxide, Ethylene, etc. ⁽⁵⁾ : As shown in the following: <u><newly added></u> 1) The notation "IGC" shall be appended to vessels built in compliance with the requirements given in Pt 7, Ch 5 of the Rules and constructed on or after 1 July, 1986. 2) The notation "GC" shall be appended to vessels built in compliance with the IMO Res.A328(IX). 3) The notation "GCX" shall be appended to vessels built in compliance with the IMO Res.A329(IX). 4) For the ships except the above, additional notation is not assigned.	1G 2G 2PG 3G	2I 3M 3S 1A 1B 1C	(R) (P) (RP)	Design Pressure, Minimum Temperature and Specific Gravity(SG)	(IGC) (GC) (GCX)					Name of Liquefied Gas when exclusively carried	LPG ⁽⁴⁾					<p>- Survey Technology & Customer Service Team (CST3200-19-2020, 2020. 2.11)</p> <p>: Due to applying New IGC Code and fully revised rule to the liquefied gas carrier where the date of keel laying is on or after 1 July 2016, we are of the opinion that the distinguished notation is required to these ships.</p>
Ship Types	Special Feature Notations					Remarks																													
2-1. Liquefied Gas Carrier (2017)	A	B	(C)	D or P	IMO Code ⁽⁵⁾	⁽⁴⁾ : The notation "LPG" shall be assigned to liquefied gas carriers carrying only propane and butane. However, the names of the following cargoes, instead of propane and butane, may be given for vessels carrying cargoes other than propane and butane under the approval of the Society. (Example) : Ammonia, Butadiene, Propylene, VCM, Ethylene Oxide, Ethylene, etc. ⁽⁵⁾ : As shown in the following: <u><newly added></u> 1) The notation "IGC" shall be appended to vessels built in compliance with the requirements given in Pt 7, Ch 5 of the Rules and constructed on or after 1 July, 1986. 2) The notation "GC" shall be appended to vessels built in compliance with the IMO Res.A328(IX). 3) The notation "GCX" shall be appended to vessels built in compliance with the IMO Res.A329(IX). 4) For the ships except the above, additional notation is not assigned.																													
	1G 2G 2PG 3G	2I 3M 3S 1A 1B 1C	(R) (P) (RP)	Design Pressure, Minimum Temperature and Specific Gravity(SG)	(IGC) (GC) (GCX)																														
					Name of Liquefied Gas when exclusively carried																														
	LPG ⁽⁴⁾																																		
Amendment																																			
<table border="1"> <thead> <tr> <th>Ship Types</th> <th colspan="5">Special Feature Notations</th> <th>Remarks</th> </tr> </thead> <tbody> <tr> <td rowspan="4">2-1. Liquefied Gas Carrier (2017)</td> <td>A</td> <td>B</td> <td>(C)</td> <td>D or P</td> <td>IMO Code⁽⁵⁾</td> <td rowspan="4"> ⁽⁴⁾ : The notation "LPG" shall be assigned to liquefied gas carriers carrying only propane and butane. However, the names of the following cargoes, instead of propane and butane, may be given for vessels carrying cargoes other than propane and butane under the approval of the Society. (Example) : Ammonia, Butadiene, Propylene, VCM, Ethylene Oxide, Ethylene, etc. ⁽⁵⁾ : As shown in the following: 1) <u>The notation "NIGC" shall be appended to vessels in compliance with the requirements given in Pt 7, Ch 5 of the Rules amended after 1 July, 2016. (2021)</u> 2) 1) The notation "IGC" shall be appended to vessels built in compliance with the requirements given in Pt 7, Ch 5 of the Rules and constructed on or after 1 July, 1986. 3) 2) The notation "GC" shall be appended to vessels built in compliance with the IMO Res.A328(IX). 4) 3) The notation "GCX" shall be appended to vessels built in compliance with the IMO Res.A329(IX). 5) 4) For the ships except the above, additional notation is not assigned. </td> </tr> <tr> <td>1G 2G 2P G 3G</td> <td>2I 3M 3S 1A 1B 1C</td> <td>(R) (P) (RP)</td> <td>Design Pressure, Minimum Temperature and Specific Gravity(SG)</td> <td>(NIGC) (IGC) (GC) (GCX)</td> </tr> <tr> <td colspan="4"></td> <td>Name of Liquefied Gas when exclusively carried</td> </tr> <tr> <td colspan="5">LPG⁽⁴⁾</td> </tr> </tbody> </table>							Ship Types	Special Feature Notations					Remarks	2-1. Liquefied Gas Carrier (2017)	A	B	(C)	D or P	IMO Code ⁽⁵⁾	⁽⁴⁾ : The notation "LPG" shall be assigned to liquefied gas carriers carrying only propane and butane. However, the names of the following cargoes, instead of propane and butane, may be given for vessels carrying cargoes other than propane and butane under the approval of the Society. (Example) : Ammonia, Butadiene, Propylene, VCM, Ethylene Oxide, Ethylene, etc. ⁽⁵⁾ : As shown in the following: 1) <u>The notation "NIGC" shall be appended to vessels in compliance with the requirements given in Pt 7, Ch 5 of the Rules amended after 1 July, 2016. (2021)</u> 2) 1) The notation "IGC" shall be appended to vessels built in compliance with the requirements given in Pt 7, Ch 5 of the Rules and constructed on or after 1 July, 1986. 3) 2) The notation "GC" shall be appended to vessels built in compliance with the IMO Res.A328(IX). 4) 3) The notation "GCX" shall be appended to vessels built in compliance with the IMO Res.A329(IX). 5) 4) For the ships except the above, additional notation is not assigned.	1G 2G 2P G 3G	2I 3M 3S 1A 1B 1C	(R) (P) (RP)	Design Pressure, Minimum Temperature and Specific Gravity(SG)	(NIGC) (IGC) (GC) (GCX)					Name of Liquefied Gas when exclusively carried	LPG ⁽⁴⁾				
Ship Types	Special Feature Notations					Remarks																													
2-1. Liquefied Gas Carrier (2017)	A	B	(C)	D or P	IMO Code ⁽⁵⁾	⁽⁴⁾ : The notation "LPG" shall be assigned to liquefied gas carriers carrying only propane and butane. However, the names of the following cargoes, instead of propane and butane, may be given for vessels carrying cargoes other than propane and butane under the approval of the Society. (Example) : Ammonia, Butadiene, Propylene, VCM, Ethylene Oxide, Ethylene, etc. ⁽⁵⁾ : As shown in the following: 1) <u>The notation "NIGC" shall be appended to vessels in compliance with the requirements given in Pt 7, Ch 5 of the Rules amended after 1 July, 2016. (2021)</u> 2) 1) The notation "IGC" shall be appended to vessels built in compliance with the requirements given in Pt 7, Ch 5 of the Rules and constructed on or after 1 July, 1986. 3) 2) The notation "GC" shall be appended to vessels built in compliance with the IMO Res.A328(IX). 4) 3) The notation "GCX" shall be appended to vessels built in compliance with the IMO Res.A329(IX). 5) 4) For the ships except the above, additional notation is not assigned.																													
	1G 2G 2P G 3G	2I 3M 3S 1A 1B 1C	(R) (P) (RP)	Design Pressure, Minimum Temperature and Specific Gravity(SG)	(NIGC) (IGC) (GC) (GCX)																														
					Name of Liquefied Gas when exclusively carried																														
	LPG ⁽⁴⁾																																		

Present			Amendment			Note								
3. ~ 11. <omitted>			3. ~ 11. <same as the current Guidances>			- Introduced Pole and Line as a Special Feature Notation.								
<table border="1"> <thead> <tr> <th>Ship Types</th> <th>Special Feature Notations</th> <th>Remarks</th> </tr> </thead> <tbody> <tr> <td>12. Fishing Vessel</td> <td>Long Liner, Stern Trawler, Side Trawler, Whaler, Purse Seiner, Gill Net, Angling, Stick-held Dip Net, Bottom Long Liner, Trap, Stow Net, Lift Net, Dredge Net, Seiner, Stab Net, Lighting, <newly added></td> <td></td> </tr> </tbody> </table>	Ship Types	Special Feature Notations	Remarks	12. Fishing Vessel	Long Liner, Stern Trawler, Side Trawler, Whaler, Purse Seiner, Gill Net, Angling, Stick-held Dip Net, Bottom Long Liner, Trap, Stow Net, Lift Net, Dredge Net, Seiner, Stab Net, Lighting, <newly added>			<table border="1"> <thead> <tr> <th>Ship Types</th> <th>Special Feature Notations</th> <th>Remarks</th> </tr> </thead> <tbody> <tr> <td>12. Fishing Vessel</td> <td>Long Liner, Stern Trawler, Side Trawler, Whaler, Purse Seiner, Gill Net, Angling, Stick-held Dip Net, Bottom Long Liner, Trap, Stow Net, Lift Net, Dredge Net, Seiner, Stab Net, Lighting, Pole and Line (2021)</td> <td></td> </tr> </tbody> </table>	Ship Types	Special Feature Notations	Remarks	12. Fishing Vessel	Long Liner, Stern Trawler, Side Trawler, Whaler, Purse Seiner, Gill Net, Angling, Stick-held Dip Net, Bottom Long Liner, Trap, Stow Net, Lift Net, Dredge Net, Seiner, Stab Net, Lighting, Pole and Line (2021)	
Ship Types	Special Feature Notations	Remarks												
12. Fishing Vessel	Long Liner, Stern Trawler, Side Trawler, Whaler, Purse Seiner, Gill Net, Angling, Stick-held Dip Net, Bottom Long Liner, Trap, Stow Net, Lift Net, Dredge Net, Seiner, Stab Net, Lighting, <newly added>													
Ship Types	Special Feature Notations	Remarks												
12. Fishing Vessel	Long Liner, Stern Trawler, Side Trawler, Whaler, Purse Seiner, Gill Net, Angling, Stick-held Dip Net, Bottom Long Liner, Trap, Stow Net, Lift Net, Dredge Net, Seiner, Stab Net, Lighting, Pole and Line (2021)													

Present

Note

13. ~ 14. <omitted>

Ship Types	Special Feature Notations	Remarks
15-1. Tug Boat (2020)	A* (Purpose) - Salvage Supply Anchor Fire-Fighting(GA or GC) ⁽²⁴⁾ Oil Recovery(GA, GB or GC) ⁽²⁵⁾	A* : In relation to Special Feature Notation, A(Purpose), Offshore Support Vessel's special feature notations, FFS1, FFS2, FFS3 or FF, shall be assigned to ships <u>if they are complied with the requirements</u> of FFS1, FFS2, FFS3 or FF, which are Special Feature Notations of Offshore Support Vessel. - : Additional notation is not required for tug boats or pushers built only for the purpose of tug or pusher work. ⁽²⁴⁾ : When it complies with the "Enforcement Regulations of Ship Arrival and Departure, Annex 2, Standards for Fire Extinguishing Facilities," etc., the "Fire-Fighting" specialty feature notations shall be granted. GA or GC are shown in the following:
15-2. Pusher (2018)	- (Type A) (Type B) Pusher/Tug (Type A) (Type B)	1) GC : Regarding the fire fighting equipment for other vessels, this notation shall be assigned to ships complied with the requirements for explosion-protected electrical equipment in dangerous zone. 2) GA : Regarding the fire fighting equipment for other vessels, this notation shall be assigned to ships not applied to the requirements for explosion-protected electrical equipment in dangerous zone. Type A : permanent connection type Type B : removable connection type
16. Work Vessel	<omitted> Oil Recovery(GA, GB or GC) ⁽²⁵⁾ <omitted>	- : Additional notation is not required for work vessels built only for the purpose of work. ⁽²⁵⁾ : As shown in the following: 1) to 3) <omitted> <newly added>
17. Special Purpose Ship	<omitted> Fire-Fighting(GA or GC) ⁽²⁴⁾ <omitted>	<newly added>

