2nd in 2025

Editorial Correction for Technical Rules and Guidance

Issued on 25 December 2025

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About this document:

This document is a compilation of corrections of editorial corrections of the Society's Technical Rules.

Errata in this document refer to corrections that do not change the requirements, intent, or technical background of the requirements specified in the rules and guidance, e.g., correction of typographical errors or references.

Content:

Rules for the Audit and Registration of Safety Management Systems Chapter 5 5.5-1

Correction	Present	Note
1 Ships laid-up are not subject to Initial Audits specified in **5.1** and Periodical Audits specified in **5.~~5~~3**.	**1** Ships laid-up are not subject to Initial Audits specified in **5.1** and Periodical Audits specified in **5.5**.	Reference correction

Rules for the Audit and Registration of Safety Management Systems Chapter 5 5.5-2

Correction	Present	Note
2 When the ships laid-up are about to be re-entering service, the following audits are to be carried out. (1) The ships which have valid Interim SMC before lay-up (a) In the case where the laid-up period is within 3 *months*, any audits are not required. However, in the case where Interim SMC has become invalid while the ship was laid-up, the Audit for Issuing an Interim SMC is to be carried out. (b) In the case where the lay-up period is more than 3 *months*, the Audit for Issuing an Interim SMC is to be carried out. (2) The ships which have valid SMC before they become laid-up (a) In the case where the lay-up period is within 6 *months* and the due dates for Periodical Audits has not transpired while the ship was laid-up, in ~~principal~~principle, any audits are not required and the kind of Periodical Audit and the due date shall be kept as assigned before. (b) In the case where the lay-up period is within 6 *months* and the due date for Periodical Audit has transpired while the ship was laid-up, in ~~principal~~principle, the Periodical Audit whose due date has transpired is to be carried out. However, in the case where that kind of Periodical Audit is Intermediate Audit, either	**2** When the ships laid-up are about to be re-entering service, the following audits are to be carried out. (1) The ships which have valid Interim SMC before lay-up (a) In the case where the laid-up period is within 3 *months*, any audits are not required. However, in the case where Interim SMC has become invalid while the ship was laid-up, the Audit for Issuing an Interim SMC is to be carried out. (b) In the case where the lay-up period is more than 3 *months*, the Audit for Issuing an Interim SMC is to be carried out. (2) The ships which have valid SMC before they become laid-up (a) In the case where the lay-up period is within 6 *months* and the due dates for Periodical Audits has not transpired while the ship was laid-up, in principal, any audits are not required and the kind of Periodical Audit and the due date shall be kept as assigned before. (b) In the case where the lay-up period is within 6 *months* and the due date for Periodical Audit has transpired while the ship was laid-up, in principal, the Periodical Audit whose due date has transpired is to be carried out. However, in the case where that kind of Periodical Audit is Intermediate Audit, either Intermediate Audit or	Wording correction Wording correction

Intermediate Audit or Renewal Audit shall be carried out. Then, in the case where the Intermediate Audit is carried out, next audit shall be Renewal Audit and the due date shall be kept as assigned before.	Renewal Audit shall be carried out. Then, in the case where the Intermediate Audit is carried out, next audit shall be Renewal Audit and the due date shall be kept as assigned before.	
(c) In the case where the lay-up period is more than 6 *months*, in ~~principal~~principle, the Audit for Issuing an Interim SMC is to be carried out.	(c) In the case where the lay-up period is more than 6 *months*, in principal, the Audit for Issuing an Interim SMC is to be carried out.	Wording correction

Rules for the Audit and Registration of Ship Security Management Systems Chapter 3 3.6-2

Correction	Present	Note
2 When the ships laid-up are about to be re-entering service, the following audits are to be carried out.	**2** When the ships laid-up are about to be re-entering service, the following audits are to be carried out.	
(1) The ships which have valid Interim ISSC before lay-up	(1) The ships which have valid Interim ISSC before lay-up	
(a) In the case where the lay-up period is within 3 *months*, any audits are not required. However, in the case where Interim ISSC has become invalid while the ship was laid-up, the Audit for Issuing an Interim ISSC is to be carried out.	(a) In the case where the lay-up period is within 3 *months*, any audits are not required. However, in the case where Interim ISSC has become invalid while the ship was laid-up, the Audit for Issuing an Interim ISSC is to be carried out.	
(b) In the case where the lay-up period is more than 3 *months*, the Audit for Issuing an Interim ISSC is to be carried out.	(b) In the case where the lay-up period is more than 3 *months*, the Audit for Issuing an Interim ISSC is to be carried out.	
(2) The ships which have valid ISSC before lay-up	(2) The ships which have valid ISSC before lay-up	
(a) In the case where the lay-up period is within 6 *months* and the due dates for Periodical Audits has not transpired while the ship was laid-up, in ~~principal~~principle, any audits are not required and the kind of Periodical Audit and the due date shall be kept as assigned before.	(a) In the case where the lay-up period is within 6 *months* and the due dates for Periodical Audits has not transpired while the ship was laid-up, in principal, any audits are not required and the kind of Periodical Audit and the due date shall be kept as assigned before.	Wording correction
(b) In the case where the lay-up period is within 6 *months* and the due date for Periodical Audit has transpired while the ship was laid-up, in ~~principal~~principle, the Periodical Audit whose due date has transpired is to be carried out. However, in the case where that kind of Periodical Audit is Intermediate Audit, either Intermediate Audit or Renewal Audit shall be carried out. Then, in the case where the Intermediate Audit is carried out, next audit shall be Renewal Audit and the due date shall be kept as assigned before.	(b) In the case where the lay-up period is within 6 *months* and the due date for Periodical Audit has transpired while the ship was laid-up, in principal, the Periodical Audit whose due date has transpired is to be carried out. However, in the case where that kind of Periodical Audit is Intermediate Audit, either Intermediate Audit or Renewal Audit shall be carried out. Then, in the case where the Intermediate Audit is carried out, next audit shall be Renewal Audit and the due date shall be kept as assigned before.	Wording correction
(c) In the case where the lay-up period is more than	(c) In the case where the lay-up period is more than	

6 *months*, in ~~principal~~principle, the Audit for Issuing an Interim ISSC is to be carried out.	6 *months*, in principal, the Audit for Issuing an Interim ISSC is to be carried out.	Wording correction

Rules for the survey and construction of steel ships Part A Chapter 2 2.1.20

Correction	Present	Note
The enclosed superstructure is the superstructure complying with the following conditions: (1) Access openings in the end bulkheads of the superstructure are provided with doors complying with the requirements in ~~18~~11.3.2.6, Part 1, Part C of the rules. (2) All other openings in side or end bulkheads of the superstructure are provided with efficient weathertight means of closing. (3) A means of access for the crew to reach machinery and other working spaces within a bridge or poop starting from any point on the uppermost complete exposed deck or higher is available at all times even when bulkhead openings are closed.	The enclosed superstructure is the superstructure complying with the following conditions: (1) Access openings in the end bulkheads of the superstructure are provided with doors complying with the requirements in 18.3.1, Part C of the rules. (2) All other openings in side or end bulkheads of the superstructure are provided with efficient weathertight means of closing. (3) A means of access for the crew to reach machinery and other working spaces within a bridge or poop starting from any point on the uppermost complete exposed deck or higher is available at all times even when bulkhead openings are closed.	Reference correction

Rules for the survey and construction of steel ships Part B Chapter 1 1.1.3-1

Correction	Present	Note
1 Periodical Surveys are to be carried out in accordance with the requirements specified in **(1)** through **(6)** below. (1) Annual Surveys Annual Surveys are to be carried out within three *months* before or after each anniversary date. (2) Intermediate Surveys Intermediate Surveys are to be carried out as specified in **(a)** or **(b)** below. Annual Surveys are not required to be carried out when an Intermediate Survey is carried out. (a) Intermediate Surveys are to be carried out at the time of the second or third Annual Survey after the Classification Survey during Construction or a Special Survey; or (b) In lieu of **(a)** above, Intermediate Surveys for cargo ships over 10 *years* of age may be commenced at any time between the second and third Annual Surveys and be completed at the time of the second or third Annual Survey. (3) Special Surveys Special Surveys are to be carried out as specified in **(a)** and **(b)** below. (a) Special Surveys are to be carried out within 3 *months* before the date of expiry of the *Certificate of Classification*; (b) Special Surveys may be commenced at or after the 4th Annual Survey and be completed within 3 *months* before the date of expiry of the *Certificate of Classification*~~; or~~. (Omitted)	**1** Periodical Surveys are to be carried out in accordance with the requirements specified in **(1)** through **(6)** below. (1) Annual Surveys Annual Surveys are to be carried out within three *months* before or after each anniversary date. (2) Intermediate Surveys Intermediate Surveys are to be carried out as specified in **(a)** or **(b)** below. Annual Surveys are not required to be carried out when an Intermediate Survey is carried out. (a) Intermediate Surveys are to be carried out at the time of the second or third Annual Survey after the Classification Survey during Construction or a Special Survey; or (b) In lieu of **(a)** above, Intermediate Surveys for cargo ships over 10 *years* of age may be commenced at any time between the second and third Annual Surveys and be completed at the time of the second or third Annual Survey. (3) Special Surveys Special Surveys are to be carried out as specified in **(a)** and **(b)** below. (a) Special Surveys are to be carried out within 3 *months* before the date of expiry of the *Certificate of Classification*; (b) Special Surveys may be commenced at or after the 4th Annual Survey and be completed within 3 *months* before the date of expiry of the *Certificate of Classification* ; or (Omitted)	Wording correction

Rules for the survey and construction of steel ships Part B Chapter 1 1.1.7-1

Correction	Present	Note
1 For ships which are applicable to **Chapter 31B, Part C** (Requirements related to **Chapter 31B, Part C** specified in this Chapter are those which are applied to ships which have been contracted for construction prior to 1 July 2023), continuing compliance with ~~**An3**~~**31B.3** and ~~**An**~~**31B.5, ~~Annex 1.1, Part 2-2,~~ Part C** is to be verified at Special Surveys and Intermediate Surveys (for ships over 10 years of age). For this purpose, the thickness measurements as deemed appropriate by the Society are to be carried out for the vertical corrugated watertight bulkhead abaft the foremost hold, in addition to those according to **Table B5.15**.	**1** For ships which are applicable to **Chapter 31B** (Requirements related to **Chapter 31B** specified in this Chapter are those which are applied to ships which have been contracted for construction prior to 1 July 2023), continuing compliance with **An3** and **An.5, Annex 1.1, Part 2-2, Part C** is to be verified at Special Surveys and Intermediate Surveys (for ships over 10 years of age). For this purpose, the thickness measurements as deemed appropriate by the Society are to be carried out for the vertical corrugated watertight bulkhead abaft the foremost hold, in addition to those according to **Table B5.15**.	Reference correction Reference correction

Rules for the survey and construction of steel ships Part B Chapter 1 1.1.8-2

Correction	Present	Note
2 When laid-up ships are about to be re-entering service, the following surveys and surveys for specific matters which have been postponed due to being laid-up, if any, are to be carried out. (1) If the due dates for Periodical Surveys or Planned Machinery Surveys have not transpired while the ship was laid-up, then surveys equivalent to the Annual Surveys specified in **Chapter 3**, corresponding to the age of the ship, are to be carried out. (2) If the due dates for Periodical Surveys or Planned Machinery Surveys have transpired while the ship was laid-up, then these Periodical Surveys or Planned Machinery Surveys are, in ~~principal~~principle, to be carried out. However, where two or more kinds of Periodical Surveys are due, only the superlative survey may be carried out.	**2** When laid-up ships are about to be re-entering service, the following surveys and surveys for specific matters which have been postponed due to being laid-up, if any, are to be carried out. (1) If the due dates for Periodical Surveys or Planned Machinery Surveys have not transpired while the ship was laid-up, then surveys equivalent to the Annual Surveys specified in **Chapter 3**, corresponding to the age of the ship, are to be carried out. (2) If the due dates for Periodical Surveys or Planned Machinery Surveys have transpired while the ship was laid-up, then these Periodical Surveys or Planned Machinery Surveys are, in principal, to be carried out. However, where two or more kinds of Periodical Surveys are due, only the superlative survey may be carried out.	Wording correction

Rules for the survey and construction of steel ships Part B Chapter 2 Table B2.1 46

Correction

Table B2.1 Plans and Documents – Hull (General)

Name*1	Notes	Submission			Maintained On Board		
		Approval	Other	Finished Plans (Submission)	Finished Plans (On Board)	Ship Construction File: Ships engaged in international voyages	Ship Construction File: Ships subject to *SOLAS* Chapter II-1 Regulation 3-10
(Omitted)							
46 Stability information booklets	(1) As specified in Annex U1.2.1 "Guidance for Stability Information for Master". (2) Booklets are to be prepared in accordance with the following **(a)** to **(c)**. (a) For ships complying with **Part U of the Rules**, booklets are to be prepared in accordance with **(1)** above. (b) For ships other than **(a)** above that comply with the International Convention on Load Lines, 1966 (hereinafter referred to as "*ILLC*"), booklets are to be prepared in a format approved by the Society. (c) For ships other than **(1)** and **(2)** above, booklets are to be prepared as deemed appropriate by the Society. (3) Booklets for ships subject to **Part U of the Rules**, are to be submitted to the Society in consideration of the timing of stability experiments and delivery. It is recommended that booklets based on assumed values be submitted to the Head Office of the Society for preliminary examination as early as possible before stability experiments.	○			○*2	○	○
(Omitted)							

Notes

*1 : For ships of not less than 500 *gross tonnage* engaged in international voyages, it is recommended submitted pans and documents be marked with *IMO* ship identification numbers.

*2 : Plans and documents plans approved by the Society or copies thereto.