- Requested by Environment & Piping Team

Amendment

Note

13. ~ 14. <same as the present>

Ship Types	Special Feature Notations	Remarks
15-1. Tug Boat (2020)	A* (Purpose)	A* : In relation to Special Feature Notation, A(Purpose), Offshore Support Vessel's special feature notations, FFS1, FFS2, FFS3 or FF, shall be assigned to ships if they are complied with Ch 8_of Guidance for OSV and the requirements of FFS1, FFS2, FFS3 or FF, which are Special Feature Notations of Offshore Support Vessel. <i>(2021)</i> - : Additional notation is not required for tug boats or pushers built only for the purpose of tug or pusher work. <Same as the present>
	- Salvage Supply Anchor Fire-Fighting(GA or GC) ⁽²⁴⁾ Oil Recovery(GA, GB or GC) ⁽²⁵⁾	
15-2. Pusher (2018)	<Same as the present>	
16. Work Vessel	A* (Purpose)	A* : Offshore Support Vessel's special feature notations, FFS1, FFS2, FFS3 or FF, shall be assigned to ships if they are complied with Ch 8_of Guidance for OSV and the requirements of FFS1, FFS2, FFS3 or FF, which are Special Feature Notations of Offshore Support Vessel. (2021) - : Additional notation is not required for work vessels built only for the purpose of work. <same as the present>
	<same as the present>	
17. Special Purpose Ship	A* (Purpose)	A* : Offshore Support Vessel's special feature notations, FFS1, FFS2, FFS3 or FF, shall be assigned to ships if they are complied with Ch 8_of Guidance for OSV and the requirements of FFS1, FFS2, FFS3 or FF, which are Special Feature Notations of Offshore Support Vessel. (2021) - : Additional notation is not required for Special Purpose Ships built only for the purpose of special purpose. (2021)
	<same as the present>	

- Requested by Environment & Piping Team

(3) Effective date : 1 July 2021

(Contracts for construction are signed on or after 1 July 2021)

Present	Amendment	Note
<p style="text-align: center;">Annex 1-10 Loading Instrument on Stability</p> <p>1. Application</p> <p>(1) This requirement applies to ships having a length exceeding 24 <i>metres</i> when a loading instrument with a stability computation capability(hereinafter called "loading instrument on stability") is installed on a new ship or newly installed on an existing ship in accordance with the requirement in Ch 1, 307. of the Rules.</p> <p>(2) For the purpose of this requirements, "new ship" means a ship for which the application for Classification Survey during Construction is made on or after 1 January 1997 and "existing ship" means a ship for the application for Classification Survey during Construction before 1 January 1997.</p> <p>2. Approval procedure (2017)</p> <p>(1) The procedure for approval of a loading instrument on stability is as illustrated in Fig 1.</p> <div data-bbox="210 778 766 1279" data-label="Diagram"> <pre> graph TD A[Submit User's Manual and Test conditions] <--> B[Design Approval of the Software, if requested] A --> C[Review of User's Manual and Approval of Test] B --> C C <--> D[Approval Data or Calculation output by the Society] C --> E[On-board Installation Test] E --> F[Issue Certificate of Loading Instrument] </pre> </div> <p>* The approval of the software should be carried out in accordance with "Guidance for Approval of Manufacturing Process and Type Approval Etc."</p> <p>Fig 1 Procedure for the approval of loading instrument on stability for a specific ship.</p>	<p style="text-align: center;">Annex 1-10 Loading Instrument on Stability</p> <p>1. Application</p> <p>(1) This requirement applies to ships having a length exceeding 24 <i>metres</i> when a loading instrument with a stability computation capability(hereinafter called "loading instrument on stability") is installed on a new ship or newly installed on an existing ship in accordance with the requirement in Ch 1, 307. of the Rules.</p> <p>(2) For the purpose of this requirements, "new ship" means a ship for which the application for Classification Survey during Construction is made on or after 1 January 1997 <u>1, July 2021</u> and "existing ship" means a ship for the application for Classification Survey during Construction before 1 January 1997 <u>1, July 2021.</u> <i>(2021)</i></p> <p>2. Approval procedure (2017) <same as the current Guidances></p>	<p>- Reflected the opinions by Stability & Tonnage Team</p>

Present	Amendment	Note
<p>(A) User's manual and 3 copies of test conditions are to be submitted to Head Office. The loading instrument on stability of test conditions may be approved provisionally if the stability information booklet is approved provisionally. A provisional certificate may be issued after on-board installation in this case.</p> <p>(B) The requirements which are checked during review of the user's manual and approval of test conditions are as follows:</p> <ul style="list-style-type: none"> - the output of the loading instrument for the exemplified test conditions are correct. - the technical contents and forms of the user's manual is appropriate. <p>(2) Where the loading instrument on stability is intended for office use on shore(in such case it may be used for stability calculations for several different ships), this is acceptable provided that:</p> <ul style="list-style-type: none"> - the procedure in this appendix has been satisfactorily completed. - the user's manual has been reviewed and test conditions have been approved for each of ships for which the instrument is used. - operational performance of the hardware is to be tested but environmental testing is not normally required. - the installation test is to be carried out and a certificate is issued if found appropriate. 	<p><same as the current Guidances></p>	

Present	Amendment	Note
<p>3. Software for a specific ship</p> <p>(1) General</p> <p>(A) In order to apply the design approved software to a specific ship, details of the test conditions prepared using all relevant data used by the ship designer concerning hull form definition and compartment definition is to be submitted.</p> <p>(B) The calculation result should include at least 4 test loading conditions covering the anticipated loading draughts, i.e. a maximum loading draught, a light condition draught and two intermediate draughts. In order for the Society to check the correctness of the calculation, the test conditions should be the same as presented in the stability information booklet submitted for approval. All test loading conditions must show all deadweight items and information on the free surface effect for each deadweight item.</p> <p>(C) The drawings and data required to be submitted by (2) and (3) below need not be submitted if these are same that were submitted by the designers, etc.</p> <p>(2) Intact Stability</p> <p>(A) In order to the Society to verify the data submitted, the following information must be submitted:</p> <ul style="list-style-type: none"> - details of hull form definition, e.g., lines plans and/or offset tables, including all appendages. - hydrostatic particulars including cross curve data - details of compartment definition including list of volumes, center of gravity and free surface data - details of position of down-flooding points. - details of the relevant requirements and criteria against which the calculations must show compliance - hard copy of output of results 	<p>3. Computer Software for Onboard Stability Calculations (2021)</p> <p>(1) Application</p> <p>(A) <u>This Unified Requirement is applicable to software which calculates the stability of actual loading conditions and which is installed on ships and on units subject to compliance with the 1966 Load Line Convention or the 1988 Protocol to the Load Line Convention, as amended, the IMO MODU Code and/or the 2008 IS Code.</u></p> <p>(B) <u>Where type approved onboard computers for stability calculations is installed, one instrument shall install, and otherwise two instruments are to be installed.</u></p> <p>(C) <u>Stability software installed onboard shall cover all mandatory class and statutory intact and damage stability requirements applicable to the ship. This UR, requires approval of software installed on onboard computers which is capable of performing stability calculations.</u></p> <p>(D) <u>Active and passive systems are defined in paragraph (3) This UR covers passive systems and the off-line operation mode of active systems only.</u></p> <p>(2) General</p> <p>(A) <u>The scope of a stability calculation software shall be in accordance with the stability information as approved by the administration and shall at least include all information and perform all calculations or checks as necessary to ensure compliance with the applicable stability requirements.</u></p> <p>(B) <u>Approved stability software is not a substitute for the approved stability information, and is used as a supplement to the approved stability information to facilitate stability calculations.</u></p> <p>(C) <u>The input/output information shall be easily comparable with approved stability information so as to avoid confusion and possible misinterpretation by the operator relative to the approved stability information.</u></p>	<p>- Full reflection of IACS UR L5</p> <p>- Reflected the requirements of Par.5. (2), Ch 3, 104. of the Guidance Pt 3</p>

Present	Amendment	Note
<p>(B) <u>Hard copies of the full results for all test loading conditions are compared with the Society's calculation result(or approved stability information booklet) and the hard copies should include displacement, draughts, trim, <i>VCG</i>, <i>LCG</i>, <i>GM</i>, free surface correction and angle of down flooding. The residual <i>GZ</i> distribution in curvilinear or tabulated form, is also to be produced for each case showing compliance with intact stability criteria.</u></p> <p>(C) <u>Hydrostatic and intact stability characteristics of the hull form and for each test loading condition produced by the software is to be checked against those derived by the Society's programs (or approved stability information booklet).</u></p> <p><u>Characteristics to be checked will include:</u></p> <ul style="list-style-type: none"> - <u>hydrostatic properties for full range of service draughts</u> - <u>cross curves of stability embracing full range of service displacements</u> - <u>properties of fully complied test loading conditions</u> - <u>compliance with intact stability criteria</u> - <u>relevant limiting <i>KG/GM/DWT</i> values for full range of service draughts where appropriate</u> <p>(3) <u>Grain stability</u></p> <p>(A) <u>In addition to the documentation as specified in preceding (2) (A), the following should also be submitted for the assessment of grain stability calculations.</u></p> <ul style="list-style-type: none"> - <u>Cargo hold drawings showing the structure abreast and beyond hatched including details of hatch end beams with feeding holes, if fitted</u> - <u>Hatch cover details</u> - <u>Details of longitudinal divisions, if applicable</u> - <u>Details of the relevant regulations and criteria against which the calculation must show compliance, e.g., International Grain Code in addition to relevant intact stability criteria</u> - <u>Hard copy of output of results</u> 	<p><u>(D) An operation manual is to be provided for the onboard computer stability software.</u></p> <p><u>(E) The language in which the stability information is displayed and printed out as well as the operation manual written shall be the same as used in the ship's approved stability information. However, if the language on the loading instrument is English, it can be accepted even if the language on the stability information used is not the same. The society may require a translation into a language considered appropriate.</u></p> <p><u>(F) The onboard computer software for stability calculations is to be ship specific and the results of the calculations are to be only applicable to the ship for which it has been approved.</u></p> <p><u>(G) In case of modifications implying changes in the main data or internal arrangement of the ship, the specific approval of any original stability calculation software is no longer valid. The software is to be modified accordingly and re-approved.</u></p> <p>(3) Calculation Systems</p> <p><u>(A) A passive system requires manual data entry;</u></p> <p><u>(B) An active system replaces the manual entry with sensors reading and entering the contents of tanks, etc.; and</u></p> <p><u>(C) A third system, an integrated system, controls or initiates actions based on the sensor-supplied inputs and is not within the scope of this Requirement.</u></p> <p>(4) Types of Stability Software</p> <p><u>Four types of calculations performed by stability software are acceptable depending upon a vessel's stability requirements:</u></p> <p><u>(A) Type 1</u> <u>Software calculating intact stability only (for vessels not required to meet a damage stability criterion).</u></p>	<p>- In case of domestic vessels, the language in the stability information is in Korean and the language on the screen of the loading instrument is in English, therefore, related information is added (reflected Stability & Tonnage Team)</p>