Present

Note

Wording correction

Wording correction

Rules for the survey and construction of steel ships Part B Chapter 2 Table B2.7

<table>
<tr><th>Correction</th><th>Present</th><th>Note</th></tr>
<tr><td colspan="2">Table B2.7 Survey - Hull and Equipment
<table>
<tr><th>Survey Item</th><th>Details</th></tr>
<tr><td>1 Materials, equipments and weldings</td><td>(1) Tests are carried out in accordance with Part K, Part L and Part M of the Rules.
(2) Materials, equipment and welded parts not manufactured at the shipyard are to be confirmed to be suitable for use on board the ship.
(3) ~~Survey~~The Society may approve other survey methods considered to be sufficient for obtaining information equivalent to that obtained through traditional ordinary surveys where a surveyor is in attendance.</td></tr>
<tr><td colspan="2">(Omitted)</td></tr>
<tr><td>9 Load lines, freeboard marks and ship identification numbers</td><td>(1) Load lines are located at appropriate positions.
(2) Freeboard mark is located at an appropriate position.
(3) Ship’s identification number is located at an appropriate position.</td></tr>
<tr><td>10 Airtight tests (including leakage and hose tests), hydrostatic tests, watertight tests</td><td>(1) The watertightness and structural adequacy of tanks and watertight boundaries as well as the weathertightness of other structures and shipboard outfittings are verified in accordance with the following (a) to (d).
(a) The tests specified in SOLAS Chapter II-1 Regulation 11 are carried out for ships subject to SOLAS Convention, except where specially approved by the Administration.
(b) The tests specified in Chapter 1, Annex 2.1.5 “Testing Procedures of Watertight Compartments”, Part B of the Rules are carried out for ships subject to SOLAS Convention, except in the case of the following (c).
(c) The tests specified in Chapter 2, Annex 2.1.5 “Testing Procedures of Watertight Compartments”, Part B of the Rules are carried out for ships subject to SOLAS Convention satisfying the following i) and ii).
i) The shipyard provides documentary evidence of the shipowner’s agreement to request a Flag Administration exemption from the application of SOLAS Chapter II-1, Regulation 11, or for an equivalency agreeing that the content of Chapter 2, Annex 2.1.5 “Testing Procedures of Watertight Compartments”, Part B of the Rules is equivalent to SOLAS Chapter II-1, Regulation 11.
ii) The exemption/equivalency specified in i) above has been granted by the responsible Flag Administration.
(d) The tests specified in Chapter 3, Annex 2.1.5 “Testing Procedures of Watertight Compartments”, Part B of the Rules are carried out for ships not subject to SOLAS Convention.
(2) Relevant tests specified in Part D of the Rules are carried out for pipes.</td></tr>
</table></td><td></td><td>Wording correction</td></tr>
</table>

	11 Bottom parts before launching	(1) The condition of the underwater parts of bottom parts is appropriate. (2) Construction and arrangements for in-water surveys are appropriately provided for ships subject to **6.1.2, Part B of the Rules**.		
	(Omitted)			

Rules for the survey and construction of steel ships Part B Chapter 2 Table B2.8

Table B2.8 Survey - Machinery and Electrical Installations*1

Survey Items	Details	Note
(Omitted)		
5 Main parts of machinery and materials	(1) The tests of materials of main parts of machinery specified in **Part K of the Rules** are to be carried out. (2) The tests specified in either **Part D** or **Part H of the Rules** (according to the kind of machinery) are to be carried out. (3) For the tests specified **(1)** and **(2)** in above, the Society may approve other survey methods which are considered to be able to obtain information equivalent to that obtained through traditional ordinary surveys where a surveyor is in attendance. (4) The machining condition of main parts is to be appropriate. Confirmation at appropriate stages during machining may be required. (5) For welded construction, the welding is appropriate and there are no serious defects. The welding is to be confirmed before commenced and when completed.	Wording correction
(Omitted)		
16 Incinerators	(1) Operation tests of the safety devices and the alarm devices ~~specified~~ as well as the burning tests specified in **9.13.5, Part D of the Rules** are to be carried out.	Wording correction
(Omitted)		

Notes

*1 : This item may be carried out during sea trials.

*2 : During the tests, it is to be ascertained that voltage drops of feeder circuits do not exceed the values specified in **2.9.6 , Part H of the Rules**.

Rules for the survey and construction of steel ships Part B Chapter 2 Table B2.11

Table B2.11 Survey – Sea Trials *1

Test Items	Details
(Omitted)	
4 Steering tests	

	-1. For ships with propeller propulsion	(1) During steering tests, the steering capabilities required by **15.2.2** and **15.2.3, Part R of the Rules** are to be confirmed. Where it is impractical to perform tests with ships at their deepest seagoing draughts and running ahead at speeds corresponding to the number of maximum continuous revolutions of main engines and maximum design pitches, ships may demonstrate their steering capabilities in accordance with the one of the following **(a)** to **(c)** items. (a) During sea trials, the ship is to be at even keel with its rudder fully submerged while running ahead at a speed corresponding to the number of maximum continuous revolutions of the main engine and maximum design pitch (in the case of the auxiliary steering gear, one half of this speed or 7 *knots*, whichever is greater). Where the rudder cannot be fully submerged at even keel, the draught that the rudder is fully submerged (at zero speed waterline) in which the ship is in an acceptable trim condition may be accepted. (b) Where full rudder immersion during sea trials cannot be achieved, an appropriate ahead speed is to be calculated using the submerged rudder blade area in the proposed sea trial loading condition. The calculated ahead speed is to result in a force and torque applied to the main steering gear which is at least as great as if it was being tested with the ship at its deepest seagoing draught and running ahead at the speed corresponding to the number of maximum continuous revolutions of the main engine and maximum design pitch (in case of the auxiliary steering gear, one half of this speed or 7 *knots*, whichever is greater). (c) The rudder force and torque at the sea trial loading condition have been reliably predicted and extrapolated to the full load condition[*2]. The speed of the ship is to correspond to the number of maximum continuous revolutions of the main engine and maximum design pitch of the propeller (in the case of the auxiliary steering gear, one half of this speed or 7 *knots*, whichever is greater). (2) Running tests of power units, including transfer between power units, are to be carried out. (3) Isolation tests of one hydraulic actuating system, including checking the time for regaining steering capability, are to be carried out. (4) Tests of hydraulic fluid recharging systems are to be carried out. (5) Tests of the emergency power supplies specified by **15.2.6, Part D of the Rules** are to be carried out. (6) Operation tests of controls, including change-overs between two control systems, change-overs between the control systems and controllers provided in steering gear compartments, and change-overs between automatic steering and manual steering are to be carried out. (7) Function tests of alarm indicators, rudder angle indicators and power units required by		

		Chapter 15, Part D of the Rules are to be carried out. (8) Function tests of power failure indicators and overcurrent alarms, operating conditions of electric motors, and relief valves for preventing overpressure are to be carried out. (9) Function tests of the rudder stoppers specified in **15.2.6, Part D of the Rules** are to be carried out. (10) Where steering gear is designed to avoid hydraulic locking, demonstrations of this feature are to be carried out.		
	-2. For waterjet propulsion systems	(1) Tests of the steering capabilities specified in **19.5.1, Part D of the Rules** are to be carried out. (2) Operation tests of steering system controls, including tests on change-overs of control systems between navigation bridges and auxiliary steering stations, and change-overs between manual steering and automatic steering are to be carried out, if provided. (3) Tests on measures for maintaining power supplies and on the alternative source of power required by **19.6.2 Part D of the Rules** are to be carried out. (4) Tests on the functioning of relief valves for preventing over-pressure are to be carried out. (5) Tests on the functioning of alarm and safety devices, and indication devices for deflector positions, reverser positions and impeller speed, and running indicators of electric motors for steering actuating systems are to be carried out. (6) Tests on the functioning of stoppers for ~~reversers~~deflectors are to be carried out.		Wording correction
	-3. For azimuth thrusters	(1) Tests on the steering capability specified in **20.5.1, Part D of the Rules** are to be carried out. (2) Operation tests of steering system controls, including tests on change-overs of control systems between navigation bridges and azimuth thruster compartments, and change-overs between manual steering and automatic steering are to be carried out, if provided. (3) Tests on measures for maintaining power supplies and on the alternative sources of power required by **20.6.2, Part D of the Rules** are to be carried out. (4) Tests on the functioning of relief valves for preventing overpressure are to be carried out. (5) Tests on the functioning of alarm and safety devices as well as indication devices for azimuth angles, propeller speeds and directions of rotation and pitch positions, and running indicators of electric motors for azimuth steering gear are to be carried out.		
	(Omitted)			

	13 Other tests where deemed necessary by the Society	(1) For ships having multiple propellers or multiple main engines, sea trials are to be carried out under the assumption that one propeller or engine is inoperable due to failure to confirm that the ship can be maneuvered properly in that condition. (2) For propulsion gears for which the total face width (in case of double helical gears, the central gap is included) exceeds 300 *mm* or for which the ratio of the total face width to pitch circle diameter of the pinion exceeds 2, contact markings of the teeth are to be confirmed by thinly and uniformly coating tooth flanks with suitable paint. (3) Performance tests of supplementary means for manoeuvring or stopping are to be carried out when provided. (4) Open-up inspections of cylinders may be required after sea trials when considered necessary by the Society. (5) Sea trials for ships with electrical propulsion plants are to be carried out in accordance with test procedures deemed appropriate by the Society. For tests of ship manoeuvrability, refer to the test procedures specified in **Annex 2.3.1-1, Part B of the Rules**. (6) In addition to the tests specified in item 5, **Table B2.~~12~~11, Part B of the Rules** the Society may require other tests found in *JIS F* 0801 “Test Code of Propelling Machinery at Sea Trials” or other documents considered equivalent thereto. (7) For ships carrying liquefied gases in bulk, ships carrying dangerous chemicals in bulk and other ships whose length is not less than 100 *m*, sea trials to ascertain initial turning ability, yaw, and course keeping abilities are to be carried out. However, such tests need not be carried out for ships whose manoeuvring characteristics are confirmed by sufficient data on the ship and test type as well as information from sources such as the sea trials of sister ships and model tests. For other ships, such tests are recommended. (8) For ships having exhaust gas recirculation systems, running tests of engines are to be carried out with exhaust gas recirculation systems in operation, and the satisfactory operation of the engine and exhaust gas recirculation system is to be confirmed.		Reference correction
	Notes (Omitted)			

Rules for the survey and construction of steel ships Part B Chapter 3 Table B3.4

<table>
<tr><th>Correction</th><th>Present</th><th>Note</th></tr>
<tr><td colspan="2">
Table B3.4 Internal Examinations of Spaces and Tanks
<table>
<tr><th>Items</th><th>Examination</th></tr>
<tr><td colspan="2">(Omitted)</td></tr>
<tr><td colspan="2">Requirements for General Dry Cargo Ships of not less than 500 gross tonnage</td></tr>
<tr><td>1 Engine room and boiler room</td><td>(1) An internal examination is to be carried out.</td></tr>
<tr><td>2 Ballast tanks</td><td>(1) For general dry cargo ships over 5 years of age, an internal examination of the tank(s), of which an internal examination is required as a consequence of the last Intermediate Survey or Special Survey, is to be carried out.</td></tr>
<tr><td>3 Cargo holds</td><td>(1) For general dry cargo ships carrying timber cargoes over 5 years and up to 10 years of age, an internal examination of all cargo holds is to be carried out to check the condition of lower part of hold frames, lower brackets and lower part of transverse bulkheads.
(~~1~~2) For general dry cargo ships over 10 years and up to 15 years of age, an internal examination of one forward and one after cargo hold (all cargo holds for ships carrying timber cargoes) and their associated tween deck spaces is to be carried out.
(~~1~~3) For general dry cargo ships over 15 years of age, an internal examination of all cargo holds and their associated tween deck spaces is to be carried out.</td></tr>
</table>
Note:
*1: For bulk carriers with hybrid cargo hold arrangements, e.g. with some cargo holds of single side skin and others of double side skin, the Requirements for Double Skin Bulk Carriers are to apply to cargo holds of double side skin and associated wing spaces.
</td><td>Wording correction

Wording correction</td></tr>
</table>

Rules for the survey and construction of steel ships Part B Chapter 3 Table B3.5

Correction

Table B3.5 Close-up Surveys

Items	Examinations
Requirements for Cargo Ships except when specified otherwise	
1 Bow doors, inner doors, side shell doors and stern doors	(1) Close-up surveys of securing, supporting and locking devices, together with welded parts, are to be carried out.
Requirements for Bulk Carriers other than Double Skin Bulk Carriers[*1]	
1 Hatch covers and hatch coamings	(1) Close-up survey of hatch cover plating and hatch coaming plating and their stiffeners is to be carried out.
2 Structural members in cargo holds	(1) For bulk carriers over 10 *years* but not more than 15 *years* of age, a close-up survey of sufficient extent (i.e. a minimum of 25% of the frames) is to be carried out, to establish the condition of the lower region of the side frames including approximately the lower one third length of the frames at side shell and side frame end attachment and the adjacent shell plating in the forward cargo hold. (2) For bulk carriers over 15 *years* of age, a close-up survey of sufficient extent (i.e. a minimum of 25% of the frames) is to be carried out, to establish the condition of the lower region of the shell frames including approximately the lower one third length of the frames at side shell and side frame end attachment and the adjacent shell plating in the forward cargo hold and one other selected cargo hold. (3) Where this level of survey reveals the need for remedial measures, the survey is to be extended to include a close-up survey of all of the shell frames and adjacent shell plating of that cargo hold as well as a close-up survey of sufficient extent (i.e. a minimum of 25% of the frames) of all remaining cargo holds.
Requirements for Double Skin Bulk Carriers	
1 Hatch covers and hatch coamings	(1) Close-up survey of hatch cover plating and hatch coaming plating and their stiffeners is to be carried out.
Requirements for General Dry Cargo Ships of not less than 500 *gross tonnage*	
1 Hatch covers and hatch coamings	(1) Close-up survey of hatch cover plating and hatch coaming plating and their stiffeners is to be carried out.

Present

Note

Wording correction

	2 Cargo hold frames	(1) For general dry cargo ships carrying timber cargoes over 5 *years* and up to 15 *years* of age, the extent of survey is to be increased to the satisfaction of the Surveyor where deemed necessary by the Surveyor as a consequence of the survey carried out in accordance with **Table B3.4**. (2) For general dry cargo ships over 15 *years* of age, a close-up survey of sufficient extent (i.e. a minimum of 25% of the frames) is to be carried out, to establish the condition of the lower region of the shell frames including approximately the lower one third length of the frames at side shell and side frame end attachment and the adjacent shell plating in the forward cargo hold (the forward lower cargo hold in the case of tween deck spaces) and one other selected cargo hold (one other selected lower cargo hold in the case of tween deck spaces). (3) Where this level of survey reveals the need for remedial measures, the survey is to be extended to include a close-up survey of all of the shell frames and adjacent shell plating of those cargo holds and associated tween deck spaces (as applicable) as well as a close-up survey of sufficient extent of all remaining cargo holds and tween deck spaces (as applicable).		

Note:

*1: For bulk carriers with hybrid cargo hold arrangements, e.g. with some cargo holds of single side skin and others of double side skin, the Requirements for Double Skin Bulk Carriers are to apply to cargo holds of double side skin and associated wing spaces.