Present	Amendment	Note
<p>(B) <u>Hard copies of the full results for all test loading conditions are to be submitted so that detailed comparisons may be made with the results from the Society's loading instrument program(or approved grain stability booklet). The output is to be include displacement, draughts, trim, VCG, LCG, GM, free surface correction, angle of down flooding, grain heeling moments and maximum allowable grain heeling moment. The residual GZ distribution, curvilinear or tabulated form, is also to be produced for each case showing compliance with intact and grain stability criteria.</u></p> <p>(C) <u>The results for each test condition produced by the software will be checked against those derived by the Society's programs(or approved grain stability booklet). The information to be assessed will include:</u></p> <ul style="list-style-type: none"> - <u>curves or tables of grain heeling moments for every compartments, filled or partly filled, including the effects of temporary fittings</u> - <u>tables of maximum permissible heeling moments or other information demonstrating compliance with the relevant requirements.</u> 	<p><u>(B) Type 2</u> <u>Software calculating intact stability and checking damage stability on basis of a limit curve (e.g. for vessels applicable to SOLAS Part B-1 damage stability calculations, etc.) or checking all the stability requirements (intact and damage stability) on the basis of a limit curve.</u></p> <p><u>(C) Type 3</u> <u>Software calculating intact stability and damage stability by direct application of pre-programmed damage cases based on the relevant Conventions or Codes for each loading condition (for some tankers etc.).</u></p> <p><u>(D) Type 4</u> <u>Software calculating damage stability associated with an actual loading condition and actual flooding case, using direct application of user defined damage, for the purpose of providing operational information for safe return to port (SRtP).</u></p> <p><u>Damage stability of both Type 3 and Type 4 stability software shall be based on a hull form model, that is, directly calculated from a full three-dimensional geometric model.</u></p> <p><u>(5) Functional requirements:</u></p> <p><u>(A) General requirements for any type of stability software</u></p> <p><u>(a) The calculation program shall present relevant parameters of each loading condition in order to assist the Master in his judgement on whether the ship is loaded within the approval limits. The following parameters shall be presented for a given loading condition:</u></p> <ul style="list-style-type: none"> - <u>deadweight data;</u> - <u>lightship data;</u> - <u>trim;</u> - <u>draft at the draft marks and perpendiculars;</u> - <u>summary of loading condition displacement, VCG, LCG and, if applicable, TCG;</u> 	

Present	Amendment	Note
	<p data-bbox="1010 231 1888 379">- <u>downflooding angle and corresponding downflooding opening (not applicable for Type 2 software which uses limit curve for checking all the stability requirements. However, if intact stability criteria are given in addition to the limit curve, downflooding angle and the corresponding downflooding opening shall be indicated);</u></p> <p data-bbox="1010 416 1888 595">- <u>compliance with stability criteria: Listing of all calculated stability criteria, the limit values, the obtained values and the conclusions (criteria fulfilled or not fulfilled) (not applicable for Type 2 software which uses limit curve for checking all the stability requirements. However, if intact stability criteria are given in addition to the limit curve, the limit values, the obtained values and the conclusion shall be indicated).</u></p> <p data-bbox="960 632 1888 687">(b) <u>A clear warning shall be given on screen and in hard copy printout if any of the loading limitations are not complied with.</u></p> <p data-bbox="1010 724 1704 748"><u>Loading limitations shall include, but may not be limited to:</u></p> <ul data-bbox="1010 785 1888 903" style="list-style-type: none"> - <u>Trim, draught, liquid densities, tank filling levels, initial heel;</u> - <u>Use of limit KG/GM curves in conjunction with above for Type 2;</u> - <u>Restrictions to the stowage height for timber where timber load lines are assigned;</u> <p data-bbox="960 940 1888 1027">(c) <u>Type 3 software is to include pre-defined relevant damage cases for both sides of the ship according to the applicable rules for automatic check of a given loading condition.</u></p> <p data-bbox="960 1064 1888 1120">(d) <u>The date and time of a saved calculation shall be part of the screen display and hard copy printout.</u></p> <p data-bbox="960 1157 1888 1212">(e) <u>Each hard copy printout shall contain identification of the calculation program including version number.</u></p> <p data-bbox="960 1249 1888 1305">(f) <u>Units of measurement are to be clearly identified and used consistently within a loading calculation.</u></p>	

Present	Amendment	Note
	<p>(g) <u>For Type 3 and Type 4 software, the system shall be pre-loaded with a detailed computer model of the complete hull, including appendages, all compartments, tanks and the relevant parts of the superstructure considered in the damage stability calculation, wind profile, down-flooding and up-flooding openings, cross-flooding arrangements, internal compartment connections and escape routes, as applicable and according to the type of stability software.</u></p> <p>(h) <u>For Type 1 and Type 2 software, in case a full three dimensional model is used for stability calculations, the requirements of the computer model are to be as per paragraph 4.1.7 above to the extent as applicable and according to the type of stability software.</u></p> <p><u>(B) Further requirements for Type 4 stability software</u></p> <p>(a) <u>The normal (Type 1, 2 and 3) and SRtP (Type 4) software need not be “totally separated”. Where the normal and SRtP software are not totally separated:</u></p> <ul style="list-style-type: none"> <u>- the function of switching between normal software and Type 4 software shall be provided.</u> <u>- the actual intact loading condition is to be the same for both functions (normal operation and SRtP); and</u> <u>- the SRtP module needs only to be activated in case of an incident.</u> <p><u>Approval of Type 4 (SRtP) software is for stability only.</u></p> <p>(b) <u>In passenger ships which are subject to SRtP and have an onboard stability computer and shore-based support, such software need not be identical.</u></p> <p>(c) <u>Each internal space shall be assigned its permeability as shown below, unless a more accurate permeability has been reflected in the approved stability information.</u></p>	

Present	Amendment	Note																																																						
	<table border="1" data-bbox="960 260 1682 908"> <thead> <tr> <th data-bbox="965 263 1223 323" rowspan="2">Spaces</th> <th colspan="4" data-bbox="1223 263 1677 300">Permeability</th> </tr> <tr> <th data-bbox="1223 323 1339 384">Default</th> <th data-bbox="1339 323 1447 384">Full</th> <th data-bbox="1447 323 1570 384">Partially filled</th> <th data-bbox="1570 323 1677 384">Empty</th> </tr> </thead> <tbody> <tr> <td data-bbox="965 384 1223 432">Container Spaces</td> <td data-bbox="1223 384 1339 432">0.95</td> <td data-bbox="1339 384 1447 432">0.70</td> <td data-bbox="1447 384 1570 432">0.80</td> <td data-bbox="1570 384 1677 432">0.95</td> </tr> <tr> <td data-bbox="965 432 1223 480">Dry Cargo spaces</td> <td data-bbox="1223 432 1339 480">0.95</td> <td data-bbox="1339 432 1447 480">0.70</td> <td data-bbox="1447 432 1570 480">0.80</td> <td data-bbox="1570 432 1677 480">0.95</td> </tr> <tr> <td data-bbox="965 480 1223 528">Ro-Ro spaces</td> <td data-bbox="1223 480 1339 528">0.95</td> <td data-bbox="1339 480 1447 528">0.90</td> <td data-bbox="1447 480 1570 528">0.90</td> <td data-bbox="1570 480 1677 528">0.95</td> </tr> <tr> <td data-bbox="965 528 1223 576">Cargo liquids</td> <td data-bbox="1223 528 1339 576">0.95</td> <td data-bbox="1339 528 1447 576">0.70</td> <td data-bbox="1447 528 1570 576">0.80</td> <td data-bbox="1570 528 1677 576">0.95</td> </tr> <tr> <td data-bbox="965 576 1223 655">Intended for consumable liquids</td> <td data-bbox="1223 576 1339 655">0.95</td> <td data-bbox="1339 576 1447 655">0.95</td> <td data-bbox="1447 576 1570 655">0.95</td> <td data-bbox="1570 576 1677 655">0.95</td> </tr> <tr> <td data-bbox="965 655 1223 703">Stores</td> <td data-bbox="1223 655 1339 703">0.95</td> <td data-bbox="1339 655 1447 703">0.60</td> <td data-bbox="1447 655 1570 703">(0.60)</td> <td data-bbox="1570 655 1677 703">0.95</td> </tr> <tr> <td data-bbox="965 703 1223 783">Occupied by machinery</td> <td colspan="4" data-bbox="1223 703 1677 783">0.85</td> </tr> <tr> <td data-bbox="965 783 1223 831">Void spaces</td> <td colspan="4" data-bbox="1223 783 1677 831">0.95</td> </tr> <tr> <td data-bbox="965 831 1223 904">Occupied by accommodation</td> <td colspan="4" data-bbox="1223 831 1677 904">0.95</td> </tr> </tbody> </table> <p data-bbox="960 938 1888 997">(d) The system shall be capable of accounting for applied moments such as wind, lifeboat launching, cargo shifts and passenger relocation.</p> <p data-bbox="960 1031 1888 1182">(e) The system shall account for the effect of wind by using the method in SOLAS regulation II-1/7-2.4.1.2 as the default, but allow for manual input of the wind speed/pressure if the on-scene pressure is significantly different ($P = 120 \text{ N/m}^2$ equates to Beaufort 6; approximately 13.8 m/s or 27 knots).</p> <p data-bbox="960 1216 1888 1367">(f) The system shall be capable of assessing the impact of open main watertight doors on stability (e.g. for each damage case provided for verification, additional damage stability calculation shall be done and presented, taking into account any watertight door located within the damaged compartment(s)).</p> <p data-bbox="960 1401 1888 1460">(g) The system shall utilize the latest approved lightship weight and centre of gravity information.</p>	Spaces	Permeability				Default	Full	Partially filled	Empty	Container Spaces	0.95	0.70	0.80	0.95	Dry Cargo spaces	0.95	0.70	0.80	0.95	Ro-Ro spaces	0.95	0.90	0.90	0.95	Cargo liquids	0.95	0.70	0.80	0.95	Intended for consumable liquids	0.95	0.95	0.95	0.95	Stores	0.95	0.60	(0.60)	0.95	Occupied by machinery	0.85				Void spaces	0.95				Occupied by accommodation	0.95				
Spaces	Permeability																																																							
	Default	Full	Partially filled	Empty																																																				
Container Spaces	0.95	0.70	0.80	0.95																																																				
Dry Cargo spaces	0.95	0.70	0.80	0.95																																																				
Ro-Ro spaces	0.95	0.90	0.90	0.95																																																				
Cargo liquids	0.95	0.70	0.80	0.95																																																				
Intended for consumable liquids	0.95	0.95	0.95	0.95																																																				
Stores	0.95	0.60	(0.60)	0.95																																																				
Occupied by machinery	0.85																																																							
Void spaces	0.95																																																							
Occupied by accommodation	0.95																																																							

Present	Amendment	Note
	<p data-bbox="958 260 1888 411">(h) <u>The output of the software is to be such that it provides the master with sufficient clear unambiguous information to enable quick and accurate assessment of the stability of the vessel for any actual damage, the impact of flooding on the means of escape and the controls of devices necessary for managing and/or controlling the stability of the ship.</u></p> <p data-bbox="1005 445 1888 504"><u>When the actual loading condition is input in the SRtP software, the following output (intact stability) shall be available:</u></p> <ul data-bbox="1005 507 1888 999" style="list-style-type: none"> <u>- deadweight data;</u> <u>- lightship data;</u> <u>- trim;</u> <u>- heel;</u> <u>- draft at the draft marks and perpendiculars;</u> <u>- summary of loading condition displacement, VCG, LCG and, if applicable, TCG;</u> <u>- downflooding angle and corresponding downflooding opening;</u> <u>- free surfaces;</u> <u>- GM value;</u> <u>- GZ values relevant to an adequate range of heeling (not less than 60°) available indicatively at the following intervals: 0, 5, 10, 15, 20, 25, 30, 40, 50, 60 deg;</u> <u>- compliance with relevant intact stability criteria (i.e. 2008 IS Code): listing of all calculated intact stability criteria, the limiting values, the obtained values and the evaluation (criteria fulfilled or not fulfilled);</u> <u>- GM/KG limiting curve according to SOLAS, Ch II-1, Regulation 5-1.</u> <p data-bbox="994 1032 1888 1118"><u>When the actual loading condition is associated to the actual damage case(s) due to the casualty, the following output (damage stability) shall be available:</u></p> <ul data-bbox="1005 1121 1888 1366" style="list-style-type: none"> <u>- trim;</u> <u>- heel;</u> <u>- draft at the draft marks and perpendiculars;</u> <u>- progressive flooding angle and corresponding progressive flooding openings;</u> <u>- GM value;</u> <u>- GZ values relevant to an adequate range of heeling (not less than 60°) available indicatively at the following intervals: 0, 5, 10, 15, 20, 25, 30, 40, 50, 60 deg;</u> 	

Present	Amendment	Note
	<ul style="list-style-type: none"> - <u>compliance with stability criteria: listing of all calculated stability criteria, the limit values, the obtained values and the conclusions (criteria fulfilled or not fulfilled);</u> - <u>the survivability criteria for Type 4 software (SRtP) are left to the discretion of the Administration;</u> - <u>relevant flooding points (unprotected or weathertight) with the distance from the damage waterline to each point;</u> - <u>list of all flooded compartments with the permeability considered;</u> - <u>amount of water in each flooded compartment;</u> - <u>escape route immersion angles;</u> - <u>a profile view, deck views and cross-sections of the ship indicating the flooded water-plane and the damaged compartments.</u> <p>(i) <u>For ro-ro passenger ships there shall be algorithms in the software for estimating the effect of water accumulation on deck (WOD) (e.g. 1. In addition to the predefined significant wave height taken from the approved stability document, there shall be possibility for the crew to input manually the significant wave height of the ship navigation area in the system, 2. In addition to the predefined significant wave height taken from the approved stability document, calculations with two additional significant wave heights shall be submitted for checking the correctness of the algorithms in the software for estimating the effect of WOD). *</u></p> <p><u>* This paragraph applies to Ro-Ro Passenger ships subject to the Stockholm Agreement (IMO Circular Letter No. 1891)</u></p> <p><u>(6) Acceptable Tolerances</u></p> <p><u>(A) Depending on the type and scope of programs, the acceptable tolerances are to be determined differently, according to (6) (B) or (6) (C). Deviation from these tolerances shall not be accepted unless the Society considers that there is a satisfactory explanation for the difference and that there will be no adverse effect on the safety of the ship.</u></p> <p><u>(a) Examples of pre-programmed input data include the following:</u></p> <ul style="list-style-type: none"> - <u>Hydrostatic data: Displacement, LCB, LCF, VCB, Kmt and MCT versus draught.</u> - <u>Stability data: KN or MS values at appropriate heel/ trim angles versus displacement, stability limits.</u> - <u>Compartment data: Volume, LCG, VCG, TCG and FSM/ Grain heeling moments vs level of the compartment's contents.</u> 	

Present	Amendment	Note
	<p>(b) <u>Examples of output data include the following:</u></p> <ul style="list-style-type: none"> - <u>Hydrostatic data: Displacement, LCB, LCF, VCB, KMT and MCT versus draught as well as actual draughts, trim.</u> - <u>Stability data: FSC (free surface correction), GZ-values, KG, GM, KG/GM limits, allowable grain heeling moments, derived stability criteria, e.g. areas under the GZ curve, weather criteria.</u> - <u>Compartment data: Calculated Volume, LCG, VCG, TCG and FSM/ Grain heeling moments vs level of the compartment's contents.</u> <p><u>The computational accuracy of the calculation program results shall be within the acceptable tolerances, specified in (6) (B) or (6) (C) of the results using an independent program or the approved stability information with identical input.</u></p> <p><u>(B) Programs which use only pre-programmed data from the approved stability information as the basis for stability calculations, shall have zero tolerances for the printouts of input data.</u></p> <p><u>Output data tolerances are to be close to zero, however, small differences associated with calculation rounding or abridged input data are acceptable.</u></p> <p><u>Additionally differences associated with the use of hydrostatic and stability data for trims that differ from those in the approved stability information, are acceptable subject to review by the individual Society.</u></p> <p><u>(C) Programs which use hull form models as their basis for stability calculations, shall have tolerances for the printouts of basic calculated data established against either data from the approved stability information or data obtained using the approval authority's model. Acceptable tolerances shall be in accordance with Table 1.</u></p>	

Present	Amendment	Note																																																				
	<p data-bbox="913 231 1003 255"><u>Table 1</u></p> <table border="1" data-bbox="913 292 1861 1321"> <thead> <tr> <th colspan="2" data-bbox="920 323 1854 352"><u>Hull Form Dependent</u></th> </tr> </thead> <tbody> <tr> <td data-bbox="920 352 1532 384">Displacement</td> <td data-bbox="1532 352 1854 384">+/- 2%</td> </tr> <tr> <td data-bbox="920 384 1532 416">Longitudinal center of buoyancy, from AP</td> <td data-bbox="1532 384 1854 416">+/- 1% / 50 cm</td> </tr> <tr> <td data-bbox="920 416 1532 448">Vertical center of buoyancy</td> <td data-bbox="1532 416 1854 448">+/- 1% / 5 cm</td> </tr> <tr> <td data-bbox="920 448 1532 480">Transverse center of buoyancy</td> <td data-bbox="1532 448 1854 480">+/- 0.5% of B / 5 cm</td> </tr> <tr> <td data-bbox="920 480 1532 512">Longitudinal center of flotation, from AP</td> <td data-bbox="1532 480 1854 512">+/- 1% / 50 cm</td> </tr> <tr> <td data-bbox="920 512 1532 544">Moment to trim 1 cm</td> <td data-bbox="1532 512 1854 544">+/- 2%</td> </tr> <tr> <td data-bbox="920 544 1532 576">Transverse metacentric height</td> <td data-bbox="1532 544 1854 576">+/- 1% / 5 cm</td> </tr> <tr> <td data-bbox="920 576 1532 608">Longitudinal metacentric height</td> <td data-bbox="1532 576 1854 608">+/- 1% / 50 cm</td> </tr> <tr> <td data-bbox="920 608 1532 639">Cross curves of stability</td> <td data-bbox="1532 608 1854 639">+/- 5 cm</td> </tr> <tr> <th colspan="2" data-bbox="920 703 1854 732"><u>Compartment dependent</u></th> </tr> <tr> <td data-bbox="920 732 1532 764">Volume or deadweight</td> <td data-bbox="1532 732 1854 764">+/- 2%</td> </tr> <tr> <td data-bbox="920 764 1532 796">Longitudinal center of gravity, from AP</td> <td data-bbox="1532 764 1854 796">+/- 1% / 50 cm</td> </tr> <tr> <td data-bbox="920 796 1532 828">Vertical centre of gravity</td> <td data-bbox="1532 796 1854 828">+/- 1% / 5 cm</td> </tr> <tr> <td data-bbox="920 828 1532 860">Transverse center of gravity</td> <td data-bbox="1532 828 1854 860">+/- 0.5% of B / 5 cm</td> </tr> <tr> <td data-bbox="920 860 1532 892">Free surface moment</td> <td data-bbox="1532 860 1854 892">+/- 2%</td> </tr> <tr> <td data-bbox="920 892 1532 924">Shifting moment</td> <td data-bbox="1532 892 1854 924">+/- 5%</td> </tr> <tr> <td data-bbox="920 924 1532 956">Level of contents</td> <td data-bbox="1532 924 1854 956">+/- 2%</td> </tr> <tr> <th colspan="2" data-bbox="920 1019 1854 1048"><u>Trim and stability</u></th> </tr> <tr> <td data-bbox="920 1048 1532 1080">Draughts (forward, aft, mean)</td> <td data-bbox="1532 1048 1854 1080">+/- 1% / 5 cm</td> </tr> <tr> <td data-bbox="920 1080 1532 1112">GMt (both solid and corrected for free surfaces)</td> <td data-bbox="1532 1080 1854 1112">+/- 1% / 5 cm</td> </tr> <tr> <td data-bbox="920 1112 1532 1144">GZ values</td> <td data-bbox="1532 1112 1854 1144">+/- 5% / 5 cm</td> </tr> <tr> <td data-bbox="920 1144 1532 1176">Downflooding angle</td> <td data-bbox="1532 1144 1854 1176">+/- 20</td> </tr> <tr> <td data-bbox="920 1176 1532 1208">Equilibrium angles</td> <td data-bbox="1532 1176 1854 1208">+/- 10</td> </tr> <tr> <td data-bbox="920 1208 1532 1272">Distance from WL to unprotected and weathertight openings, or other relevant point, if applicable</td> <td data-bbox="1532 1208 1854 1272">+/- 5% / 5 cm</td> </tr> <tr> <td data-bbox="920 1272 1532 1303">Areas under righting arm curve</td> <td data-bbox="1532 1272 1854 1303">+/- 5% / 0.0012mrad</td> </tr> </tbody> </table>	<u>Hull Form Dependent</u>		Displacement	+/- 2%	Longitudinal center of buoyancy, from AP	+/- 1% / 50 cm	Vertical center of buoyancy	+/- 1% / 5 cm	Transverse center of buoyancy	+/- 0.5% of B / 5 cm	Longitudinal center of flotation, from AP	+/- 1% / 50 cm	Moment to trim 1 cm	+/- 2%	Transverse metacentric height	+/- 1% / 5 cm	Longitudinal metacentric height	+/- 1% / 50 cm	Cross curves of stability	+/- 5 cm	<u>Compartment dependent</u>		Volume or deadweight	+/- 2%	Longitudinal center of gravity, from AP	+/- 1% / 50 cm	Vertical centre of gravity	+/- 1% / 5 cm	Transverse center of gravity	+/- 0.5% of B / 5 cm	Free surface moment	+/- 2%	Shifting moment	+/- 5%	Level of contents	+/- 2%	<u>Trim and stability</u>		Draughts (forward, aft, mean)	+/- 1% / 5 cm	GMt (both solid and corrected for free surfaces)	+/- 1% / 5 cm	GZ values	+/- 5% / 5 cm	Downflooding angle	+/- 20	Equilibrium angles	+/- 10	Distance from WL to unprotected and weathertight openings, or other relevant point, if applicable	+/- 5% / 5 cm	Areas under righting arm curve	+/- 5% / 0.0012mrad	
<u>Hull Form Dependent</u>																																																						
Displacement	+/- 2%																																																					
Longitudinal center of buoyancy, from AP	+/- 1% / 50 cm																																																					
Vertical center of buoyancy	+/- 1% / 5 cm																																																					
Transverse center of buoyancy	+/- 0.5% of B / 5 cm																																																					
Longitudinal center of flotation, from AP	+/- 1% / 50 cm																																																					
Moment to trim 1 cm	+/- 2%																																																					
Transverse metacentric height	+/- 1% / 5 cm																																																					
Longitudinal metacentric height	+/- 1% / 50 cm																																																					
Cross curves of stability	+/- 5 cm																																																					
<u>Compartment dependent</u>																																																						
Volume or deadweight	+/- 2%																																																					
Longitudinal center of gravity, from AP	+/- 1% / 50 cm																																																					
Vertical centre of gravity	+/- 1% / 5 cm																																																					
Transverse center of gravity	+/- 0.5% of B / 5 cm																																																					
Free surface moment	+/- 2%																																																					
Shifting moment	+/- 5%																																																					
Level of contents	+/- 2%																																																					
<u>Trim and stability</u>																																																						
Draughts (forward, aft, mean)	+/- 1% / 5 cm																																																					
GMt (both solid and corrected for free surfaces)	+/- 1% / 5 cm																																																					
GZ values	+/- 5% / 5 cm																																																					
Downflooding angle	+/- 20																																																					
Equilibrium angles	+/- 10																																																					
Distance from WL to unprotected and weathertight openings, or other relevant point, if applicable	+/- 5% / 5 cm																																																					
Areas under righting arm curve	+/- 5% / 0.0012mrad																																																					