Rules for the survey and construction of steel ships Part B Chapter 3 Table B3.8

Correction	Present	Note
Table B3.8 Additional Requirements for Tankers, Ships Carrying Liquefied Gases in Bulk and Ships Carrying Dangerous Chemicals in Bulk		

Items	Examinations
(Omitted)	

	5 Inert gas systems	(1) Inert gas systems installed in accordance with **4.5.5, Part R**, are to be subjected to the following general examinations and operation tests. After completion of these examinations and tests, when practicable, the proper operation of the inert gas system is to be checked. Other inert gas systems are to be examined as deemed appropriate by the Society. (a) Examining externally for any sign of gas or effluent leakage (b) Confirming the proper operation of both inert gas blowers (c) Observing the operation of the scrubber-room ventilation system (d) Checking the deck water seal for automatic filling and draining (e) Examining the operation of all remotely operated or automatically controlled valves and, in particular, the flue gas isolating valves (f) Observing a test of the interlocking feature of soot blowers (g) Observing that the gas pressure regulating valve automatically closes when the inert gas blowers are secured (h) Checking, as far as practicable, the following alarms and safety devices of the inert gas system using simulated conditions where necessary: ● i) High oxygen content of gas in the inert gas main ● ii) Low gas pressure in the inert gas main ● iii) Low pressure in the supply to the deck water seal ● iv) High temperature of gas in the inert gas main ● v) Low water pressure or low water-flow rate ● vi) Accuracy of portable and fixed oxygen-measuring equipment by means of calibration gas ● vii) High water level in the scrubber ● viii) Failure of the inert gas blowers ● ix) Failure of the power supply to the automatic control system for the gas regulating valve ~~and to the instrumentation for continuous indication and permanent recording of pressure and oxygen content in the inert gas main~~ ● x) Failure of the power supply to the instrumentation for continuous indication and permanent recording of pressure and oxygen content in the inert gas main ● xi) High pressure of gas in the inert gas main		Wording correction
	(Omitted)			

Rules for the survey and construction of steel ships Part B Chapter 3 Table B3.11

<table>
<tr><th>Correction</th><th>Present</th><th>Note</th></tr>
<tr><td colspan="2">
Table B3.11 Special Requirements for Ships Using Low-flashpoint Fuels
<table>
<tr><th>Items</th><th>Examinations</th></tr>
<tr><td>1 Fuel containment systems[*1]</td><td>(1) The following (a) to (i) are to be carried out, so far as applicable.
(a) External examination of the storage tanks including secondary barrier if fitted and accessible
(b) General examination of the fuel storage hold ~~place~~spaces
(c) Internal examination of tank connection space
(d) External examination of tank and relief valves
(e) Verification of satisfactory operation of tank monitoring system
(f) Examination and testing of installed bilge alarms and means of drainage of the compartment
(g) Examination of the general condition of the thermal insulation of fuel storage tanks and secondary barriers as far as accessible
(h) Examination of the general condition of the sealing arrangements for fuel storage tanks or tank covers penetrating decks as far as accessible
(i) At the first Annual Survey after delivery, the examinations specified in (1)(a) and (b) of item 1 and item 2 of Table B5.29 as well as an examination of the general condition of the fuel storage tank connection to the hull are to be carried out when deemed necessary by the Surveyor.</td></tr>
<tr><td colspan="2">(Omitted)</td></tr>
</table>
Notes:
(*1) Insulation need not be removed, but any deterioration or evidence of dampness is to be investigated.
(*2) The electrical equipment and bulkhead/deck penetrations including access openings are to be examined for continued suitability for their intended service and installation area.
(*3) The manufacturer/builder instructions and manuals covering the operations, safety and maintenance requirements and occupational health hazards relevant to fuel storage, fuel bunkering, and fuel supply and associated systems for the use of the fuel, are to be confirmed as being aboard the vessel.
(*4) The logbooks and operating records are to be examined with regard to correct functioning of the gas detection systems, fuel supply/gas systems, etc. The hours per day of the reliquefaction plant, gas combustion unit, as applicable, the boil-off rate, and nitrogen consumption (for membrane containment systems) are to be considered together with gas detection records.
</td><td></td><td>Wording correction</td></tr>
</table>

Rules for the survey and construction of steel ships Part B Chapter 5 Table B5.6-2

Table B5.6-2 Requirements of Close-up Surveys for Ore Carriers

Special Survey	Structural members subject to Close-up Survey	Note
1 Special Survey for ships up to 5 *years* of age (Special Survey No.1)	(1) One web frame rings in a ballast wing tank (A) (2) Lower part of one transverse bulkhead in a ballast tank (D) (3) Two selected cargo hold transverse bulkheads (including stiffeners and girders) (E) (4) Air pipes and sounding pipes in cargo holds in way of tank top (5) All hatch cover plating, hatch coaming plating, and stiffeners	
2 Special Survey for ships over 5 *years* and up to 10 *years* of age (Special Survey No.2)	(1) All web frame rings in a ballast wing tank (A) (2) One deck transverse in each remaining ballast tank (B) (3) Forward and aft transverse bulkheads in a ballast wing tank (C) (4) Lower part of one transverse bulkhead in each remaining ballast tank (D) (5) One transverse bulkhead in each cargo hold (including stiffeners and girders) (E) (6) All deck plating and under deck structure inside line of hatch openings between cargo hold hatches (7) All piping arrangements in cargo holds. If the surveyor considers it necessary, airtight tests are to be carried out. (8) All hatch cover plating, hatch coaming plating, and stiffeners	
3 Special Survey for ships over 10 *years* and up to 15 *years* of age (Special Survey No.3)	(1) All web frame rings in each ballast tank (A) (2) All transverse bulkheads in each ballast tank (C) (3) One web frame ring in ~~all in~~ each wing void space (A) However, additional close-up surveys may be carried out for other web frame rings in void spaces as deemed necessary by the Surveyor. (4) All transverse bulkhead in each cargo hold (including stiffeners and girders) (E) (5) Structural members specified in (6). to (8) of Special Survey No.2 above	Wording correction
4 Special Survey for ships over 15 *years* of age (Special Survey No.~~4~~4 and subsequent Special Surveys)	(1) As for Special Survey No.3	Wording correction

Notes:

(1) Letters in this table mean:

(A): Cross Ties and complete transverse web frame rings including adjacent structural members such as shell plating, longitudinal bulkheads, longitudinal stiffeners, brackets, etc.

(B): Including deck structures adjacent to deck transverse such as deck plating, longitudinal stiffeners, brackets, etc.

(C) and (D): Including vertical and horizontal girders, and adjacent structural members such as longitudinal bulkheads, inner bottom plating, hopper plating, bottom girders, brackets, stiffeners, etc.

(E): Including plating and internal structures of lower and upper stools, where fitted

(2) Close-up Surveys of transverse bulkheads are to be carried out at least at four levels as specified as follows:

(i): Immediately above the inner bottom and immediately above the line of gussets (if fitted) and shedders for ships without lower stool.

(ii): Immediately above and below the lower stool shelf plate (for those ships fitted with lower stools), and immediately above the line of the shedder plates.

(iii): About mid-height of the bulkhead.

(iv): Immediately below the upper deck plating and immediately adjacent to the upper wing tank, and immediately below the upper stool shelf plate for those ships fitted with upper stools, or immediately below the topside tanks.

Rules for the survey and construction of steel ships Part B Chapter 5 Table B5.7

Correction	Present	Note

Table B5.7 Requirements of Close-up Surveys for General Dry Cargo Ships of Not less than 500 *gross tonnage*

Special Survey	Structural members subject to Close-up Survey
1 Special Survey for ships up to 5 *years* of age (Special Survey No.1)	(1) Selected shell frames in one forward and one after cargo holds and associated tween deck spaces and lower part of remaining shell frames including their end attachments and adjacent shell plating (2) Lower parts of shell frames in remaining cargo holds including their end attachments and adjacent shell plating (3) One selected transverse bulkhead and lower part of remaining transverse bulkheads (including stiffeners and girders) (4) Air pipes and sounding pipes in cargo holds in way of tank top (5) All hatch cover plating, hatch coaming plating, and stiffeners

	2 Special Survey for ships over 5 *years* and up to 10 *years* of age (Special Survey No.2)	(1) Selected shell frames in all cargo holds and associated tween deck spaces and lower part of remaining shell frames including their end attachments and adjacent shell plating (2) One transverse bulkhead and lower part of the remaining transverse bulkhead in each cargo hold (including stiffeners and girders) (3) Both forward and aft bulkhead (including stiffeners and girders) in one side ballast tank (4) One transverse web with associated plating and longitudinals in two representative ballast tanks of each type (topside, bilge hopper, side tank or double bottom tank) (5) Selected area of deck plating and under deck structure inside the line of hatch openings between cargo hatches (6) Selected area of inner bottom plating (7) Air pipes and sounding pipes in cargo holds in way of tank top (8) All hatch cover plating, hatch coaming plating, and stiffeners		
	3 Special Survey for ships over 10 *years* and up to 15 *years* of age (Special Survey No.3)	(1) All shell frames in the forward cargo hold (the forward lower cargo hold in the case of tween deck spaces), and 25% of frames in each of the remaining cargo holds (tween deck spaces including the cargo holds except for the forward lower cargo hold in the case of tween deck spaces), and lower part of remaining shell frames including their end attachments and adjacent shell plating (2) All transverse bulkheads (including stiffeners and girders) in ~~all~~each cargo holds (3) All transverse bulkheads (including stiffeners and girders) in ~~all~~each ballast tanks (4) All transverse webs with associated plating and longitudinals in each ballast tank (5) All deck plating and under deck structure inside the line of hatch openings between cargo hold hatches (6) All area of inner bottom plating (7) Air pipes and sounding pipes in cargo holds in way of tank top (8) All hatch cover plating, hatch coaming plating, and stiffeners		Wording correction
	4 Special Survey for ships over 15 *years* of age (Special Survey No.4 and subsequent Special Surveys)	(1) All shell frames in ~~all~~each cargo holds and associated tween deck spaces including their end attachments and adjacent shell plating (2) Structural members specified in (2) to (8) of Special Survey No.3 above		Wording correction

Notes:

Close-up Surveys of transverse bulkheads are to be carried out at least at three levels as specified as follows:

- Immediately above the inner bottom and immediately above the tween decks, as applicable.
- Mid-height of the bulkheads for holds without tween decks.
- Immediately below the upper deck plating and tween deck plating.

Rules for the survey and construction of steel ships Part B Chapter 8 Table B8.2

<table>
<tr><th>Correction</th><th>Present</th><th>Note</th></tr>
<tr><td colspan="2">
Table B8.2 Surveys of Water Lubricated Shafts – Shafts Kind 1A, Kind 2 and Shafts of Ships Whose Classification Characters Are Affixed with the Notation PSCM-1A
<table>
<tr><th rowspan="2">Items</th><th rowspan="2">Examinations</th><th rowspan="2">Ordinary Survey</th><th rowspan="2">Partial Survey</th><th rowspan="2">Alternative Ordinary Survey</th><th colspan="2">Extension Survey</th></tr>
<tr><th>1Year</th><th>3Month</th></tr>
<tr><td colspan="7">(Omitted)</td></tr>
<tr><td>5 Sealing device for stern tube</td><td>(1) Verification of the satisfactory conditions of inboard seals ~~during the re-installation of the shaft and propeller~~. (For ordinary surveys, the verification is carried out during the re-installation of the shaft and propeller.)</td><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td></tr>
<tr><td colspan="7">(Omitted)</td></tr>
</table>
Note
*1 : It is acceptable by confirmation of the result of Section 1-3 of the table.
</td><td>Wording correction</td></tr>
</table>

Rules for the survey and construction of steel ships Part B Chapter 8 8.3.1-5

Correction	Present	Note
5 For the surveys referred to **-1** to **-4** above completed ~~with~~within 3 *months* prior to the survey due date, the next period will start from the survey due date.	**5** For the surveys referred to **-1** to **-4** above completed with 3 *months* prior to the survey due date, the next period will start from the survey due date.	Wording correction

Rules for the survey and construction of steel ships Part B Chapter 8 8.3.1-6

Correction	Present	Note
6 For shafts which are subject to the lubricating oil analysis specified in **8.1.1(18)**, the survey due date may be extended in cases where the survey is carried out in accordance with the following **(1)** to **(5)**. (1) The survey due date may be extended for up to 2.5 *years* in cases where the 2.5Year Extension Survey specified in **Table B8.3** is carried out. No further extension survey may be carried out. (2) The survey due date may be extended for up to 1 *year* in cases where the 1Year Extension Survey specified in **Table B8.3** is carried out. No more than two	**6** For shafts which are subject to the lubricating oil analysis specified in **8.1.1(18)**, the survey due date may be extended in cases where the survey is carried out in accordance with the following **(1)** to **(5)**. (1) The survey due date may be extended for up to 2.5 *years* in cases where the 2.5Year Extension Survey specified in **Table B8.3** is carried out. No further extension survey may be carried out. (2) The survey due date may be extended for up to 1 *year* in cases where the 1Year Extension Survey specified in **Table B8.3** is carried out. No more than two	

consecutive 1Year Extension Surveys may be carried out. In the event an additional extension is requested, the survey due date, prior to the previous extension, may be extended for up to 2.5 *years* in cases where the 2.5Year Extension Survey specified in **Table B8.3** is carried out.	consecutive 1Year Extension Surveys may be carried out. In the event an additional extension is requested, the survey due date, prior to the previous extension, may be extended for up to 2.5 *years* in cases where the 2.5Year Extension Survey specified in **Table B8.3** is carried out.	
(3) The survey due date may be extended for up to 3 *months* in cases where 3 Months Extension Survey specified in **Table B8.3** is carried out. No further 3 Months Extension Survey can be carried out. In the event an additional extension is requested, the survey due date, prior to the previous extension, may be extended for up to 1 *year* or 2.5 *years* in cases where a 1Year Extension Survey or 2.5Year Extension Survey specified in **Table B8.3** is carried out.	(3) The survey due date may be extended for up to 3 *months* in cases where 3 Months Extension Survey specified in **Table B8.3** is carried out. No further 3 Months Extension Survey can be carried out. In the event an additional extension is requested, the survey due date, prior to the previous extension, may be extended for up to 1 *year* or 2.5 *years* in cases where a 1Year Extension Survey or 2.5Year Extension Survey specified in **Table B8.3** is carried out.	
(4) The period of extension counts from the survey due date in cases where the extension survey is carried out ~~prior to~~within 1 *month* ~~within~~prior to the survey due date.	(4) The period of extension counts from the survey due date in cases where the extension survey is carried out prior to 1 *month* within the survey due date.	Wording correction
(5) The period of extension counts from the date on which the extension survey in cases where the extension survey is carried out more than 1 *month* prior to the survey due date.	(5) The period of extension counts from the date on which the extension survey in cases where the extension survey is carried out more than 1 *month* prior to the survey due date.	

Rules for the survey and construction of steel ships Part B Chapter 8 8.3.2-6

Correction	Present	Note
6 The survey due date may be extended in cases where a survey is carried out in accordance with the following **(1)** to **(5)**.	**6** The survey due date may be extended in cases where a survey is carried out in accordance with the following **(1)** to **(5)**.	
(1) The survey due date may be extended for up to 2.5 *years* in cases where the 2.5Year Extension Survey specified in **Table B8.3** is carried out. No further extension survey may be carried out.	(1) The survey due date may be extended for up to 2.5 *years* in cases where the 2.5Year Extension Survey specified in **Table B8.3** is carried out. No further extension survey may be carried out.	
(2) The survey due date may be extended for up to 1 *year*	(2) The survey due date may be extended for up to 1 *year*	

in cases where the 1Year Extension Survey specified in **Table B8.3** is carried out. No more than two consecutive 1Year Extension Surveys may be carried out. In the event an additional extension is requested, the survey due date, prior to the previous extension, may be extended for up to 2.5 *years* in cases where the 2.5Year Extension Survey specified in **Table B8.3** is carried out.	in cases where the 1Year Extension Survey specified in **Table B8.3** is carried out. No more than two consecutive 1Year Extension Surveys may be carried out. In the event an additional extension is requested, the survey due date, prior to the previous extension, may be extended for up to 2.5 *years* in cases where the 2.5Year Extension Survey specified in **Table B8.3** is carried out.	
(3) The survey due date may be extended for up to 3 *months* in cases where the 3Month Extension Survey specified in **Table B8.3** is carried out. No further 3Month Extension Surveys may be carried out. In the event an additional extension is requested, the survey due date, prior to the previous extension, may be extended for up to 1 *year* or 2.5 *years* in cases where the 1Year Extension Survey or 2.5 Year Extension Survey specified in **Table B8.3** is carried out.	(3) The survey due date may be extended for up to 3 *months* in cases where the 3Month Extension Survey specified in **Table B8.3** is carried out. No further 3Month Extension Surveys may be carried out. In the event an additional extension is requested, the survey due date, prior to the previous extension, may be extended for up to 1 *year* or 2.5 *years* in cases where the 1Year Extension Survey or 2.5 Year Extension Survey specified in **Table B8.3** is carried out.	
(4) The period of extension counts from the survey due date in cases where the extension survey is carried out ~~prior to~~within 1 *month* ~~within~~prior to the survey due date.	(4) The period of extension counts from the survey due date in cases where the extension survey is carried out prior to 1 *month* within the survey due date.	Wording correction
(5) The period of extension counts from the date on which the extension survey in cases where the extension survey is carried out more than 1 *month* prior to the survey due date.	(5) The period of extension counts from the date on which the extension survey in cases where the extension survey is carried out more than 1 *month* prior to the survey due date.	