Present	Amendment	Note
	<p><u>Notes:</u></p> <ol style="list-style-type: none"> 1. <u>Deviation in % = {(base value-applicant's value)/base value} *100</u> Where the "base value" may be from the approved stability information or the society's computer model. 2. <u>When applying the tolerances in Table 1 having two values, the allowable tolerance is the greater of the two values.</u> 3. <u>Where differences in calculation methodology exist between the programs used in the comparison, this may be a basis for accepting deviations greater than that specified in Table 1 provided a software examination is carried out in sufficient detail to clearly document that such differences are technically justifiable.</u> 4. <u>Deviation from these tolerances shall not be accepted unless the Society considers that there is a satisfactory explanation for the difference and that it is clearly evident from the Society's stability calculations that the deviation does not impact compliance with the required stability criteria for the ship under consideration.</u> <p><u>(7) Approval Procedure</u></p> <p><u>(a) Conditions of approval of the onboard software for stability calculations</u> The onboard software used for stability calculations is subject to approval, which is to include:</p> <ul style="list-style-type: none"> - <u>verification of design approval, if any;</u> - <u>verification that the data used is consistent with the current condition of the ship. (Refer to para (7.2));</u> - <u>verification and approval of the test conditions;</u> - <u>verification that the software is appropriate for the type of ship and stability calculations required;</u> - <u>verification of functional requirements under paragraph (5) (A) (b).</u> <p><u>The satisfactory operation of the software with the onboard computer(s) for stability calculations is to be verified by testing upon installation. (Refer to para (9).</u></p> <p><u>A copy of the approved test conditions and the operation manual for the computer/software are to be available on board.</u></p>	

Present	Amendment	Note
	<p><u>(7.1) General Approval (optional):</u></p> <p><u>(A) Upon application to the Society for general approval of the calculation program, the Society may provide the applicant with test data consisting of two or more design data sets, each of which is to include a ship's hull form data, compartmentation data, lightship characteristics and deadweight data, in sufficient detail to accurately define the ship and its loading condition.</u></p> <p><u>(B) Acceptable hull form and compartmentation data may be in the form of surface coordinates for modeling the hull form and compartment boundaries, e.g: a table of offsets, or in the form of pre-calculated tabular data, e.g: hydrostatic tables, capacity tables, etc., depending upon the form of data used by the software being submitted for approval.</u></p> <p><u>(C) Alternatively, the general approval may be given based on at least two test ships agreed upon between the society and the applicant.</u></p> <p><u>(D) In general, the software is to be tested for two types of ships for which approval is requested, with at least one design data set for each of the two types. Where approval is requested for only one type of ship, a minimum of two data sets for different hull forms of that type of ship are required to be tested.</u></p> <p><u>(E) For calculation software which is based on the input of hull form data, design data sets shall be provided for three types of ships for which the software is to be approved, or a minimum of three data sets for different hull forms, if approval is requested for only one type of ship.</u></p> <p><u>(F) Representative ship types which require different design data sets due to their hull forms, typical arrangements, and nature of cargo include: tanker, bulk carrier, container ship, and other dry cargo and passenger ships.</u></p> <p><u>(G) The test data sets shall be used by the applicant to run the calculation program for the test ships. The results obtained (together with the hydrostatic data and cross-curve data developed by the program, if appropriate) shall be submitted to the Society for the assessment of the program's computational accuracy.</u></p> <p><u>(H) The Society shall perform parallel calculations using the same data sets and a comparison of these results will be made against the applicant's submitted program's results.</u></p>	

Present	Amendment	Note
	<p>(7.2) Specific Approval:</p> <p>(a) <u>The Society shall verify the accuracy of the computational results and actual ship data used by the calculation program for the particular ship on which the program will be installed.</u></p> <p>(b) <u>Upon application to the Society for data verification, the Society and the applicant shall agree on a minimum of four loading conditions, taken from the ship's approved stability information, which are to be used as the test conditions.</u> <u>For ships carrying liquids in bulk, at least one of the conditions shall include partially filled tanks. For ships carrying grain in bulk, one of the grain loading conditions shall include a partially filled grain compartment.</u></p> <p><u>Within the test conditions each compartment shall be loaded at least once. The test conditions normally are to cover the range of load draughts from the deepest envisaged loaded condition to the light ballast condition and shall include at least one departure and one arrival condition.</u> <u>For Type 4 stability software for SRtP, the Society shall examine at least three damage cases, each of them associated with at least three loading conditions taken from the ship's approved stability information. Output of the software is to be compared with results of corresponding load/damage case in the approved damage stability booklet or an alternative independent software source.</u></p> <p>(c) <u>The Society is to verify that the following data, submitted by the applicant, is consistent with arrangements and most recently approved lightship characteristics of the ship according to current plans and documentation on file with the Society, subject to possible further verification on board:</u></p> <ul style="list-style-type: none"> <u>- Identification of the calculation program including version number;</u> <u>- Main dimensions, hydrostatic particulars and, if applicable, the ship profile;</u> <u>- The position of the forward and after perpendiculars, and if appropriate, the calculation method to derive the forward and after draughts at the actual position of the ship's draught marks;</u> <u>- Ship lightweight and centre of gravity derived from the most recently approved inclining experiment or light weight check;</u> <u>- Lines plan, offset tables or other suitable presentation of hull form data if necessary for the Society to model the ship;</u> <u>- Compartment definitions, including frame spacing, and centres of volume, together with capacity tables (sounding/ullage tables), free surface corrections, if appropriate;</u> <u>- Cargo and Consumables distribution for each loading condition</u> 	

Present	Amendment	Note
<p>4. User's manual (2017)</p> <p>(1) <u>User's manual reviewed by the Society is to be provided for the loading instrument on stability. This manual should contain operating instructions for all stability calculations made by the loading instrument.</u></p> <p>(2) <u>The user's manual must be in a language readily understood by the users. A English version, if not written in English language, should be provided if the ship on which the instrument is installed is engaged in the international voyage.</u></p> <p>(3) <u>The manual should contain general description of the stability software together with a list of all terms, definitions, error messages and warnings likely to be encountered by the user. In the case of error messages and warnings, there should be unambiguous user instructions for subsequent action to be taken in each case.</u></p> <p>(4) <u>In addition to the above, the following items should also be included in the user's manual.</u> <u>But, some of following items can be included in test conditions.</u></p> <ul style="list-style-type: none"> - <u>Where applicable, a copy of the Certificate of Design Approval of the software, if approved by the Society</u> - <u>Minimum hardware specification to run the loading program.</u> - <u>Explanation of the functionality of the loading program, the calculation method and principle.</u> - <u>Lightship weight and co-ordinates of center of gravity</u> - <u>Full deadweight description of each test loading condition</u> - <u>Details of applicable Codes/Conventions, including limiting values etc.</u> - <u>An example of a non-standard calculation well supported by illustrations and sample instrument output</u> - <u>Hard copy of the results of each test loading condition</u> 	<p><u>Verification by the Society does not absolve the applicant and shipowner of responsibility for ensuring that the information programmed into the onboard computer software is consistent with the current condition of the ship.</u></p> <p>(8) Operation Manual <u>A simple and straightforward operation manual is to be provided, containing descriptions and instructions, as appropriate, for at least the following:</u></p> <ul style="list-style-type: none"> - <u>installation</u> - <u>function keys</u> - <u>menu displays</u> - <u>input and output data</u> - <u>required minimum hardware to operate the software</u> - <u>use of the test loading conditions</u> - <u>computer-guided dialogue steps</u> - <u>list of warnings</u> <p>(9) Installation Testing <u>To ensure correct working of the computer after the final or updated software has been installed, it is the responsibility of the ship's Master to have test calculations carried out according to the following pattern in the presence of a Society surveyor:</u></p> <p><u>From the approved test conditions at least one load case (other than light ship) shall be calculated. Note: Actual loading condition results are not suitable for checking the correct working of the computer.</u></p> <p><u>Normally, the test conditions are permanently stored in the computer.</u></p> <p><u>Steps to be performed:</u></p> <p>(A) <u>Retrieve the test load case and start a calculation run; compare the stability results with those in the documentation.</u></p> <p>(B) <u>Change several items of deadweight (tank weights and the cargo weight) sufficiently to change the draught or displacement by at least 10%. The results are to be reviewed to ensure that they differ in a logical way from those of the approved test condition.</u></p>	

Present	Amendment	Note
<p>- <u>Details of the frequency of testing of the instrument(The loading instrument with a stability computation capability should be handled by qualified personnel fully familiar with the instrument and it is recommended that the correct functioning of the instrument be verified by the ship's master at frequent intervals using the approved test conditions)</u></p> <p>- <u>Details of contingency measures in case of power failure</u></p> <p>- <u>Example printouts of every possible screen display, complete with explanatory text, to ensure that the user does not encounter any unfamiliar output</u></p> <p>(5) <u>In addition to the above, if the instrument performs also strength calculations, the manual should contain permissible values for still water bending moments and shear force and, if applicable, permissible local load for hatch covers, deck and double bottom structure, etc. ↓</u></p>	<p>(C) <u>Revise the above modified load condition to restore the initial test condition and compare the results. Confirm that the relevant input and output data of the approved test condition have been replicated.</u></p> <p>(D) <u>Alternatively, one or more test conditions shall be selected and the test calculation performed by entering all deadweight data for each selected test condition into the program as if it were a proposed loading. The results shall be verified as identical to the results in the approved copy of the test conditions.</u></p> <p>(10) Periodical Testing</p> <p>(A) <u>It is the responsibility of the ship's master to check the accuracy of the onboard computer for stability calculations at each Annual Survey by applying at least one approved test condition. If a Society surveyor is not present for the computer check, a copy of the test condition results obtained by the computer check is to be retained on board as documentation of satisfactory testing for the surveyor's verification.</u></p> <p>(B) <u>At each Special Survey this checking for all approved test loading conditions is to be done in presence of the surveyor.</u></p> <p>(C) <u>The testing procedure shall be carried out in accordance with paragraph (9).</u></p> <p>(11) Other Requirements</p> <p>(A) <u>Protection against unintentional or unauthorised modification of programs and data shall be provided.</u></p> <p>(B) <u>The program shall monitor operation and activate an alarm when the program is incorrectly or abnormally used.</u></p> <p>(C) <u>The program and any data stored in the system shall be protected from corruption by loss of power.</u></p> <p>(D) <u>Error messages with regard to limitations such as filling a compartment beyond capacity, or exceeding the assigned load line, etc. shall be included. ↓</u></p>	

(4) Effective date : 1 July 2021

(Date of which the application for survey is submitted)

Present

Note

Annex 1-1 Character of Classification

1. Class Notation

1.1 Ship Type and Special Feature Notations

The (Double Hull) notation should be given when Reg.19.3 is satisfied, and (Double Hull) (EXP) is given when Reg.19.6 is satisfied.