Rules for the survey and construction of steel ships Part B Chapter 8 8.4.1-5

Correction	Present	Note
5 For the surveys referred to **-1** to **-4** above completed ~~with~~within 3 *months* prior to the survey due date, the next period is to start from the survey due date.	**5** For the surveys referred to **-1** to **-4** above completed with 3 *months* prior to the survey due date, the next period is to start from the survey due date.	Wording correction

Rules for the survey and construction of steel ships Part B Chapter 8 8.4.1-6

Correction	Present	Note
6 For shafts which are carried out ~~lubricating~~ fresh water ~~analysis~~sample test specified in **8.1.1(19)**, the survey due date may be extended in cases where a survey is carried out in accordance with following **(1)** to **(5)**.	**6** For shafts which are carried out lubricating fresh water analysis specified in **8.1.1(19)**, the survey due date may be extended in cases where a survey is carried out in accordance with following **(1)** to **(5)**.	Wording correction
(1) The survey due date may be extended for up to 2.5 *years* in cases where the 2.5Year Extension Survey specified in **Table B8.4** is carried out. No further extension survey may be carried out.	(1) The survey due date may be extended for up to 2.5 *years* in cases where the 2.5Year Extension Survey specified in **Table B8.4** is carried out. No further extension survey may be carried out.	
(2) The survey due date may be extended for up to 1 *year* in cases where the 1Year Extension Survey specified in **Table B8.4** is carried out. No more than two consecutive 1Year Extension Surveys may be carried out. In the event an additional extension is requested, the survey due date, prior to the previous extension, may be extended for up to 2.5 *years* in cases where the 2.5Year Extension Survey specified in **Table B8.4** is carried out.	(2) The survey due date may be extended for up to 1 *year* in cases where the 1Year Extension Survey specified in **Table B8.4** is carried out. No more than two consecutive 1Year Extension Surveys may be carried out. In the event an additional extension is requested, the survey due date, prior to the previous extension, may be extended for up to 2.5 *years* in cases where the 2.5Year Extension Survey specified in **Table B8.4** is carried out.	
(3) The survey due date may be extended for up to 3 *months* in cases where the 3Month Extension Survey specified in **Table B8.4** is carried out. No further 3Month Extension Surveys may be carried out. In the event an additional extension is requested, the survey due date, prior to the previous extension, may be extended for up to 1 *year* or 2.5 *years* in cases where the 1Year Extension Survey or 2.5Year Extension Survey specified in **Table B8.4** is carried out.	(3) The survey due date may be extended for up to 3 *months* in cases where the 3Month Extension Survey specified in **Table B8.4** is carried out. No further 3Month Extension Surveys may be carried out. In the event an additional extension is requested, the survey due date, prior to the previous extension, may be extended for up to 1 *year* or 2.5 *years* in cases where the 1Year Extension Survey or 2.5Year Extension Survey specified in **Table B8.4** is carried out.	
(4) The period of extension counts from the survey due date in cases where the extension survey is carried out ~~prior to~~within 1 *month* ~~within~~prior to the survey due date.	(4) The period of extension counts from the survey due date in cases where the extension survey is carried out prior to 1 *month* within the survey due date.	Wording correction
(5) The period of extension counts from the date on which the extension survey in cases where the extension	(5) The period of extension counts from the date on which the extension survey in cases where the extension	

survey is carried out more than 1 *month* prior to the survey due date.	survey is carried out more than 1 *month* prior to the survey due date.	

Rules for the survey and construction of steel ships Part B Chapter 8 Table B8.4

Table B8.4 Surveys of Fresh Water Lubricated Shafts – Shafts Kind 1*W*

Items	Examinations	Ordinary Survey	Partial Survey	Simplified Partial Survey	Extension Survey		
					2.5Year	1Year	3Month
（省略）							
11 Review of records etc.	(1) Examinations are to be carried out in accordance with the following **(a)** to **(g)**. (a) Service records are to be reviewed. (b) Review of test records of the fresh water analysis is to be carried out to confirm that the reference standards specified in following **i)** and **ii)** are complied with. i) Chloride content and sodium content (upper limit): 1) Chloride: 60 *ppm* 2) Sodium (Na): 70 *ppm* ii) pH : Lower limit values determined based upon characteristics of the ~~correction inhibitors~~corrosion inhibitor used, but not to be less than 11 iii) Metal particles (upper limit): 1) Iron (Fe): 25 *ppm* 2) Chromium (Cr): 5 *ppm* 3) Nickel (Ni): 5 *ppm* 4) Copper (Cu): 40 *ppm* 5) Silicon (Si): 30 *ppm* iv) Bearing particles (non-metallic content) : No polymer resins are to be found by micro-filter or microscopic testing (c) Fresh water sample test is to be carried out. (d) Verification of no reported repairs by grinding or welding of shafts or propellers is to be carried out. (e) Examination of the lubricating fresh water record book. (f) For 1year and 3month extension surveys, review of the		○	○	○	○	○

Note: Wording correction

		previous clearance recordings is to be carried out. (g) Confirmation from the chief engineer that the shafting arrangement is in good working condition is to be obtained.								

Rules for the survey and construction of steel ships Part B Chapter 10 10.2.3-4

Correction	Present	Note
4 To implement surveys of items specified specified in **20.16.1-1**, **-3** and **-7, Part Q**, in lieu of traditional ordinary surveys where the Surveyor is in attendance, the Society may approve other survey methods which it considers to be appropriate ~~in the following cases.~~.	**4** To implement surveys of items specified specified in **20.16.1-1**, **-3** and **-7, Part Q**, in lieu of traditional ordinary surveys where the Surveyor is in attendance, the Society may approve other survey methods which it considers to be appropriate in the following cases.	Wording correction

Rules for the survey and construction of steel ships Part B Chapter 11 11.2.3

Correction	Present	Note
The presence of the Surveyor is required at the following stages. To implement surveys of the items specified otherwise by the Society, in lieu of traditional ordinary surveys where the Surveyor is in attendance, the Society may approve other survey methods which it considers to be appropriate ~~in the following cases~~. (1) When the tests on materials specified in **Part K** are carried out. (2) When the materials or parts manufactured at another location are assembled at the yard constructing the submersible. (3) During shop work, sub-assembly or when designated by the Society. (4) When each part of the hull is completed. (5) When the principal dimensions of the hull are measured. (6) When the tests specified in **7.2.1**, **7.2.2**, **7.2.4** and **7.2.5**, **Part T** are carried out. (7) With respect to the pressure vessels, when the tests	The presence of the Surveyor is required at the following stages. To implement surveys of the items specified otherwise by the Society, in lieu of traditional ordinary surveys where the Surveyor is in attendance, the Society may approve other survey methods which it considers to be appropriate in the following cases. (1) When the tests on materials specified in **Part K** are carried out. (2) When the materials or parts manufactured at another location are assembled at the yard constructing the submersible. (3) During shop work, sub-assembly or when designated by the Society. (4) When each part of the hull is completed. (5) When the principal dimensions of the hull are measured. (6) When the tests specified in **7.2.1**, **7.2.2**, **7.2.4** and **7.2.5**, **Part T** are carried out. (7) With respect to the pressure vessels, when the tests	Wording correction

specified in **Chapter 10, Part D** are carried out. (8) When the support systems are assembled at the mother ship or support ship. (9) When considered necessary by the Society.	specified in **Chapter 10, Part D** are carried out. (8) When the support systems are assembled at the mother ship or support ship. (9) When considered necessary by the Society.	

Rules for the survey and construction of steel ships Part B Chapter 12 12.1.3

Correction	Present	Note
For propeller shafts of mobile offshore drilling units fitted with oil lubricated stern tube bearings that have low running hours, the following examinations may be conducted as an alternative survey to the Ordinary Survey (specified in **8.3.1-1**). If the units are found in good condition, the Ordinary Survey may be postponed for not more than a *year* from the date of completion of the alternative survey. However, this postponement is not to be granted to shafts which operated over 7,000 *hours* from the date of completion of the Classification Survey or the previous Ordinary Survey. ~~((1) to (4) are omitted.)~~ (1) External examination of stern bearing and outboard seal area including weardown check as far as is possible. (2) Internal examination of the shaft area (inboard seals) in propulsion machinery rooms. (3) Confirmation of lubricating oil records (oil loss rate, contamination). (4) Examination/Replacement of shaft seal elements in accordance with seal manufacturer's recommendations.	For propeller shafts of mobile offshore drilling units fitted with oil lubricated stern tube bearings that have low running hours, the following examinations may be conducted as an alternative survey to the Ordinary Survey (specified in **8.3.1-1**). If the units are found in good condition, the Ordinary Survey may be postponed for not more than a *year* from the date of completion of the alternative survey. However, this postponement is not to be granted to shafts which operated over 7,000 *hours* from the date of completion of the Classification Survey or the previous Ordinary Survey. ((1) to (4) are omitted.) (1) External examination of stern bearing and outboard seal area including weardown check as far as is possible. (2) Internal examination of the shaft area (inboard seals) in propulsion machinery rooms. (3) Confirmation of lubricating oil records (oil loss rate, contamination). (4) Examination/Replacement of shaft seal elements in accordance with seal manufacturer's recommendations.	Wording correction

Rules for the survey and construction of steel ships Part B Chapter 12 12.2.3-1

Correction	Present	Note
1 During the Classification Survey, the items specified in following **(1)** to **(7)** are to be implemented. To implement surveys of items specified otherwise by the Society, in lieu of	**1** During the Classification Survey, the items specified in following **(1)** to **(7)** are to be implemented. To implement surveys of items specified otherwise by the Society, in lieu of	

traditional ordinary surveys where the Surveyor is in attendance, the Society may approve other survey methods which it considers to be appropriate ~~in the following cases~~. (1) The survey items specified in **2.1.7**, **12.2.4** and **12.2.6** (2) For machinery and electrical installations, the tests, examinations or inspections specified in **11.1.3** and **12.1.3, Part P** (3) For column-stabilized units, the draught scales are fitted (4) For large storage units, the operation test of rupture hatches at a pressure below the design operational pressure (5) For units requiring the mooring system specified in **Chapter 10, Part P**, confirmation survey for system installation on the unit (6) For units with a dynamic positioning system specified in **Chapter 10, Part P**, the following **(1)** to **(3)**. (a) Confirmation survey for components of the dynamic positioning system installation on the unit (b) Tests are carried out in accordance with the testing procedures. (c) For units with a Class 2 or Class 3 dynamic positioning system, tests for Failure Modes and Effects Analysis (*FMEA*) in accordance with testing procedures of demonstration tests. (7) For mobile offshore drilling units, confirmation survey the completion of each part of drilling derricks and substructures including supporting structures of drilling derricks and installation of drilling derricks and substructures on board.	traditional ordinary surveys where the Surveyor is in attendance, the Society may approve other survey methods which it considers to be appropriate in the following cases. (1) The survey items specified in **2.1.7**, **12.2.4** and **12.2.6** (2) For machinery and electrical installations, the tests, examinations or inspections specified in **11.1.3** and **12.1.3, Part P** (3) For column-stabilized units, the draught scales are fitted (4) For large storage units, the operation test of rupture hatches at a pressure below the design operational pressure (5) For units requiring the mooring system specified in **Chapter 10, Part P**, confirmation survey for system installation on the unit (6) For units with a dynamic positioning system specified in **Chapter 10, Part P**, the following **(1)** to **(3)**. (a) Confirmation survey for components of the dynamic positioning system installation on the unit (b) Tests are carried out in accordance with the testing procedures. (c) For units with a Class 2 or Class 3 dynamic positioning system, tests for Failure Modes and Effects Analysis (*FMEA*) in accordance with testing procedures of demonstration tests. (7) For mobile offshore drilling units, confirmation survey the completion of each part of drilling derricks and substructures including supporting structures of drilling derricks and installation of drilling derricks and substructures on board.	Wording correction

Rules for the survey and construction of steel ships Part B Chapter 13 13.6.1-1

Correction	Present	Note
1 The structural members to be inspected and the inspection level applicable thereto are to be reviewed at intervals not ~~less~~more than 5 *years* taking into consideration factors such as the results of Periodical Surveys and abnormal environmental conditions having occurred.	**1** The structural members to be inspected and the inspection level applicable thereto are to be reviewed at intervals not less than 5 *years* taking into consideration factors such as the results of Periodical Surveys and abnormal environmental conditions having occurred.	Wording correction

Rules for the survey and construction of steel ships Part B Chapter 14 14.2.3

Correction	Present	Note
14.2.3 ~~Presence of Surveyors~~Survey*	**14.2.3 Presence of Surveyors**	Wording correction

Rules for the survey and construction of steel ships Part B Chapter 14 14.2.7-1

Correction	Present	Note
1 The following surveys are to be carried out during the fitting out of production ~~and off loading~~ systems: (1) It is to be verified that all piping is adequately and firmly fixed. Piping which is used for flammable liquids such as crude oil, etc., is to be subjected to leakage tests at test pressures of 1.25 times design working pressure after fitting work has been completed. (2) It is to be verified that all electrical installations are adequately and firmly fixed. Insulation resistance tests are to be carried out after fitting work has been completed. (3) It is to be verified that all machinery is adequately and firmly fixed. Performance tests are to be carried out after fitting work has been completed. (4) Production systems are to be examined and verified that they do not endanger the Floating Offshore Facility or its crew under operating conditions.	**1** The following surveys are to be carried out during the fitting out of production and off loading systems: (1) It is to be verified that all piping is adequately and firmly fixed. Piping which is used for flammable liquids such as crude oil, etc., is to be subjected to leakage tests at test pressures of 1.25 times design working pressure after fitting work has been completed. (2) It is to be verified that all electrical installations are adequately and firmly fixed. Insulation resistance tests are to be carried out after fitting work has been completed. (3) It is to be verified that all machinery is adequately and firmly fixed. Performance tests are to be carried out after fitting work has been completed. (4) Production systems are to be examined and verified that they do not endanger the Floating Offshore Facility or its crew under operating conditions.	Wording correction

Rules for the survey and construction of steel ships Part B Chapter 15 15.2.2-2

Correction	Present	Note
2 In the Classification Survey during Construction, the following plans and documents in addition to the plans and documents specified in relevant requirements in **-1** above and **2.1.3** are to be submitted as other plans documents. (1) For units with a dynamic positioning system, the plans and documents specified in **12.2.2-2(20)**. (2) For self-elevating ships, the following plans and documents. (a) Calculations substantiating the adequacy of the structure to transmit forces between legs and the hull through jacking or other elevating systems. (b) Calculations of the ship's ability to resist overturning. (c) The plans and documents specified in **11.7.3-1(2), Part O**. (3) Operating manuals (excluding those for dynamic positioning systems and personnel transfer arrangements) (4) For machinery installations used solely for operations that are the purpose of the ship: plans and documents indicating the safety devices of such machinery installations and those specified in **Chapters 9** and **10, Part D** (5) For ~~self-elevating~~ ships to which **4.4.2-3, Part O** applies, this is to include the following **(a)** and **(b)** (a) The performance capabilities and instructions for operation of the towing winch emergency release systems specified in **1.5.1-3 of Annex 4.4.2-3, Part O** (b) Instructions for the surveys of the towing winch emergency release systems specified in **1.5.1-4 of Annex 4.4.2-3, Part O**	**2** In the Classification Survey during Construction, the following plans and documents in addition to the plans and documents specified in relevant requirements in **-1** above and **2.1.3** are to be submitted as other plans documents. (1) For units with a dynamic positioning system, the plans and documents specified in **12.2.2-2(20)**. (2) For self-elevating ships, the following plans and documents. (a) Calculations substantiating the adequacy of the structure to transmit forces between legs and the hull through jacking or other elevating systems. (b) Calculations of the ship's ability to resist overturning. (c) The plans and documents specified in **11.7.3-1(2), Part O**. (3) Operating manuals (excluding those for dynamic positioning systems and personnel transfer arrangements) (4) For machinery installations used solely for operations that are the purpose of the ship: plans and documents indicating the safety devices of such machinery installations and those specified in **Chapters 9** and **10, Part D** (5) For self-elevating ships to which **4.4.2-3, Part O** applies, this is to include the following **(a)** and **(b)** (a) The performance capabilities and instructions for operation of the towing winch emergency release systems specified in **1.5.1-3 of Annex 4.4.2-3, Part O** (b) Instructions for the surveys of the towing winch emergency release systems specified in **1.5.1-4 of Annex 4.4.2-3, Part O**	Wording correction

Rules for the survey and construction of steel ships Part B Chapter 15 15.2.3-1

Correction	Present	Note
1 During the Classification Surveys, the relevant items specified in **2.1.7** and the items specified in following **(1)** and **(2)** are to be implemented. To implement surveys of items specified otherwise by the Society, in lieu of traditional ordinary surveys where a Surveyor is in attendance, the Society may approve other survey methods which it considers to be appropriate ~~in the following cases~~. (1) Performance tests, including the tests specified in **1.5, Annex 4.4.2-3, Part O**, on work-related installations (2) For ships with a dynamic positioning system, the item specified in **12.2.3(6)**	**1** During the Classification Surveys, the relevant items specified in **2.1.7** and the items specified in following **(1)** and **(2)** are to be implemented. To implement surveys of items specified otherwise by the Society, in lieu of traditional ordinary surveys where a Surveyor is in attendance, the Society may approve other survey methods which it considers to be appropriate in the following cases. (1) Performance tests, including the tests specified in **1.5, Annex 4.4.2-3, Part O**, on work-related installations (2) For ships with a dynamic positioning system, the item specified in **12.2.3(6)**	Wording correction

Rules for the survey and construction of steel ships Part B Chapter 15 15.5.2-1

Correction	Present	Note
1 Examination of Plans and Documents At ~~Intermediate~~Special Surveys, the management conditions of plans and documents listed in **15.3.2-1** is to be examined.	**1** Examination of Plans and Documents At Intermediate Surveys, the management conditions of plans and documents listed in **15.3.2-1** is to be examined.	Wording correction

Rules for the survey and construction of steel ships Part B Chapter 15 15.6.1-4

Correction	Present	Note
4 For self-elevating ships over 5 *years of age*, internal examinations and thickness measurements of the representative ballast tanks or free-flooding compartments in bottom mats or spud cans, if accessible, and at least two representative pre-load tanks are to be carried out. However, where corrosion control arrangements of these ballast spaces are considered satisfactory, thickness measurements may be dispensed with.	**4** For ships over 5 *years of age*, internal examinations and thickness measurements of the representative ballast tanks or free-flooding compartments in bottom mats or spud cans, if accessible, and at least two representative pre-load tanks are to be carried out. However, where corrosion control arrangements of these ballast spaces are considered satisfactory, thickness measurements may be dispensed with.	Wording correction

Rules for the survey and construction of steel ships Part B Annex 2.3.1-1 An1 An1.2.3

Correction	Present	Note
1 Environmental Condition (1) Tests of ship manoeuvrability are to be carried out preferably in the calmest possible weather conditions. The tests should be conducted in conditions preferably within the following limits. (a) Winds not exceeding 5 on the Beaufort scale (b) Waves not exceeding a sea state of 4 (c) Uniform current only (d) Visibility good (such as no fog)	**1** Environmental Condition (1) Tests of ship manoeuvrability are to be carried out preferably in the calmest possible weather conditions. The tests should be conducted in conditions preferably within the following limits. (a) Winds not exceeding 5 on the Beaufort scale (b) Waves not exceeding a sea state of (c) Uniform current only (d) Visibility good (such as no fog)	Wording correction

Rules for the survey and construction of steel ships Part B Annex 2.3.1-2 Chapter3 An3.3.1

Correction	Present	Note
Measurements are to be carried out under the following conditions specified in the following **(1)** to **(8)**. The actual conditions during measurement are to be recorded on the noise survey report. ~~(1) Measurements are to be taken with the ship in the loaded or ballast condition.~~ ~~(2) Measurements are to be taken at a course that is as straight as possible.~~ ~~(3) Measurements are to be taken at normal service speed and no less than 80% of the maximum continuous rating (*MCR*). Controllable pitch and Voith-Schneider propellers, if any, are to be in the normal seagoing position. This does not apply to special ship types and ships with special propulsion and power configurations.~~ ~~(4) All machinery, navigation instruments, radio and radar sets, etc., normally in use at normal seagoing condition and levels, including squelch are to operate throughout the measurement period. However, neither energized fog signals nor helicopter~~	Measurements are to be carried out under the following conditions specified in the following **(1)** to **(8)**. The actual conditions during measurement are to be recorded on the noise survey report. (1) Measurements are to be taken with the ship in the loaded or ballast condition. (2) Measurements are to be taken at a course that is as straight as possible. (3) Measurements are to be taken at normal service speed and no less than 80% of the maximum continuous rating (*MCR*). Controllable pitch and Voith-Schneider propellers, if any, are to be in the normal seagoing position. This does not apply to special ship types and ships with special propulsion and power configurations. (4) All machinery, navigation instruments, radio and radar sets, etc., normally in use at normal seagoing condition and levels, including squelch are to operate throughout the measurement period. However, neither energized fog signals nor helicopter	Wording correction

~~operations are to take place during the taking of these measurements.~~	operations are to take place during the taking of these measurements.	
~~(5) Measurements in spaces containing emergency diesel engine driven generators, fire pumps or other emergency equipment that would normally be run only in emergency, or for test purposes, are to be taken with the equipment operating. Measurements are not intended for determining compliance with maximum noise level limits in **Table An4.1**, but as a reference for personal protection of seafarers carrying out maintenance, repair and test activities in such spaces.~~	(5) Measurements in spaces containing emergency diesel engine driven generators, fire pumps or other emergency equipment that would normally be run only in emergency, or for test purposes, are to be taken with the equipment operating. Measurements are not intended for determining compliance with maximum noise level limits in **Table An4.1**, but as a reference for personal protection of seafarers carrying out maintenance, repair and test activities in such spaces.	
~~(6) Mechanical ventilation, heating and air-conditioning equipment are to be in normal operation, taking into account that the capacity is to be in accordance with the design conditions. With respect to the requirement, air conditioning vents are to be kept open during the taking of noise measurements on board, unless they are designed to be kept closed in the normal operating condition.~~	(6) Mechanical ventilation, heating and air-conditioning equipment are to be in normal operation, taking into account that the capacity is to be in accordance with the design conditions. With respect to the requirement, air conditioning vents are to be kept open during the taking of noise measurements on board, unless they are designed to be kept closed in the normal operating condition.	
~~(7) In general, doors and windows are to be closed. With respect to the requirement, closing devices of ventilation grilles/louvres of cabin doors are to be kept open during the taking of noise measurements on board, unless they are designed to be kept closed in the normal operating condition.~~	(7) In general, doors and windows are to be closed. With respect to the requirement, closing devices of ventilation grilles/louvres of cabin doors are to be kept open during the taking of noise measurements on board, unless they are designed to be kept closed in the normal operating condition.	
~~(8) Spaces are to be furnished with all necessary equipment. Measurements without soft furnishings may be taken but no allowance is to be made for their absence. Rechecks or follow-up readings may be taken with soft furnishings included.~~	(8) Spaces are to be furnished with all necessary equipment. Measurements without soft furnishings may be taken but no allowance is to be made for their absence. Rechecks or follow-up readings may be taken with soft furnishings included.	

Rules for the survey and construction of steel ships Part B Annex 2.3.1-2 Chapter3 An3.3.1-1

Correction	Present	Note
1 Measurements are to be taken with the ship in the loaded or ballast condition.	(Newly added)	Wording correction

Rules for the survey and construction of steel ships Part B Annex 2.3.1-2 Chapter3 An3.3.1-2

Correction	Present	Note
2 Measurements are to be taken at a course that is as straight as possible.	(Newly added)	Wording correction

Rules for the survey and construction of steel ships Part B Annex 2.3.1-2 Chapter3 An3.3.1-3

Correction	Present	Note
3 Measurements are to be taken at normal service speed and no less than 80% of the maximum continuous rating (*MCR*). Controllable pitch and Voith-Schneider propellers, if any, are to be in the normal seagoing position. This does not apply to special ship types and ships with special propulsion and power configurations.	(Newly added)	Wording correction

Rules for the survey and construction of steel ships Part B Annex 2.3.1-2 Chapter3 An3.3.1-5

Correction	Present	Note
5 Measurements in spaces containing emergency diesel engine driven generators, fire pumps or other emergency equipment that would normally be run only in emergency, or for test purposes, are to be taken with the equipment operating. Measurements are not intended for determining compliance with maximum noise level limits in **Table An4.1**, but as a reference for personal protection of seafarers carrying out maintenance, repair and test activities in such spaces.	(Newly added)	Wording correction

Rules for the survey and construction of steel ships Part B Annex 2.3.1-2 Chapter3 An3.3.1-6

Correction	Present	Note
6 Mechanical ventilation, heating and air-conditioning	(Newly added)	Wording correction

equipment are to be in normal operation, taking into account that the capacity is to be in accordance with the design conditions. With respect to the requirement, air conditioning vents are to be kept open during the taking of noise measurements on board, unless they are designed to be kept closed in the normal operating condition.		

Rules for the survey and construction of steel ships Part B Annex 2.3.1-2 Chapter3 An3.3.1-7

Correction	Present	Note
7 In general, doors and windows are to be closed. With respect to the requirement, closing devices of ventilation grilles/louvres of cabin doors are to be kept open during the taking of noise measurements on board, unless they are designed to be kept closed in the normal operating condition.	(Newly added)	Wording correction

Rules for the survey and construction of steel ships Part B Annex 2.3.1-2 Chapter3 An3.3.1-8

Correction	Present	Note
8 Spaces are to be furnished with all necessary equipment. Measurements without soft furnishings may be taken but no allowance is to be made for their absence. Rechecks or follow-up readings may be taken with soft furnishings included.	(Newly added)	Wording correction

Rules for the survey and construction of steel ships Part C Part 1 Chapter 1 Table 1.4.4-1

<table>
<tr><th>Correction</th><th>Present</th><th>Note</th></tr>
<tr>
<td>Table 1.4.4-1 Definition of Terms
<table>
<tr><th>Terms</th><th>Definition</th></tr>
<tr><td colspan="2">（省略）</td></tr>
<tr><td>Bulkhead structure</td><td>Transverse or longitudinal bulkhead plating ~~supported by~~and their attached stiffeners and girders.</td></tr>
<tr><td colspan="2">（省略）</td></tr>
</table>
</td>
<td>Table 1.4.4-1 Definition of Terms
<table>
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</table>
</td>
<td>Wording correction</td>
</tr>
</table>

Rules for the survey and construction of steel ships Part C Part 1 Annex 1 An1.3.1-2

Correction	Present	Note
An1.3.1 General (Omitted) **2** Reduction of scantlings of members and equipment of ships to be classed for *Smooth Water Service* (1) Heights of hatchway coamings, sills of doors, etc. may be reduced to the heights specified in **Table An3**. (2) The hatchway covers may be of a shelter type. (3) The thicknesses of steel hatchway covers, on which cargoes are not carried, may be 4.5 *mm*. (4) Stiffeners are to be provided at suitable intervals for steel hatchway covers, and the section modulus of stiffeners, on which cargoes are not carried, may be reduced from the value obtained from the formula in ~~**19.2**~~**14.6.5.5-2~~**~~, Part CS.~~**(5)**~~.~~**.** (5) The design pressure of rectangular windows specified in **14.11.1.4**, including minimum design pressure specified in **Table 14.11.1-1** may be reduced by 10 %. (6) Equipment is to be accordance with the requirements in **-1(3)** and **(4)**. However, the equipment letter in **Table CS23.1, Part CS** may be downgraded one rank	An1.3.1 General (Omitted) **2** Reduction of scantlings of members and equipment of ships to be classed for *Smooth Water Service* (1) Heights of hatchway coamings, sills of doors, etc. may be reduced to the heights specified in **Table An3**. (2) The hatchway covers may be of a shelter type. (3) The thicknesses of steel hatchway covers, on which cargoes are not carried, may be 4.5 *mm*. (4) Stiffeners are to be provided at suitable intervals for steel hatchway covers, and the section modulus of stiffeners, on which cargoes are not carried, may be reduced from the value obtained from the formula in **19.2.6-2, Part CS**. (5) The design pressure of rectangular windows specified in **14.11.1.4**, including minimum design pressure specified in **Table 14.11.1-1** may be reduced by 10 %. (6) Equipment is to be accordance with the requirements in **-1(3)** and **(4)**. However, the equipment letter in **Table CS23.1, Part CS** may be downgraded one rank	Reference correction

from the requirements in **23.1.2, Part CS**. (7) The design pressure P_e for the doors specified in **14.10.1.4-1** and **Table 14.10.2-2** may be reduced to 50 %. (8) Ships not engaged on international voyages need not apply the requirements of **14.13.2.1-2**. (9) Ships not engaged on international voyages need not apply the requirements of **14.5.3.1**. (10) Ships not engaged on international voyages need not apply the requirements of **3.3.5.2-2**, **3.8.2.3** and **Annex 1.1, Chapter 1, Part 2-2 "Additional Requirements for Bulk Carriers, Chapter XII of the SOLAS Convention"**. (11) Ships not engaged on international voyages need not apply the requirements of **14.16.3**. (Omitted)	from the requirements in **23.1.2, Part CS**. (7) The design pressure P_e for the doors specified in **14.10.1.4-1** and **Table 14.10.2-2** may be reduced to 50 %. (8) Ships not engaged on international voyages need not apply the requirements of **14.13.2.1-2**. (9) Ships not engaged on international voyages need not apply the requirements of **14.5.3.1**. (10) Ships not engaged on international voyages need not apply the requirements of **3.3.5.2-2**, **3.8.2.3** and **Annex 1.1, Chapter 1, Part 2-2 "Additional Requirements for Bulk Carriers, Chapter XII of the SOLAS Convention"**. (11) Ships not engaged on international voyages need not apply the requirements of **14.16.3**. (Omitted)	

Rules for the survey and construction of steel ships Part C Part 1 Chapter 7 7.1.2.1-4

Correction	Present	Note
7.1.2.1 Application **1** The requirements in this Chapter are to be applied in accordance with **Table 1.2.2-1**. **2** Girders and plates to be flange in double bottom or double side constituting a double hull are to be in accordance with the requirements in **7.3**. Other girders are to be in accordance with the requirements in **7.2**. (*See* **Fig. 7.1.2-1**) **3** Constructions of single bottom are to be according to the requirements specified in **7.2**. **4** Notwithstanding **-2** and **-3** above, assessments may be carried out by direct strength calculations deemed appropriate by the Society, such as ~~beam~~finite element analysis.	7.1.2.1 Application **1** The requirements in this Chapter are to be applied in accordance with **Table 1.2.2-1**. **2** Girders and plates to be flange in double bottom or double side constituting a double hull are to be in accordance with the requirements in **7.3**. Other girders are to be in accordance with the requirements in **7.2**. (*See* **Fig. 7.1.2-1**) **3** Constructions of single bottom are to be according to the requirements specified in **7.2**. **4** Notwithstanding **-2** and **-3** above, assessments may be carried out by direct strength calculations deemed appropriate by the Society, such as beam analysis.	Wording correction