Ship Types	Special Feature Notations	Remarks
1. Oil Tanker (Double Hull) ⁽²⁻²⁾ (Double Hull)(EXP) ⁽²⁻³⁾ (FAC) ⁽¹⁾ (FAO) ⁽¹⁾ (FBC) ⁽¹⁾ (CSR) ⁽²⁻⁵⁾	'ESP' ⁽²⁻¹⁾	(1) : <omitted> (2-1) : <omitted>
	Asphalt ⁽²⁻⁴⁾	(2-2) : The notation "(Double Hull)" shall be assigned to ships which are constructed primarily for the carriage of oil in bulk, which have the cargo tanks protected by a double hull which extends for the entire length of the cargo area, consisting of double sides and double bottom spaces for the carriage of water ballast or void spaces. <u>In addition, the arrangement of the double hull is to comply with the requirements in Pt 7, Ch 10, 102. 1 of the Guidances (2019)</u> (2-3) : Any ships not applicable to ⁽²⁻²⁾ , the notation "(Double Hull)(EXP)" shall be assigned to ships which are constructed primarily for the carriage of oil in bulk, which have the cargo tanks <u>protected by a double hull</u> which extends for the entire length of the cargo area, consisting of double sides and double bottom spaces for the carriage of water ballast or void spaces. (2019) <omitted>

Amendments

Note

Annex 1-1 Character of Classification

1. Class Notation

1.1 Ship Type and Special Feature Notations

Ship Types	Special Feature Notations	Remarks
1. Oil Tanker (Double Hull) ⁽²⁻²⁾ (Double Hull)(EXP) ⁽²⁻³⁾ (FAC) ⁽¹⁾ (FAO) ⁽¹⁾ (FBC) ⁽¹⁾ (CSR) ⁽²⁻⁵⁾	'ESP' ⁽²⁻¹⁾	⁽¹⁾ : <same as the current Guidances> ⁽²⁻¹⁾ : <same as the current Guidances> ⁽²⁻²⁾ : The notation "(Double Hull)" shall be assigned to ships which are constructed primarily for the carriage of oil in bulk, which have the cargo tanks protected by a double hull complied with the Reg. 19.3 of Annex I of MARPOL 73/78 which extends for the entire length of the cargo area, consisting of double sides and double bottom spaces for the carriage of water ballast or void spaces. In addition, the arrangement of the double hull is to comply with the requirements in Pt 7, Ch 10, 102. 1 of the Guidances (2021) ⁽²⁻³⁾ : Any ships not applicable to ⁽²⁻²⁾ , the notation "(Double Hull)(EXP)" shall be assigned to ships which are constructed primarily for the carriage of oil in bulk, which have the cargo tanks protected by a double hull complied with the Reg. 19.6 of Annex I of MARPOL 73/78 which extends for the entire length of the cargo area, consisting of double sides and double bottom spaces for the carriage of water ballast or void spaces. (2021) <same as the current Guidances>
	Asphalt ⁽²⁻⁴⁾	

The (Double Hull) notation should be given when Reg.19.3 is satisfied, and (Double Hull) (EXP) is given when Reg.19.6 is satisfied..

Present		Note
Additional Special Feature Notations	Relevant Requirements	
CDG	to ships comply with the requirements specified in Pt 8, Ch 12 of the Rules.	
<Newly added>	<Newly added>	

Amendments		Note
Additional Special Feature Notations	Relevant Requirements	
CDG	to ships comply with the requirements specified in Pt 8, Ch 12 of the Rules.	
<u>AFP-A</u>	<u>to ships comply with the requirements specified in Pt 8, Annex 8-9, Sec.2 of the Guidance.</u>	
<u>AFP-M</u>	<u>to ships comply with the requirements specified in Pt 8, Annex 8-9, Sec.3 of the Guidance.</u>	
<u>AFP-C</u> <u>AFP-C(1)</u> <u>AFP-C(2)</u> <u>AFP-C(3)</u> <u>AFP-C(FSC)</u>	<u>AFP-C: to ships comply with the related requirements specified in Pt 8, Annex 8-9, Sec.4 of the Guidance.</u> <u>AFP-C(1): to container ships where cargo space in accordance with the requirements specified in Pt 8, Annex 8-9, Sec.4 405. 2 of the Guidance.</u> <u>AFP-C(2): to container ships where cargo space in accordance with the requirements specified in Pt 8, Annex 8-9, Sec.4 405. 3 of the Guidance.</u> <u>AFP-C(3): to container ships where cargo space in accordance with the requirements specified in Pt 8, Annex 8-9, Sec.4 405. 4 of the Guidance.</u> <u>AFP-C(FSC): to container ships where cargo space in accordance with the requirements specified in Pt 8, Annex 8-9, Sec.4 405. 5 of the Guidance.</u>	

Present		Note
Additional Special Feature Notations	Relevant Requirements	
CLEAN1, CLEAN2, CLEAN3	to ships which comply with the <u>environmental protection related requirements specified in Annex 1-15 of the Guidance.</u>	
<Omitted>	<Omitted>	
EEAS-SCR	to ships comply with the additional requirements for the selective catalytic reduction system specified in <u>using ammonia solutions or urea solutions as the reductant agents specified in Sec.1 of the Guidance for Exhaust gas emission abatement system. (2019)</u>	
EEAS-EGR	to ships comply with the additional requirements for the exhaust gas recirculation systems specified in <u>Sec.2 of the Guidance for Exhaust gas emission abatement system. (2019)</u>	
<Newly added>	<Newly added>	
EEAS-EGC-D. O, C, H (2019)	to ships comply with the additional requirements for the exhaust gas cleaning system specified in <u>Sec.3 of the Guidance for Exhaust gas emission abatement system.</u>	
EEAS-EGC(R)-D. O, C, H (2019)	to ships comply with the additional requirements for the exhaust gas cleaning system specified in <u>Sec.3 of the Guidance for Exhaust gas emission abatement system. (Redundancy requirement)</u>	
EEAS-EGC(S)-D. O, C, H (2019)	to ships comply with the additional requirements for the exhaust gas cleaning system specified in <u>Sec.3 of the Guidance for Exhaust gas emission abatement system. (Type Approval & Certification of Classification)</u>	
EGC Ready D- D, O, C, H (2019)	to ships for which the generic design is prepared in accordance with <u>Sec.4 of the Guidance for Exhaust gas emission abatement system. (2019)</u>	
EGC Ready I(SR, EX, WR, CH, SD, EG)-D, O, C, H (2019)	to ships for which parts of the systems are installed with the detailed design in accordance with <u>Sec.4 of the Guidance for Exhaust gas emission abatement system.</u>	
<Newly added>	<Newly added>	

Amendments		Note
Additional Special Feature Notations	Relevant Requirements	
CLEAN1, CLEAN2, CLEAN3	to ships which comply with the environmental protection related requirements specified in Annex 1-15 of the Guidance additional requirements for pollution prevention system specified in Ch 1 of Guidance for Prevention System of Pollution from ships. (2021)	
<Omitted>	<Omitted>	
EEAS CEmN -SCR (2021)	to ships comply with the additional requirements for the selective catalytic reduction system specified in using ammonia solutions or urea solutions as the reductant agents specified in Sec.1 of the Guidance for Exhaust gas emission abatement system: Ch 2 Sec.1 of the Guidance for Prevention System of Pollution from ships. (2021)	
EEAS CEmN -EGR (2021)	to ships comply with the additional requirements for the exhaust gas recirculation systems specified in Sec.2 of the Guidance for Exhaust gas emission abatement system: Ch 2 Sec.1 of the Guidance for Prevention System of Pollution from ships. (2021)	
CEmN-E&F (2021)	to ships reducing emission of nitrogen oxides by adjusting combustion environment and/or fuel used in engines specified in Ch 2 Sec.1 of the Guidance for Prevention System of Pollution from ships.	
EEAS CEmS -EGC-D, O, C, H (2021)	to ships comply with the additional requirements for the exhaust gas cleaning system specified in Sec.3 of the Guidance for Exhaust gas emission abatement system: Ch 3 Sec.2 of the Guidance for Prevention System of Pollution from ships	
EEAS CEmS -EGC(R)-D, O, C, H (2021)	to ships comply with the additional requirements for the exhaust gas cleaning system specified in Sec.3 of the Guidance for Exhaust gas emission abatement system: Ch 3 Sec.2 of the Guidance for Prevention System of Pollution from ships. (Redundancy requirement)	
EEAS CEmS -EGC(S)-D, O, C, H (2021)	to ships comply with the additional requirements for the exhaust gas cleaning system specified in Sec.3 of the Guidance for Exhaust gas emission abatement system: Ch 3 Sec.2 of the Guidance for Prevention System of Pollution from ships. (Type Approval & Certification of Classification) (2021)	
EGC Ready D- D, O, C, H (2019)	to ships for which the generic design is prepared in accordance with Sec.4 of the Guidance for Exhaust gas emission abatement system: Ch 3 Sec.3 of the Guidance for Prevention System of Pollution from ships. (2021)	
EGC Ready I(SR, EX, WR, CH, SD, EG)-D, O, C, H (2019)	to ships for which parts of the systems are installed with the detailed design in accordance with Sec.4 of the Guidance for Exhaust gas emission abatement system: Ch 3 Sec.3 of the Guidance for Prevention System of Pollution from ships. (2021)	
CEmS -LSF (2021)	to ships using low sulphur fuel without exhaust gas cleaning system specified in Ch 3 Sec.1 of the Guidance for Prevention System of Pollution from ships.	