Rules for the survey and construction of steel ships Part C Part 1 Chapter 13 13.2.1.3-3

Correction	Present	Note
13.2.1.3 Welding and Design Details **1** Slot welding is to comply with the following **(1)** to **(3)**: (1) Slot welding is to be limited as far as possible. Slot welding is not to be used in areas with large in-plane stresses transversely to the slots or in way of cut-out areas of Type *A*, *D* and *E* rudders. (2) When slot welding is applied, the length of slots is to be minimum 75 *mm* with breadth of 2*t*, where *t* is the rudder plate thickness (*mm*). The distance between ends of slots is not to be more than 125 *mm* (*See* **Fig. 13.2.1-2**). The slots are to be fillet welded around the edges and filled with a suitable compound, e.g. epoxy putty. Slots are not to be filled with weld. (3) Continuous slot welds may be used in lieu of slot welds. Where continuous slot welds are used, the root gap is to be between 6 *mm* and 10 *mm.* The bevel angle is to be at least 15° (*See* **Fig. 13.2.1-2**). **2** In way of the rudder horn recess of Type *A*, *D* and *E* rudders the radii in the rudder plating (except in way of solid part in cast steel) are not to be less than 5 *times* the plate thickness, but in no case less than 100 *mm*. Welding in side plate are to be avoided in or at the end of the radii. Edges of side plate and weld adjacent to radii are to be ground smooth. **3** Welds in the rudder side plating subjected to significant stresses from rudder bending, and welds between plates and heavy pieces (solid parts in forged or cast steel or very thick plating) are to comply with the following **(1)** to **(3)**: (1) These are to be made as full penetration welds. (2) In way of highly stressed areas e.g. cut-out of Type *A*, *D* and *E* rudders and upper part of Type *C* rudders, cast or welding on ribs is to be arranged. (3) Two sided full penetration welding is normally to be	13.2.1.3 Welding and Design Details **1** Slot welding is to comply with the following **(1)** to **(3)**: (1) Slot welding is to be limited as far as possible. Slot welding is not to be used in areas with large in-plane stresses transversely to the slots or in way of cut-out areas of Type *A*, *D* and *E* rudders. (2) When slot welding is applied, the length of slots is to be minimum 75 *mm* with breadth of 2*t*, where *t* is the rudder plate thickness (*mm*). The distance between ends of slots is not to be more than 125 *mm* (*See* **Fig. 13.2.1-2**). The slots are to be fillet welded around the edges and filled with a suitable compound, e.g. epoxy putty. Slots are not to be filled with weld. (3) Continuous slot welds may be used in lieu of slot welds. Where continuous slot welds are used, the root gap is to be between 6 *mm* and 10 *mm.* The bevel angle is to be at least 15° (*See* **Fig. 13.2.1-2**). **2** In way of the rudder horn recess of Type *A*, *D* and *E* rudders the radii in the rudder plating (except in way of solid part in cast steel) are not to be less than 5 *times* the plate thickness, but in no case less than 100 *mm*. Welding in side plate are to be avoided in or at the end of the radii. Edges of side plate and weld adjacent to radii are to be ground smooth. **3** Welds in the rudder side plating subjected to significant stresses from rudder bending, and welds between plates and heavy pieces (solid parts in forged or cast steel or very thick plating) are to comply with the following **(1)** to **(3)**: (1) These are to be made as full penetration welds. (2) In way of highly stressed areas e.g. cut-out of Type *A*, *D* and *E* rudders and upper part of Type *C* rudders, cast or welding on ribs is to be arranged. (3) Two sided full penetration welding is normally to be	

arranged. Where back welding is impossible, one side welding using steel backing bars is, in principle, to be performed. In such cases, one sided continuous welding is to be used to weld the steel backing bars to bevelled edge ~~(*See* **Fig.** **13.2.1-3).~~ The bevel angle is to be at least 15 *degrees* for one sided welding (*See* **Fig. 13.2.1-3**).~~ Other welding procedures, however, may be approved when deemed appropriate by the Society.	arranged. Where back welding is impossible, one side welding using steel backing bars is, in principle, to be performed. In such cases, one sided continuous welding is to be used to weld the steel backing bars to bevelled edge (*See* **Fig. 13.2.1-3**). The bevel angle is to be at least 15 *degrees* for one sided welding. Other welding procedures, however, may be approved when deemed appropriate by the Society.	Wording correction
4 Requirements for welding and design details of rudder trunks are described in **11.5.1.8**.	**4** Requirements for welding and design details of rudder trunks are described in **11.5.1.8**.	
5 Requirements for welding and design details when the rudder stock is connected to the rudder by horizontal flange coupling are described in **13.2.8.1-5**.	**5** Requirements for welding and design details when the rudder stock is connected to the rudder by horizontal flange coupling are described in **13.2.8.1-5**.	
6 Requirements for welding and design details of rudder horns are described in **11.5.1.5-5**.	**6** Requirements for welding and design details of rudder horns are described in **11.5.1.5-5**.	

Rules for the survey and construction of steel ships Part C Part 2-5 Chapter 10 10.1.1.2

Correction	Present	Note
10.1.1.2 Assumptions It is assumed in **10.1** that inner bottoms, hopper slant plates and longitudinal bulkheads are ~~a vertically structured.~~longitudinally stiffened. It is also assumed that the sides of single-side ships without hopper slant plates are ~~horizontally structured.~~transversely stiffened. For other cases, examinations are to be performed according to individual conditions.	10.1.1.2 Assumptions It is assumed in **10.1** that inner bottoms, hopper slant plates and longitudinal bulkheads are a vertically structured. It is also assumed that the sides of single-side ships without hopper slant plates are horizontally structured. For other cases, examinations are to be performed according to individual conditions.	Wording correction

Rules for the survey and construction of steel ships Part W Chapter 2 2.1.3

Correction	Present	Note
2 From each bridge wing the horizontal field of vision is to extend over an arc of at least 225°, that is at least 45° on the opposite bow through right ahead and then from right ahead to right astern through 180° on the same side of the ship.	**2** From each bridge wing the horizontal field of vision is to extend over an arc of at least 225° on the opposite bow through right ahead and then from right ahead to right astern through 180° on the same side of the ship.	Wording correction

Rules for the survey and construction of steel ships Part CS Chapter 23 23.2.3-4

Correction	Present	Note
4 Supporting Hull Structures (1) Design load for the supporting hull structures are to be as specified in **(a)** to **(c)** below: (a) For normal towing operations, 1.25 *times* the intended maximum towing load. (b) For other towing services, the breaking load of the tow line specified in **Table CS23.1**. (c) For fittings intended to be used for both normal and other towing operations, the greater of the design loads specifies in **(~~1~~a)** and **(~~2~~b)**. (2) The reinforced members beneath shipboard fittings are to be effectively arranged for any variation of direction (horizontally and vertically) of the towing forces acting upon the shipboard fittings, and the proper alignment of the fittings and their supporting hull structures is to be ensured. (See **Fig. CS23.5** for a sample arrangement.) (3) The acting point of the towing force on towing fittings is to be taken as the attachment point of a tow line or at a change in its direction. For bollards and bitts, the attachment point of the tow line is to be taken as not less than 4/5 of the tube height above the base. (See **Fig. CS23.6**) (4) The design load is to be applied to fittings in all directions that may occur in consideration of the arrangements shown in the towing and mooring arrangements plan specified in **23.2.9**. (5) Where the tow line is paid-out through a fitting, the design load is to be equal to the resultant force of the design loads acting on the line but need not exceed twice the design load acting on the line. The design load acting on the line is to be the minimum design	**4** Supporting Hull Structures (1) Design load for the supporting hull structures are to be as specified in **(a)** to **(c)** below: (a) For normal towing operations, 1.25 *times* the intended maximum towing load. (b) For other towing services, the breaking load of the tow line specified in **Table CS23.1**. (c) For fittings intended to be used for both normal and other towing operations, the greater of the design loads specifies in **(1)** and **(2)**. (2) The reinforced members beneath shipboard fittings are to be effectively arranged for any variation of direction (horizontally and vertically) of the towing forces acting upon the shipboard fittings, and the proper alignment of the fittings and their supporting hull structures is to be ensured. (See **Fig. CS23.5** for a sample arrangement.) (3) The acting point of the towing force on towing fittings is to be taken as the attachment point of a tow line or at a change in its direction. For bollards and bitts, the attachment point of the tow line is to be taken as not less than 4/5 of the tube height above the base. (See **Fig. CS23.6**) (4) The design load is to be applied to fittings in all directions that may occur in consideration of the arrangements shown in the towing and mooring arrangements plan specified in **23.2.9**. (5) Where the tow line is paid-out through a fitting, the design load is to be equal to the resultant force of the design loads acting on the line but need not exceed twice the design load acting on the line. The design load acting on the line is to be the minimum design	Reference correction

load specified in **(1)** and **(2)**. (See **Fig. CS23.7**) (6) The strength of supporting hull structures is to be evaluated based on net scantling calculation.	load specified in **(1)** and **(2)**. (See **Fig. CS23.7**) (6) The strength of supporting hull structures is to be evaluated based on net scantling calculation.	

Rules for the survey and construction of steel ships Part D Chapter 2 2.4.3-4

Correction	Present	Note
4 The explosion relief valves given in **-1** and **-3** above are to conform to the following requirements **(1)** to **(~~3~~2)**: (1) The free area of each explosion relief valve is to be not less than 45 cm^2. (2) The combined free area of the valves fitted on an engine is to be not less than 115 cm^2 per cubic metre of the crankcase or similar drive case specified in **-3** gross volume. The total volume of the stationary parts within the crankcase or separate space may be discounted in estimating the gross volume of the case.	**4** The explosion relief valves given in **-1** and **-3** above are to conform to the following requirements **(1)** to **(3)**: (1) The free area of each explosion relief valve is to be not less than 45 cm^2. (2) The combined free area of the valves fitted on an engine is to be not less than 115 cm^2 per cubic metre of the crankcase or similar drive case specified in **-3** gross volume. The total volume of the stationary parts within the crankcase or separate space may be discounted in estimating the gross volume of the case.	Reference correction

Rules for the survey and construction of steel ships Part D Chapter 7 7.2.2-2

Correction	Present	Note
2 The diameter of blade fixing bolts of controllable pitch propellers is not to be less than the value calculated by the following formula. However, in cases where documents deemed appropriate by the Society are submitted and it can be demonstrated that the blade fixing bolts satisfy the strength requirements specified in the Rules, this requirement may be dispensed with. $d = 0.55\sqrt{\frac{1}{\sigma_a n}\left(\frac{AK_3}{L} + F_c\right)}$ where d : Required diameter of blade fixing bolt (*mm*) (*See* **Fig. D7.~~1~~2**) A : Value given by the following formula, where H, N_0 and Z are the same as those specified in **7.2.1**: $A = 3.0 \times 10^4 \frac{H}{N_0 Z}$ K_3 : Value given by the following formula:	**2** The diameter of blade fixing bolts of controllable pitch propellers is not to be less than the value calculated by the following formula. However, in cases where documents deemed appropriate by the Society are submitted and it can be demonstrated that the blade fixing bolts satisfy the strength requirements specified in the Rules, this requirement may be dispensed with. $d = 0.55\sqrt{\frac{1}{\sigma_a n}\left(\frac{AK_3}{L} + F_c\right)}$ where d : Required diameter of blade fixing bolt (*mm*) (*See* **Fig. D7.1**) A : Value given by the following formula, where H, N_0 and Z are the same as those specified in **7.2.1**: $A = 3.0 \times 10^4 \frac{H}{N_0 Z}$ K_3 : Value given by the following formula:	Reference correction

$K_3 = \left\{\left(\frac{D}{P}\right)^2 \times (0.622 - 0.9x_0)^2 + (0.318 - 0.499x_0)^2\right\}^{\frac{1}{2}}$ x_0 : Ratio of the radius from centreline of the propeller shaft to the boundary between the "blade flange and pitch control gear" and the propeller radius (*See* **Fig. D7.2**). Where x_0>0.3, the ratio is to be taken as 0.3. L : Mean value of $L_1$and L_2 (*cm*) where L_1 and L_2 are the lengths of lines constructed from the centre of the bolts located on the edge of each side that are perpendicular to the line passing through the rotating centre of the flange at a pitch angle of β. (*See* **Fig. D7.3**) F_c : Centrifugal force (*N*) of propeller blade given by the following formula: $F_c = 1.10 \times mR'N_0^2$ m : Mass of one blade (*kg*) R' : Distance between the centre of gravity of the blade and the centre line of the propeller shaft (*cm*) n : Number of bolts on the face side of blade σ_a : Allowable stress of bolt material given by the following formula (N/mm^2): $\sigma_a = 34.7 \times \left(\frac{\sigma_B + 160}{600}\right)$ σ_B : Specified Tensile strength of bolt material (N/mm^2) where σ_B >800 N/mm^2, it is to be taken as 800	$K_3 = \left\{\left(\frac{D}{P}\right)^2 \times (0.622 - 0.9x_0)^2 + (0.318 - 0.499x_0)^2\right\}^{\frac{1}{2}}$ x_0 : Ratio of the radius from centreline of the propeller shaft to the boundary between the "blade flange and pitch control gear" and the propeller radius (*See* **Fig. D7.2**). Where x_0>0.3, the ratio is to be taken as 0.3. L : Mean value of $L_1$and L_2 (*cm*) where L_1 and L_2 are the lengths of lines constructed from the centre of the bolts located on the edge of each side that are perpendicular to the line passing through the rotating centre of the flange at a pitch angle of β. (*See* **Fig. D7.3**) F_c : Centrifugal force (*N*) of propeller blade given by the following formula: $F_c = 1.10 \times mR'N_0^2$ m : Mass of one blade (*kg*) R' : Distance between the centre of gravity of the blade and the centre line of the propeller shaft (*cm*) n : Number of bolts on the face side of blade σ_a : Allowable stress of bolt material given by the following formula (N/mm^2): $\sigma_a = 34.7 \times \left(\frac{\sigma_B + 160}{600}\right)$ σ_B : Specified Tensile strength of bolt material (N/mm^2) where σ_B >800 N/mm^2, it is to be taken as 800	

N/mm^2. Other symbols are the same as those given in the formula of **7.2.1-1**.	N/mm^2. Other symbols are the same as those given in the formula of **7.2.1-1**.	