Present	Amendments	Note
<p style="text-align: center;">Annex 1–15 Requirements for CLEAN Notation</p> <p>1. General</p> <p>(1) <u>This Annex applies to the ships classed with the Society or intended to be registered under the Society, which intended to comply with the environmental protection requirements for design, construction and operation for obtaining the relevant notation.</u></p> <p>(2) <u>The notation prescribed in (1) are classified into the followings.</u></p> <p>(A) <u>CLEAN1 notation: Ships complying with requirements of convention specified in Par 3</u></p> <p>(B) <u>CLEAN2 notation: Ships complying with additional requirements of the Society specified in Par 4</u></p> <p>(C) <u>CLEAN3 notation: Ships complying with additional requirements in Par 5</u></p> <p>2. Survey</p> <p>(1) <u>Classification survey</u></p> <p>(A) <u>The documents specified in applicable requirements for each notation are to be submitted to the Society.</u></p> <p>(B) <u>The appropriate installation of all relevant equipment specified in applicable requirements for each notation and the proper provision on board of all relevant documents, procedures and record books are to be confirmed.</u></p> <p>(2) <u>Periodical survey</u></p> <p>(A) <u>The periodical surveys to maintain the classification are to be carried out at Annual Survey, Intermediate Survey and Special Survey. However, the survey for MARPOL Annex IV and V is to be carried out at Special Survey and the periodical survey for AFS convention is not required.</u></p> <p>(B) <u>The satisfactory condition of all relevant equipment specified in applicable requirements for each notation and proper maintaining of all relevant documents, procedures and record books are to be confirmed.</u></p> <p><Omitted></p>	<p style="text-align: center;">Annex 1–15 Requirements for CLEAN Notation – <u><Void> (2021)</u></p> <p style="text-align: center;"><u>(Refer to the Guidance for Prevention System of Pollution from Ships)</u></p> <p><Same as present></p>	

(5) Effective date : 1 July 2021

(The contract date for ship construction)

Present	Amendment	Note
<p align="center">Annex 1–12 Hull Survey for Classification Survey during Construction</p> <p>1. ~ 6. <omitted></p> <p>7. Newbuilding survey planning</p> <p>(1) ~ (3) <omitted></p> <p>(4) Shipbuilding quality standards for the hull structure during new construction are to be reviewed and agreed during the kick-off meeting. Structural fabrication is to be carried out in accordance with IACS Recommendation 47, “Shipbuilding and Repair Quality Standard”, or a <u>recognized fabrication standard</u> which has been accepted by the Society prior to the commencement of fabrication/ construction. The work is to be carried out in accordance with the Rules and under survey of the Society.</p> <p><u><newly added></u></p>	<p align="center">Annex 1–12 Hull Survey for Classification Survey during Construction</p> <p>1. ~ 6. <same as the current Guidances></p> <p>7. Newbuilding survey planning</p> <p>(1) ~ (3) <same as the current Guidances></p> <p>(4) Shipbuilding quality standards for the hull structure during new construction are to be reviewed and agreed during the kick-off meeting. Structural fabrication is to be carried out in accordance with IACS Recommendation 47, “Shipbuilding and Repair Quality Standard”, or a <u>recognized fabrication standard(RFS)</u> which has been accepted by the Society prior to the commencement of fabrication/ construction. The work is to be carried out in accordance with the Rules and under survey of the Society. <i>(2021)</i></p> <p><u>A Classification Society may accept an RFS as an alternative to IACS Rec. 47 provided that (4.1) or (4.2) is complied with as applicable. (2021)</u></p> <p><u>(4.1) Where a RFS is well established and has well documented history (3 or more years prior to the new vessel contract) of successful application to similar designs as the new vessel and that history is for the same Shipyard as the new vessel. Then the Shipyard is to create a summary document referencing the RFS to be used in construction and highlighting any limitations to usage of the selected RFS. This summary document is to be included with the “record of kick-off meeting” for the vessel.</u></p> <p><u>The summary document is also to be included in the SCF, (for Tankers and Bulk Carriers subject to SOLAS Chapter II-1 Part A-1 Regulation 3-10 per App 12-2-2, Table A Tier II Item 11), as applicable.</u></p>	<p>- reflected to 7.42 of IACS UR Z23 (Rev.7 Oct 2020)</p> <p>: During the GBS audit, auditors observed that there is no established process for accepting the use of fabrication standards in lieu of IACS Rec. 47. Therefore, IACS received an “OB” as a Finding.</p> <p>- Additionally a procedure was added to Para 7.4 for accepting the use of a RFS in lieu of Rec. 47 in UR Z23 for addressing an GBS OB</p>

Present	Amendment	Note
<p>(5) The kick-off meeting may be attended by other parties(owner, administrations, etc.) as defined in IACS PR3(Transparency of Classification and Statutory Information) subject to agreement by the shipbuilder.</p> <p><hereafter, omitted></p>	<p><u>(4.2) Where a RFS is new or revised or otherwise not as per (4.1) the following steps are to be carried out:</u></p> <p><u>(a) The tolerances and fabrications standards of the RFS are to be compared with those of Rec. 47.</u> <u>Any that are less stringent than those of Rec. 47 are to be identified.</u></p> <p><u>(b) The tolerances and fabrication standards of the RFS identified in (4.2) (a) are to be assessed to determine the acceptability for use and/or any restrictions for usage for the subject (or proposed) design.</u> <u>Details of how the acceptability for use and/or restrictions are to be recorded, and.</u></p> <p><u>(c) A summary document including the outcomes of (4.2) (a) and (b) is to be compiled. This document is to also include a reference to the RFS, details of the tolerance and fabrication standards not analysed as part of (4.2) (b) and any limitations to the usage of the RFS.</u></p> <p><u>The summary document is to be included with the “record of the kick-off meeting” of the vessel. The summary document is also to be included in the SCF, (for Tankers and Bulk Carriers subject to SOLAS Chapter II-1 Part A-1 Regulation 3-10 per App 2, Table A Tier II Item 11), as applicable. (2021)</u></p> <p>(5) The kick-off meeting may be attended by other parties(owner, administrations, etc.) as defined in IACS PR3(Transparency of Classification and Statutory Information) subject to agreement by the shipbuilder.</p> <p><hereafter, same as the current Guidances></p>	<p>- reflected to 7.4 of IACS UR Z23 (Rev.7 Oct 2020)</p> <p>: During the GBS audit, auditors observed that there is no established process for accepting the use of fabrication standards in lieu of IACS Rec. 47. Therefore, IACS received an “OB” as a Finding.</p> <p>- Additionally a procedure was added to Para 7.4 for accepting the use of a RFS in lieu of Rec. 47 in UR Z23 for addressing an GBS OB</p>

Present	Amendment	Note
<p>10. Ship Construction File</p> <p>The purpose of this paragraph are applicable to all ships except the tankers and bulk carriers subject to SOLAS Ch II-1 Pt A-1 Reg.3-10 for which Par 3 of Appendix 1-12-2 to this Annex is to be applied.</p> <p>(1) <omitted></p> <p>(2) It is recognised that the purpose of documents held in the Ship Construction File on board the ship, is to facilitate inspection(survey) and repair and maintenance, and, therefore, is to include in addition to documents listed in Table 1, but not be limited to:</p> <p>(A) ~ (C) <omitted></p> <p>(D) copies of certificates of forgings and castings welded into the hull(IACS UR W7(Hull and Machinery Steel Forging) and W8(Hull and Machinery Steel Casting)),</p> <p>(E) details of equipment forming part of the watertight and weathertight integrity of the ship, <newly added></p> <p>(F) tank testing plan including details of the test requirements(IACS UR S14(Testing Procedures of Watertight Compartments)),</p> <p><hereafter, omitted></p>	<p>10. Ship Construction File</p> <p>The purpose of this paragraph are applicable to all ships except the tankers and bulk carriers subject to SOLAS Ch II-1 Pt A-1 Reg.3-10 for which Par 3 of Appendix 1-12-2 to this Annex is to be applied.</p> <p>(1) <same as the current Guidances></p> <p>(2) It is recognised that the purpose of documents held in the Ship Construction File on board the ship, is to facilitate inspection(survey) and repair and maintenance, and, therefore, is to include in addition to documents listed in Table 1, but not be limited to:</p> <p>(A) ~ (C) <same as the current Guidances></p> <p>(D) copies of certificates of forgings and castings welded into the hull(IACS UR W7(Hull and Machinery Steel Forging) and W8(Hull and Machinery Steel Casting)),</p> <p>(E) details of equipment forming part of the watertight and weathertight integrity of the ship, (2021)</p> <p>a) a Cable Transit Seal Systems Register, to be prepared by the shipbuilder for watertight cable transits. The Register can be in either a hard copy or digitized media. For an example of a register see Appendix 1-12-4 "Recommendatory Sample - Cable Transit Seal Systems Register". It is to include a marking/identification system, documentation referencing manufacturer manual(s) for each type of cable transit installed, the Type Approval certification for each type of transit system, applicable installation drawings, and a recording of each installed transit documenting the as built condition after final inspection in the shipyard. This is to include sections to record any inspection, modification, repair and maintenance.</p> <p>(F) tank testing plan including details of the test requirements (IACS UR S14(Testing Procedures of Watertight Compartments)),</p> <p><hereafter, same as the current Guidances></p>	<p>- reflected to 10.2.5 of IACS UR Z23 (Rev.7 Oct 2020)</p> <p>A global unified standard is required to improve the installation & maintenance of Pressure-Rated MCT/Transit systems.</p> <p>In order to properly maintain Ship and MOU structures and promote vessel safety during water ingress a better method is necessary to document and manage installation, maintenance, and repair of MCT/Transit systems.</p>

Present	Amendment	Note
<p>(J) Coating Technical File, for ships subject to compliance with the IMO Performance Standard for Protective Coatings(PSPC) as a class requirement under the IACS Common Structural Rules.</p> <p>Table 1 Hull Surveyable Items Activities Table</p> <p>Appendix 1-12-1 Shipyard Review Record</p> <p>Appendix 1-12-2 Requirements for Tankers and Bulk Carriers subject to SOLAS Ch II-1 Pt A-1 Reg.3-10(Goal-based ship construction standards for bulk carriers and oil tankers)</p> <p>Appendix 1-12-3 Ship Construction File Form Example</p> <p><newly added></p>	<p>(J) Coating Technical File, for ships subject to compliance with the IMO Performance Standard for Protective Coatings(PSPC) as a class requirement under the IACS Common Structural Rules.</p> <p>Table 1 Hull Surveyable Items Activities Table</p> <p>Appendix 1-12-1 Shipyard Review Record</p> <p>Appendix 1-12-2 Requirements for Tankers and Bulk Carriers subject to SOLAS Ch II-1 Pt A-1 Reg.3-10 (Goal-based ship construction standards for bulk carriers and oil tankers)</p> <p>Appendix 1-12-3 Ship Construction File Form Example</p> <p>Appendix 1-12-4 Recommendatory Sample - Cable Transit Seal Systems Register (2021)</p>	<p>- reflected to Enclosures, D of IACS UR Z23 (Rev.7 Oct 2020)</p>

Present

Note

Table 1 Surveyable Items Activities Table									
Reference	Shipbuilding function	Survey Requirements for Classification	Survey Method required for Classification	IACS reference*	Statutory requirements and relevant reference	Documentation available to classification Surveyor during construction	Documentation for ship construction file	Specific activities	Classification Society proposals for the project
(omitted)									
1.3c	Welding supervision	Sufficient number of skilled supervisors	Review and patrol	Rec 20 and 47				Verify supervision is effective	
1.4	Welding-surface discontinuities	Substantially free from significant indications, satisfactory profile and size	Visual examination, surface detection techniques, review of documents and patrol of operator	Rec 20 and 47		Shipbuilders and recognised standards and Rules as applicable, welding and NDT plans, NDT reports, operator qualifications	Not required	Identify workstations where NDT is carried out, e.g. panel line butt welds, castings into hull structure	
								Verify NDT carried out in accordance with approved plans where applicable	
								Verify suitability of NDT methods	
								Verify operators suitably qualified particularly where sub-contractors have been employed	
								Verify NDT is carried out according to the acceptable process	
Review NDT records									