Rules for the survey and construction of steel ships Part D Chapter 9 9.5.11

Correction	Present	Note
The required thickness of a furnace foundation ring plate (refer to **Fig. D9.11(~~d)~~(**4)E) connecting the furnace bottom of a vertical boiler to the shell is to be calculated by the following formula: $T_r = 1.28\sqrt{DP}$ where D : Inside diameter of the shell (*mm*)	The required thickness of a furnace foundation ring plate (refer to **Fig. D9.11(d)**(4)E) connecting the furnace bottom of a vertical boiler to the shell is to be calculated by the following formula: $T_r = 1.28\sqrt{DP}$ where D : Inside diameter of the shell (*mm*)	Reference correction

Rules for the survey and construction of steel ships Part D Chapter 12 12.2.2-1

Correction	Present	Note
1 The thickness of steel pipes is to comply with the requirements in **12.2.1** and is not to be less than the value shown in **Table D12.6(1)** and **Table D12.6(2)** depending on the service and location of the pipes. However, where corrosion resistant alloy steel pipes are used in lieu of steel pipes, the minimum thickness of these pipes will be considered by the Society in each case.	**1** The thickness of steel pipes is to comply with the requirements in **12.2.1** and is not to be less than the value shown in **Table D12.6** depending on the service and location of the pipes. However, where corrosion resistant alloy steel pipes are used in lieu of steel pipes, the minimum thickness of these pipes will be considered by the Society in each case.	Reference correction

Rules for the survey and construction of steel ships Part D Chapter 13 13.4.1-7

Correction	Present	Note
7 Scuppers originating at any level and penetrating the shell plating at either more than 450*mm* below the freeboard deck or below 600*mm* above the load line are to be provided with non-return valves at the shell plating. These valves, unless specifically required by **-3** and **-4**, may be omitted provided that the thickness of the scupper pipes complies with	**7** Scuppers originating at any level and penetrating the shell plating at either more than 450*mm* below the freeboard deck or below 600*mm* above the load line are to be provided with non-return valves at the shell plating. These valves, unless specifically required by **-3** and **-4**, may be omitted provided that the thickness of the scupper pipes complies with	Reference correction

the requirements in **Table D12.6.(1)** and **Table D12.6(2)**.	the requirements in **Table D12.6**.	

Rules for the survey and construction of steel ships Part D Chapter 13 13.5.1-6

Correction	Present	Note
6 Bilge pipes passing through deep tanks used exclusively for ballasting and bilge pipes and ballast pipes passing through deep tanks other than ballast tanks are to be led through an oiltight or watertight pipe tunnels; or, are to be of sufficient thicknesses in accordance with the requirements in **Table D12.6(1)** and **Table D12.6(2)** and all of their joints are to be welded.	**6** Bilge pipes passing through deep tanks used exclusively for ballasting and bilge pipes and ballast pipes passing through deep tanks other than ballast tanks are to be led through an oiltight or watertight pipe tunnels; or, are to be of sufficient thicknesses in accordance with the requirements in **Table D12.6** and all of their joints are to be welded.	Reference correction

Rules for the survey and construction of steel ships Part D Chapter 18 18.3.3

Correction	Present	Note
Bridge control devices are to comply with the following **(1)** through **(6)** as well as requirements in **18.3.2**. (1) Even in cases where main propulsion machinery or controllable pitch propellers is controlled from the navigation bridge or the main control station on the bridge, telegraphed orders from the navigation bridge or the main control station on the bridge are to be indicated in the main or sub-control stations respectively and at any manoeuvring platforms which are capable of controlling main propulsion machinery or controllable pitch propellers. ~~(a) Sub-control stations or local control stations for main propulsion machinery or controllable pitch propellers for ships provided with a main control station on bridge; or~~ ~~(b) Main control stations for ships not provided with main control station on bridge.~~ ((2) to (6) are omitted.)	Bridge control devices are to comply with the following **(1)** through **(6)** as well as requirements in **18.3.2**. (1) Even in cases where main propulsion machinery or controllable pitch propellers is controlled from the navigation bridge or the main control station on the bridge, telegraphed orders from the navigation bridge or the main control station on the bridge are to be indicated in the main or sub-control stations respectively and at any manoeuvring platforms which are capable of controlling main propulsion machinery or controllable pitch propellers. (a) Sub-control stations or local control stations for main propulsion machinery or controllable pitch propellers for ships provided with a main control station on bridge; or (b) Main control stations for ships not provided with main control station on bridge. ((2) to (6) are omitted.)	Wording correction

Rules for the survey and construction of steel ships Part D Chapter 25 25.2.1-4.

Correction	Present	Note
4 For ships with the Class Notation "*Coasting Service*" or equivalent, which are not engaged in international voyages, or whose gross tonnage is less than 500 *tons*, the following requirements may be applied in addition to **-1** to **-3** above.	**4** For ships with the Class Notation "*Coasting Service*" or equivalent, which are not engaged in international voyages, or whose gross tonnage is less than 500 *tons*, the following requirements may be applied in addition to **-1** to **-3** above.	
((1) to (5) are omitted.)	((1) to (5) are omitted.)	
(6) The requirements specified in **13.5.10**, **13.6.1-~~5~~6**, **13.8.5**, **13.8.7**, **13.9.1-5** and **13.9.1-6** need not apply.	(6) The requirements specified in **13.5.10**, **13.6.1-5**, **13.8.5**, **13.8.7**, **13.9.1-5** and **13.9.1-6** need not apply.	Reference correction
((7) to (15) are omitted.)	((7) to (15) are omitted.)	
(16) The requirements specified in **20.~~2~~1.5**, **20.5.3(4)**, **20.6.1-2**, **20.6.2**, **20.6.3(2)** (only those requirements concerned with overload alarms of motors), **20.6.3(4)**, and **20.7.1-5** need not apply.	(16) The requirements specified in **20.2.5**, **20.5.3(4)**, **20.6.1-2**, **20.6.2**, **20.6.3(2)** (only those requirements concerned with overload alarms of motors), **20.6.3(4)**, and **20.7.1-5** need not apply.	Reference correction
((17) is omitted.)	((17) is omitted.)	

Rules for the survey and construction of steel ships Part D Appendix 3 3.2.2-2

Correction	Present	Note
Appendix 3 GUIDANCE FOR CALCULATION OF SURFACE TREATED FILLETS AND OIL BORE OUTLETS **(1.1 to 2.2 are omitted.)** **(3.1 is omitted.)** **3.2 Evaluation of Local Fillet Stresses** **(3.2.1 is omitted.)** **3.2.2 Evaluation Based upon a Simplified Approach** **1** If no FEA is available, a simplified approach may be used. This can be based on the empirically determined stress concentration factors (SCFs), as in **1.4** of **Annex 2.3.1** if within its validity range, and a relative stress gradient inversely proportional to the fillet radius. Bending and torsional stresses are to be addressed separately. The combination of these is		

addressed by the acceptability criterion.

2 The subsurface transition-zone stresses, with the minimum hardening depth, can be determined by means of local stress concentration factors along an axis perpendicular to the fillet surface.

(1) Calculation of the local SCFs $\alpha_{\text{B-local}}$ and $\beta_{\text{B-local}}$ for bending in crankpin and journal fillets is as follows: (*See* **Fig. 2**)

$$\alpha_{B-local} = (\alpha_B - 1) \cdot e^{\frac{-2 \cdot t}{R_H}} + 1 - \left(\frac{2 \cdot t}{\sqrt{W^2 + S^2}}\right)^{\frac{0.6}{\sqrt{\alpha_B}}}$$

$$\beta_{B-local} = (\beta_B - 1) \cdot e^{\frac{-2 \cdot t}{R_G}} + 1 - \left(\frac{2 \cdot t}{\sqrt{W^2 + S^2}}\right)^{\frac{0.6}{\sqrt{\beta_B}}}$$

For parameters see **1.3.1-3** and **1.4** of **Annex 2.3.1**

(2) Calculation of the local SCFs $\alpha_{\text{T-local}}$ and $\beta_{\text{T-local}}$ for torsion in crankpin and journal fillets is as follows: (*See* **Fig. 3**)

$$\alpha_{T-local} = (\alpha_T - 1) \cdot e^{\frac{-t}{R_H}} + 1 - \left(\frac{2 \cdot t}{D}\right)^{\frac{0.6}{\sqrt{\alpha_T}}}$$

$$\beta_{T-local} = (\alpha_T - 1) \cdot e^{\frac{-t}{R_G}} + 1 - \left(\frac{2 \cdot t}{D_G}\right)^{\frac{0.6}{\sqrt{\beta_T}}}$$

For parameters *see* **1.3.~~1~~ ~~3~~2-2** and **1.4** of **Annex 2.3.1**

(3 is omitted.)

(3.3 to 6.1 are omitted.)

Reference correction

Rules for the survey and construction of steel ships Part H Chapter 2 2.1.3-1

Correction	Present	Note
1 Electric machinery parts which are required to possess strength are to be made of defect-free sound materials. Their proper fits ~~and,~~ clearances and other workmanship are to be consistent with best maritime practices and experience.	**1** Electric machinery parts which are required to possess strength are to be made of defect-free sound materials. Their proper fits and clearances are to be consistent with best maritime practices and experience.	Wording correction

Rules for the survey and construction of steel ships Part H Chapter 2 2.3.6-1

Correction	Present	Note
1 To protect main generators against overloads, means are to be provided to disconnect any unessential loads automatically. In such cases, these means may consist of two or more ~~stage trippings.~~stages of preference trip.	**1** To protect main generators against overloads, means are to be provided to disconnect any unessential loads automatically. In such cases, these means may consist of two or more stage trippings.	Wording correction

Rules for the survey and construction of steel ships Part H Chapter 2 2.5.8-1

Correction	Present	Note
1 The upper limits of the scale of voltmeters are to be approximately 120 % of the ~~normal~~rated voltage of their respective circuits.	**1** The upper limits of the scale of voltmeters are to be approximately 120 % of the normal voltage of their respective circuits.	Wording correction

Rules for the survey and construction of steel ships Part H Chapter 2 2.17.4-4

Correction	Present	Note
4 ~~Circuit-breakers are~~Multipole circuit breaker is generally to be used for short-circuit protection at primary sides of transformers.	**4** Circuit-breakers are generally to be used for short-circuit protection at primary sides of transformers.	Wording correction

Rules for the survey and construction of steel ships Part H Chapter 2 2.17.4-8

Correction	Present	Note
~~**8** Voltage~~**8** Current and voltage transformers for control and instrumentation are to be provided with overload and short circuit protection on the secondary side.	**8** Voltage transformers for control and instrumentation are to be provided with overload and short circuit protection on the secondary side.	Wording correction

Rules for the survey and construction of steel ships Part H Chapter 4 4.2.6-4

Correction	Present	Note
4 The ventilation air change ~~ratios~~capacity in cargo pump rooms for tankers, ships carrying liquefied gases in bulk and ships carrying dangerous chemicals in bulk are to comply with the requirements given in **4.5.4-1(1), Part R**, **12.1.3, Part N** and **12.2.3, Part S**.	**4** The ventilation air change ratios in cargo pump rooms for tankers, ships carrying liquefied gases in bulk and ships carrying dangerous chemicals in bulk are to comply with the requirements given in **4.5.4-1(1), Part R**, **12.1.3, Part N** and **12.2.3, Part S**.	Wording correction

Rules for the survey and construction of steel ships Part H Annex 2.11.1-2 1.3.5-1

Correction	Present	Note
1 Electrical power converters for feeding power from accumulator battery systems to main switchboards are to comply with the following **(1)** to **(5)** items. For DC distribution systems (e.g. **Fig. 3(a)(ii)**, **Fig. 3(b)(ii)**, **Fig. 3(e)**), only **(3)** through **(5)** apply; however, in cases where electric propulsion ships (such as shown in **Fig. 3(e)**) depend entirely on accumulator battery system power for their power requirements, **(3)** and **(4)** need not be satisfied as long as there are no problems supplying power to each load. ((1) is omitted.) (2) The following frequency characteristics are to be provided. (a) Accumulator battery systems that fall under **1.3.1-1(2)** i) Momentary frequency variations are, in principle, to be 10 % or less of maximum rated frequency when rated loads of electrical power converters are suddenly thrown off. However, in cases where momentary frequency variations are 10 % or less of the rated frequency when the maximum load on board is suddenly thrown off and the frequency is returned to within 1 % of the final steady frequency in not more	**1** Electrical power converters for feeding power from accumulator battery systems to main switchboards are to comply with the following **(1)** to **(5)** items. For DC distribution systems (e.g. **Fig. 3(a)(ii)**, **Fig. 3(b)(ii)**, **Fig. 3(e)**), only **(3)** through **(5)** apply; however, in cases where electric propulsion ships (such as shown in **Fig. 3(e)**) depend entirely on accumulator battery system power for their power requirements, **(3)** and **(4)** need not be satisfied as long as there are no problems supplying power to each load. ((1) is omitted.) (2) The following frequency characteristics are to be provided. (a) Accumulator battery systems that fall under **1.3.1-1(2)** i) Momentary frequency variations are, in principle, to be 10 % or less of maximum rated frequency when rated loads of electrical power converters are suddenly thrown off. However, in cases where momentary frequency variations are 10 % or less of the rated frequency when the maximum load on board is suddenly thrown off and the frequency is returned to within 1 % of the final steady frequency in not more	

than 5 *seconds*, momentary frequency variations in excess of 10 % of rated frequencies may be acceptable in cases where rated loads of such electric power converters are suddenly thrown off.	than 5 *seconds*, momentary frequency variations in excess of 10 % of rated frequencies may be acceptable in cases where rated loads of such electric power converters are suddenly thrown off.	
ii) Momentary frequency variations are, in principle, to be 10 % or less of ~~maximum~~ rated frequency when 50 % of the rated loads of electrical power converters are suddenly thrown on followed by the remaining 50 % of such loads suddenly being thrown on after an interval to restore the steady state. On the other hand, momentary frequency variations are to be 10 % or less of ~~maximum~~ rated frequency when 100 % of the rated loads of electrical power converters are suddenly thrown on, and frequencies are to return to within 1 % of final steady frequencies in not more than 5 *seconds*. In cases where such throwing-on methods are difficult according to the above requirements, and where a three-stage or more throwing-on method is adopted, throw-on power calculation sheets which take into consideration the following **1)** to **4)** are to be submitted to the Society for approval. 1) Power restoration after blackout 2) Sequential starting 3) Starting with large start-up loads 4) Instantaneous load transfers in cases where one set of main sources of electrical power fails (during parallel running)	ii) Momentary frequency variations are, in principle, to be 10 % or less of maximum rated frequency when 50 % of the rated loads of electrical power converters are suddenly thrown on followed by the remaining 50 % of such loads suddenly being thrown on after an interval to restore the steady state. On the other hand, momentary frequency variations are to be 10 % or less of maximum rated frequency when 100 % of the rated loads of electrical power converters are suddenly thrown on, and frequencies are to return to within 1 % of final steady frequencies in not more than 5 *seconds*. In cases where such throwing-on methods are difficult according to the above requirements, and where a three-stage or more throwing-on method is adopted, throw-on power calculation sheets which take into consideration the following **1)** to **4)** are to be submitted to the Society for approval. 1) Power restoration after blackout 2) Sequential starting 3) Starting with large start-up loads 4) Instantaneous load transfers in cases where one set of main sources of electrical power fails (during parallel running)	Wording correction Wording correction
((b) is omitted.)	((b) is omitted.)	

((3) to (5) are omitted.)	((3) to (5) are omitted.)	

Rules for the survey and construction of steel ships Part K Chapter 3 Table K3.10

Correction

Table K3.10 Mechanical Properties

Grade	Yield point or proof stress (N/mm^2)	Tensile strength (N/mm^2)	Elongation(%) ($L = 5.65\sqrt{A}$)
*KP*42	225 min.	410~550	24 min.
*KP*46	245 min.	450~590	22 min.
*KP*49	265 min.	480~620	20 min.
*KPA*46	255 min.	450~590	23 min.
*KPA*49	275 min.	480~620	21 min.

Note:

For the plates over 90 *mm* in thickness, the elongation may be reduced from that mentioned in the above Table by 0.5% for each increment of 12.5 *mm* or fraction there of exceeding 90 *mm* in thickness. Such reduction, however, is limited to 3%.