- reflected to Table 1, 1.3c and 1.4 of IACS UR Z23 (Rev.7 Oct 2020)

: the term "Rec. 20" & "NDT" to be replaced with "UR W33" & "NDE" respectively

Amendment

Note

Table 1 Surveyable Items Activities Table									
Reference	Shipbuilding function	Survey Requirements for Classification	Survey Method required for Classification	IACS reference*	Statutory requirements and relevant reference	Documentation available to classification Surveyor during construction	Documentation for ship construction file	Specific activities	Classification Society proposals for the project
(omitted)									
1.3c (2021)	Welding supervision	Sufficient number of skilled supervisors	Review and patrol	UR W33 , Rec 20 and 47				Verify supervision is effective	
1.4 (2021)	Welding-surface discontinuities	Substantially free from significant indications, satisfactory profile and size	Visual examination, surface detection techniques, review of documents and patrol of operator	UR W33 , Rec 20 and 47		Shipbuilders and recognised standards and Rules as applicable, welding and NDE NDT plans, NDE NDT reports, operator qualifications	Not required	Identify workstations where NDE NDT is carried out, e.g. panel line butt welds, castings into hull structure	
								Verify NDE NDT carried out in accordance with approved plans where applicable	
								Verify suitability of NDE NDT methods	
								Verify operators suitably qualified particularly where sub-contractors have been employed	
								Verify NDE NDT is carried out according to the acceptable process	
								Review NDE NDT records	

- reflected to Table 1, 1.3c and 1.4 of IACS UR Z23 (Rev.7 Oct 2020)

: the term "Rec. 20" & "NDT" to be replaced with "UR W33" & "NDE" respectively

Present

Note

Table 1 Surveyable Items Activities Table									
Reference	Shipbuilding function	Survey Requirements for Classification	Survey Method required for Classification	IACS reference*	Statutory requirements and relevant reference	Documentation available to classification Surveyor during construction	Documentation for ship construction file	Specific activities	Classification Society proposals for the project
1.5	Welding – embedded discontinuities	NDT is to be carried out by qualified operators capable of ensuring that welds are substantially free from significant indications.	Radiography and ultrasonic testing, review of documents and patrol of operator, examination of films	Rec 20 and 47		Shipbuilders and recognised standards and Rules as applicable, welding and NDT plans, NDT reports, operator qualifications	Not required	Identify workstations where <u>NDT</u> is carried out, e.g. panel line butt welds, castings into hull structure	
								Verify <u>NDT</u> carried out in accordance with approved plans where applicable	
								Verify suitability of <u>NDT</u> methods	
								Verify operators suitably qualified particularly where sub-contractors have been employed	
								Verify that records have been completed and in accordance with recognised standards, e.g. IQI(Image Qualify Indicator) and sensitivity recorded	
								Verify that reports and radiographs have been evaluated correctly by the shipbuilder. Systematic review of radiographs carried out by the Surveyor	
								Verify equipment calibration satisfactory and in accordance with manufacturers and recognised standards requirements	
								Verify <u>NDT</u> is carried out according to the acceptable process	

- reflected to Table 1, 1.5 of IACS UR Z23 (Rev.7 Oct 2020)

: the term “Rec. 20” & “NDT” to be replaced with “UR W33” & “NDE” respectively

Present

Note

Table 1 Surveyable Items Activities Table									
Reference	Shipbuilding function	Survey Requirements for Classification	Survey Method required for Classification	IACS reference*	Statutory requirements and relevant reference	Documentation available to classification Surveyor during construction	Documentation for ship construction file	Specific activities	Classification Society proposals for the project
1.5 <u>(2021)</u>	Welding – embedded discontinuities	NDE NDT is to be carried out by qualified operators capable of ensuring that welds are substantially free from significant indications.	Radiography and ultrasonic testing, review of documents and patrol of operator, examination of films	UR W33, Rec 20 and 47		Shipbuilders and recognised standards and Rules as applicable, welding and NDE NDT plans, NDE NDT reports, operator qualifications	Not required	Identify workstations where NDE NDT is carried out, e.g. panel line butt welds, castings into hull structure	
								Verify NDE NDT carried out in accordance with approved plans where applicable	
								Verify suitability of NDE NDT methods	
								Verify operators suitably qualified particularly where sub-contractors have been employed	
								Verify that records have been completed and in accordance with recognised standards, e.g. IQI(Image Qualify Indicator) and sensitivity recorded	
								Verify that reports and radiographs have been evaluated correctly by the shipbuilder. Systematic review of radiographs carried out by the Surveyor	
								Verify equipment calibration satisfactory and in accordance with manufacturers and recognised standards requirements	
								Verify NDE NDT is carried out according to the acceptable process	

- reflected to Table 1, 1.5 of IACS UR Z23 (Rev.7 Oct 2020)

: the term “Rec. 20” & “NDT” to be replaced with “UR W33” & “NDE” respectively

Amendment

Note

Table 1 Surveyable Items Activities Table									
Reference	Shipbuilding function	Survey Requirements for Classification	Survey Method required for Classification	IACS reference*	Statutory requirements and relevant reference	Documentation available to classification Surveyor during construction	Documentation for ship construction file	Specific activities	Classification Society proposals for the project
	Safety Construction certification	No outstanding imperfections or defects	Witness		Reg. 1/7 or Reg. 1/10 of SOLAS as amended, as appropriate			Verify that Administration requirements have been incorporated into the hull structure	
	<newly added>								

- reflected to Table 1, 8.6 of IACS UR Z23 (Rev.7 Oct 2020)

: to add the requirements for watertight cable transit seal systems

Amendment

Note

Table 1 Surveyable Items Activities Table									
Reference	Shipbuilding function	Survey Requirements for Classification	Survey Method required for Classification	IACS reference*	Statutory requirements and relevant reference	Documentation available to classification Surveyor during construction	Documentation for ship construction file	Specific activities	Classification Society proposals for the project
	Safety Construction certification	No outstanding imperfections or defects	Witness		Reg. I/7 or Reg. I/10 of SOLAS as amended, as appropriate			Verify that Administration requirements have been incorporated into the hull structure	
8.6 (2021)	watertight cable transit seal systems	compliance with approved drawings, visual examination of fitting, check alignment and securing	patrol of the process and witness of the completed item		Reg. II-1/13 and 13-1 of SOLAS as amended	shipbuilder's inspection records, manufacturer's specification	Cable Transit Seal Systems Register	Verify that correct welding and fit up requirements, including as specified in reference 1, 2.4 and 2.5 of this table have been adopted Verify watertight cable transit seal systems are type approved Verify the format and content of the Register	

- reflected to Table 1, 8.6 of IACS UR Z23 (Rev.7 Oct 2020)

: to add the requirements for watertight cable transit seal systems

Present	Amendment	Note
<p>Appendix 1-12-2 Requirements for Tankers and Bulk Carriers subject to SOLAS Ch II-1 Pt A-1 Reg.3-10(Goal-based ship construction standards for bulk carriers and oil tankers)</p> <p>1. ~ 2. <omitted></p> <p>3. Ship Construction File(SCF)</p> <p>3.1 A Ship Construction File(SCF) with specific information on how the functional requirements of the Goal-based Ship Construction Standards for Bulk Carriers and Oil Tankers have been applied in the ship design and construction is to be provided upon delivery of a new ship, and kept on board the ship and/or ashore and updated as appropriate throughout the ship's service. The contents of the Ship Construction File are to conform to the requirements below.</p> <p>3.1.1 The following design specific information is to be included in the Ship Construction File(SCF):</p> <p>.1 ~ 8. <omitted></p> <p>.9 Details of equipment forming part of the watertight and weather tight integrity of the ship. <newly added></p> <p><hereafter, omitted></p>	<p>Appendix 1-12-2 Requirements for Tankers and Bulk Carriers subject to SOLAS Ch II-1 Pt A-1 Reg.3-10(Goal-based ship construction standards for bulk carriers and oil tankers)</p> <p>1. ~ 2. <same as the current Guidances></p> <p>3. Ship Construction File(SCF)</p> <p>3.1 A Ship Construction File(SCF) with specific information on how the functional requirements of the Goal-based Ship Construction Standards for Bulk Carriers and Oil Tankers have been applied in the ship design and construction is to be provided upon delivery of a new ship, and kept on board the ship and/or ashore and updated as appropriate throughout the ship's service. The contents of the Ship Construction File are to conform to the requirements below.</p> <p>3.1.1 The following design specific information is to be included in the Ship Construction File(SCF):</p> <p>.1 ~ 8. <same as the current Guidances></p> <p>.9 Details of equipment forming part of the watertight and weather tight integrity of the ship.</p> <p>.9.1 A Cable Transit Seal Systems Register, to be prepared by the shipbuilder for watertight cable transits. The Register can be in either a hard copy or digitized media. For an example of a register see Appendix 1-12-4 "Recommendatory Sample - Cable Transit Seal Systems Register". It is to include a marking /identification system, documentation referencing manufacturer manual(s) for each type of cable transit installed, the Type Approval certification for each type of transit system, applicable installation drawings, and a recording of each installed transit documenting the as built condition after final inspection in the shipyard. This is to include sections to record any inspection, modification, repair and maintenance. (2021)</p> <p><hereafter, same as the current Guidances></p>	<p>- reflected to Appendix 2, 3.1.1.9.1 of IACS UR Z23 (Rev.7 Oct 2020)</p> <p>A global unified standard is required to improve the installation & maintenance of Pressure-Rated MCT / Transit systems.</p> <p>In order to properly maintain Ship structures and promote vessel safety during water ingress a better method is necessary to document and manage installation, maintenance, and repair of MCT/ Transit systems.</p>

Amendment

Note

Appendix 1-12-4 Recommendatory Sample - Cable Transit Seal System Register (2021)

Name of Ship: Sample

IMO No: 12345

Place: Hamburg

Date: XX/XX/2017

Inspected by: Smith

Transits 4
Total Openings 4

TRANSIT			Inspected side		BRAND	FRAME	Type Approved	CONDITION(G, F, P)	INSPECTED	REPAIRED	MODIFIED	MAINTAINED	Checked by	DATE
Drawing number	ID	Location	F	B										
GIA-07-1047-000-883	TT-MCT-011	-	-	-	C	d= 50	x	-	-	-	-	-	NVD	PTO 2015-02-26
GIA-07-1047-000-883	TT-MCT-012	-	-	-	C	450x200	x	-	-	-	-	-	NVD	PTO 2015-02-26
GIA-07-1047-000-883	TT-MCT-013	-	-	-	C	550x200	x	-	-	-	-	-	NVD	PTO 2015-02-26
GIA-07-1047-000-883	TT-MCT-014	-	-	-	C	750x200	x	-	-	-	-	-	Open, drilled hole not closed	PTO 2015-02-26

NOTES:
 C = Compound (not known brand)
 R = Smith Blocks
 B = MCT Williams
 H = Heavy corrosion
 N = Nelson, Terasaki
 MB = Mixed brands
 MM = Mixed module sizes
 NVD = No Visible Defects
 CPA = Checkpoints rectangular frames
 CPB = Checkpoints round frames

- reflected to Appendix 3 of IACS UR Z23 (Rev.7 Oct 2020)

: to add the sample of Cable Transit Seal System Register