Present

Note

Wording correction

Rules for the survey and construction of steel ships Part K Chapter 3 Table K3.30

Correction

Table K3.30 Mechanical Properties

Grade of steel and heat treatment		Yield point or Proof stress (N/mm^2)			Tensile strength (N/mm^2) [3]		Elongation $L_0=5.65\sqrt{S_0}$ (%) [1] [2]		Impact test [7] [8]		
		Thickness (mm) [4]			Thickness (mm) [4]				Testing temperature (°C)	Minimum mean absorbed energy (J) [2]	
		$3< t \leq 50$	$50< t \leq 100$ [5]	$100< t \leq 250$ [5]	$3< t \leq 100$	$100< t \leq 250$ [6]	*T*	*L*		*T*	*L*
*KA*420	*N/NR TMCP QT*	420 min.	390 min.	365 min.	520~680	470~650	19	21	0	28	42
*KD*420									-20		
*KE*420									-40		
*KF*420									-60		
*KA*460	*N/NR TMCP QT*	460 min.	430 min.	390 min.	540~720	500~710	17	19	0	31	46
*KD*460									-20		
*KE*460									-40		
*KF*460									-60		
*KA*500	*TMCP QT*	500 min.	480 min.	440 min.	590~770	540~720	17	19	0	33	50
*KD*500									-20		
*KE*500									-40		
*KF*500									-60		
*KA*550	*TMCP*	550 min.	530 min.	490 min.	640~820	590~770	16	18	0	37	55

Present

Note

*KD*550	*QT*								-20		
*KE*550									-40		
*KF*550									-60		
*KA*620	*TMCP QT*	620 min.	580 min.	560 min.	700~890	650~830	15	17	0	41	62
*KD*620									-20		
*KE*620									-40		
*KF*620									-60		
*KA*690	*TMCP QT*	690 min.	650 min.	630 min.	770~940	710~900	14	16	0	46	69
*KD*690									-20		
*KE*690									-40		
*KF*690									-60		
*KA*890	*TMCP QT*	890 min.	830 min.	—	940~1100	—	11	13	0	46	69
*KD*890									-20		
*KE*890									-40		
*KA*960	*QT*	960 min.	—	—	980~1150	—	10	12	0	46	69
*KD*960									-20		
*KE*960									-40		

Notes:

(1) For steels whose strength levels are *K*420 to *K*960, *U*1 test specimens may be used. In such cases, the minimum elongation for the *U*1 test specimen is to comply with the requirements given in **Table K3.~~29~~31**.

(2) The direction of the longitudinal axis of the test specimen to the direction of final rolling is denoted by *L* for parallel or *T* for transverse.

(3) For steels complying with the requirements specified in **3.11**, the results of tensile tests in the through thickness direction are not to be less than 80% of specified minimum tensile strength.

(4) For bars, “thickness” is to be read as “radius” or “length of one side”

(5) For plates, flat bars and sections, the values in the thickness range of $3< t \leq 50$ are to applied regardless of thickness in cases where the design requires that tensile properties are maintained throughout the thickness.

(6) For plates, flat bars and sections for applications, values in the thickness range of $3< t \leq 100$ are to applied regardless of thickness in cases where the design requires that tensile properties are maintained throughout the thickness.

(7) When the absorbed energy of two or more test specimens among a set of test specimens is less in value than the specified minimum mean absorbed energy or when the absorbed energy of a single test specimen is less in value than 70% of the specified minimum mean absorbed energy, the test is considered to be failed.

(8) Impact tests for nominal thicknesses of less than 6 *mm* may be omitted.

Reference correction

Rules for the survey and construction of steel ships Part K Chapter 4 Table K4.20

Correction

Table K4.20 Tensile Test(2)(3)

Grade	~~Yield point or proof~~Proof stress (N/mm^2)	Tensile strength (N/mm^2)	Elongation (%) ($L = 5.65\sqrt{A}$)	
			L(1)	T(1)
*K*304*TP*	205 min.	520 min.	26 min.	22 min.
*K*304*LTP*	175 min.	480 min.		
*K*309*STP*	205 min.	520 min.		
*K*310*STP*				
*K*316*TP*				
*K*316*LTP*	175 min.	480 min.		
*K*317*TP*	205 min.	520 min.		
*K*317*LTP*	175 min.	480 min.		
*K*321*TP*	205 min.	520 min.		
*K*329*J*1*TP*	390 min.	590 min.	14 min.	10 min.
*K*329*J*3*LTP*	450 min.	620 min.	14 min.	10 min.
*K*329*J*4*LTP*	450 min.	620 min.	14 min.	10 min.
*K*347*TP*	205 min.	520 min.	26 min.	22 min.

Notes:

(1) *L* (or *T*) denotes that the longitudinal axis of the test specimen is arranged parallel (or normal) to the final direction of rolling.

(2) Where the nominal diameter of stainless steel pipes is 200 *mm* and over, tension test specimens may be taken transversely.

(3) Where test specimens of non-tubular section are taken from automatic arc welded steel pipes, laser beam welded steel pipes and electric-resistance welded steel pipes, the test specimens are to be taken from the part that does not include the welded line.

Present

Note

Wording correction

Rules for the survey and construction of steel ships Part K Chapter 6 Table K6.5

<table>
<tr><th>Correction</th><th>Present</th><th>Note</th></tr>
<tr><td>
Table K6.5 Mechanical Properties
<table>
<tr><th rowspan="2">Grade</th><th colspan="4">Tensile test</th><th colspan="3">Hardness test</th></tr>
<tr><th>~~Yield point or proof~~Proof stress (N/mm^2)</th><th>Tensile strength (N/mm^2)</th><th>Elongation (%) ($L = 5.65\sqrt{A}$)</th><th>Reduction of area (%)</th><th>Brinell hardness HBW</th><th>Rockwell hardness HRB</th><th>Vickers hardness HV</th></tr>
<tr><td>KSUSF304L
KSUSF316L</td><td>175 min.</td><td>450 min.</td><td>37 min.</td><td>50 min.</td><td rowspan="2">187 max.</td><td rowspan="2">90 max.</td><td rowspan="2">200 max.</td></tr>
<tr><td>Others</td><td>205 min.</td><td>520 min.</td><td>37 min.</td><td>50 min.</td></tr>
</table>
</td><td></td><td>Wording correction</td></tr>
</table>

Rules for the survey and construction of steel ships Part L Chapter 2 2.1.11-3

Correction	Present	Note
3 After the proof load test, components for cast super high holding power anchors are to be examined by the ultrasonic testing in way of areas where feeder heads and risers have been removed, the dye penetrant testing or the magnetic particle testing at all surfaces in addition to inspection specified above **-1** and **-2**.	**3** After the proof load test, components for cast super high holding power anchors are to be examined by the ultrasonic testing in way of areas where feeder heads and risers, the dye penetrant testing or the magnetic particle testing at all surfaces in addition to inspection specified above **-1** and **-2**.	Wording correction

Rules for the survey and construction of steel ships Part L Chapter 2 2.2.10-1

Correction	Present	Note
1 Anchors are to be subjected to and pass visual inspections and the non-destructive tests specified in **(1)** to **(4)** below. Such inspections and tests are, however, to be carried out after proof tests are completed. (1) Cast components of anchors are to be examined using dye penetrant testing or magnetic particle testing in way of areas where feeder heads and risers have been removed and where weld repairs have been carried out. (2) Cast components of anchors are to be examined using ultrasonic testing in way of areas where feeder heads and risers have been removed and then dye penetrant testing or the magnetic particle testing of all surfaces is to be carried out in addition to inspections specified in **(1)** above. (3) Welded sections of rolled steel fabricated anchors are to be examined using dye penetrant testing or magnetic particle testing. (4) For anchors complying with the requirements in **Chapter 1A, Part 2 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use** or **2.2.9-4** above, ultrasonic testing is to be carried out for all full	**1** Anchors are to be subjected to and pass visual inspections and the non-destructive tests specified in **(1)** to **(4)** below. Such inspections and tests are, however, to be carried out after proof tests are completed. (1) Cast components of anchors are to be examined using dye penetrant testing or magnetic particle testing in way of feeder heads and risers and where weld repairs have been carried out. (2) Cast components of anchors are to be examined using ultrasonic testing in way of feeder heads and risers and then dye penetrant testing or the magnetic particle testing of all surfaces is to be carried out in addition to inspections specified in **(1)** above. (3) Welded sections of rolled steel fabricated anchors are to be examined using dye penetrant testing or magnetic particle testing. (4) For anchors complying with the requirements in **Chapter 1A, Part 2 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use** or **2.2.9-4** above, ultrasonic testing is to be carried out for all full	Wording correction Wording correction

penetration welding in addition to the tests specified in **(3)** above.	penetration welding in addition to the tests specified in **(3)** above.	

Rules for the survey and construction of steel ships Part L Chapter 3 3.1.3-2

Correction	Present	Note
2 Notwithstanding **-1**, the rolled steel round bars may be used for chain round bars, provided they satisfactorily comply with the Society and comply with the requirements **3.6.46, Part K**.	**2** Notwithstanding **-1**, the rolled steel round bars may be used for chain round bars, provided they satisfactorily comply with the Society and comply with the requirements **3.6.4, Part K**.	Reference correction

Rules for the survey and construction of steel ships Part L Chapter 3 3.2.15-2

Correction	Present	Note
2 Where harmful defects are found from non-destructive test specified ~~if~~in **3.2.14-2**, a defective link may be cut out and connecting common link or joining shackle inserted in its place. Retests specified in **3.2.11** to **3.2.13** are to be carried out, and where the results comply with the requirements, these offshore chains and their accessories are considered acceptable.	**2** Where harmful defects are found from non-destructive test specified if **3.2.14-2**, a defective link may be cut out and connecting common link or joining shackle inserted in its place. Retests specified in **3.2.11** to **3.2.13** are to be carried out, and where the results comply with the requirements, these offshore chains and their accessories are considered acceptable.	Wording correction

Rules for the survey and construction of steel ships Part L Chapter 3 3.2.16-1

Correction	Present	Note
1 Where offshore chains and accessories of offshore chains have satisfactorily passed the tests and inspections required by **3.2**, they are to be marked as follows. (1) Places of markings (a) At stud of each end of offshore chains (b) At stud of each end at intervals not exceeding 100 *m* (c) On connecting common link (Stud links are marked at the stud. Studless links are marked at the outside of straight parts without flash butt welds.)	**1** Where offshore chains and accessories of offshore chains have satisfactorily passed the tests and inspections required by **3.2**, they are to be marked as follows. (1) Places of markings (a) At stud of each end of offshore chains (b) At stud of each end at intervals not exceeding 100 *m* (c) On connecting common link (Stud links are marked at the stud. Studless links are marked at the outside of straight parts without flash butt welds.)	

(d) On stud of common links next to connecting common links or shackles (e) All kinds of accessories for offshore chains (2) Kinds of markings (a) Society's stamp (b) The grade of offshore chains and accessories of offshore chains (e.g. *NK-R*3, *NK-R*3*S*, *NK-R*4, *NK-R*4*S* and *NK-R*5) (c) The nominal diameter of offshore chains and accessories for offshore chain ~~Manufacturer's number~~ ~~(d~~(d) Manufacturer's number (e) The certificate number (an abbreviation or equivalent is to be indicated on certificates.)	(d) On stud of common links next to connecting common links or shackles (e) All kinds of accessories for offshore chains (2) Kinds of markings (a) Society's stamp (b) The grade of offshore chains and accessories of offshore chains (e.g. *NK-R*3, *NK-R*3*S*, *NK-R*4, *NK-R*4*S* and *NK-R*5) (c) The nominal diameter of offshore chains and accessories for offshore chain Manufacturer's number (d) The certificate number (an abbreviation or equivalent is to be indicated on certificates.)	Wording correction

Rules for the survey and construction of steel ships Part L Chapter 4 4.1.7-4

Correction	Present	Note
4 The individual wire tests are to be carried out in accordance with the following requirements: (1) Wrapping Tests In wrapping tests, the specimens are to be wrapped at least eight times around the wire with the same diameter as the specimen. Where they are unwrapped, the number of broken specimens is not to exceed the number given in **Table L4.5** except for the core of the strand. (2) Twisting Tests (a) In twisting tests, the specimen with the length 100 times the diameter of the specimen is to be hardly gripped at the ends, and then one end is to be twisted until the specimen is broken. The tests are to show that the number of the specimens which have been broken down with the number of times of twisting less than that specified in the	**4** The individual wire tests are to be carried out in accordance with the following requirements: (1) Wrapping Tests In wrapping tests, the specimens are to be wrapped at least eight times around the wire with the same diameter as the specimen. Where they are unwrapped, the number of broken specimens is not to exceed the number given in **Table L4.5** except for the core of the strand. (2) Twisting Tests (a) In twisting tests, the specimen with the length 100 times the diameter of the specimen is to be hardly gripped at the ends, and then one end is to be twisted until the specimen is broken. The tests are to show that the number of the specimens which have been broken down with the number of times of twisting less than that specified in the	

above **Table L4.6** is not to be more than that given in the **Table L4.5** except for the core of the strand. (b) Where the specimen has been broken down at the parts of the grips, and the results of the test do not comply with the requirements, a retest may be allowed. (3) Inspection of Diameter Diameters of individual wires are to be inspected at the time of other tests. The number of specimens which fail to meet the requirements in **4.1.4-1** are not to be more than given in **Table L4.5** except for the core of the strand.	above Table is not to be more than that given in the **Table L4.5** except for the core of the strand. (b) Where the specimen has been broken down at the parts of the grips, and the results of the test do not comply with the requirements, a retest may be allowed. (3) Inspection of Diameter Diameters of individual wires are to be inspected at the time of other tests. The number of specimens which fail to meet the requirements in **4.1.4-1** are not to be more than given in **Table L4.5** except for the core of the strand.	Reference correction

Rules for the survey and construction of steel ships Part M Chapter 6 6.7.7-3

Correction	Present	Note
3 The tensile strength, ~~yield point~~proof stress and elongation of the test specimens are to be complied with the requirements of **Table M6.48**, according to the grades of welding material. However, the specified value of the minimum proof stress may be altered to other values subject to the approval of the Society.	**3** The tensile strength, yield point and elongation of the test specimens are to be complied with the requirements of **Table M6.48**, according to the grades of welding material. However, the specified value of the minimum proof stress may be altered to other values subject to the approval of the Society.	Wording correction

Rules for the survey and construction of steel ships Part M Chapter 9 9.8.4-7

Correction	Present	Note
7 The testing levels specified in *RT-D* specifications are to be in accordance with *ISO* ~~13588~~17636-2 and ~~*ISO* 19285~~*JIS Z* 3110 or recognized equivalent standards deemed acceptable by the Society. The aforementioned standards, in principle, refer to the most recent version published.	**7** The testing levels specified in *RT-D* specifications are to be in accordance with *ISO* 13588 and *ISO* 19285 or recognized equivalent standards deemed acceptable by the Society. The aforementioned standards, in principle, refer to the most recent version published.	Wording correction

Rules for the survey and construction of steel ships Part S Chapter 18 18.1.1-2

Correction	Present	Note
2 Some liquid substances are identified as falling into Pollution Category *Z* and, therefore, subject to certain requirements of *MARPOL* 73/78 Annex II.	**2** Some liquid substances are identified as falling into Pollution Category *Z* and, therefore, subject to certain requirements of *MARPOL* Annex II.	Wording correction

Rules for the survey and construction of steel ships Part S Chapter 18 18.1.1-3

Correction	Present	Note
3 Liquid mixtures which are assessed or provisionally assessed under regulation 6.3 of *MARPOL* 73/78 Annex II as falling into Pollution Category *Z* or *OS*, and which do not present safety hazards, may be carried under the appropriate entry in this chapter for “Noxious or Non-Noxious Liquid Substances, not otherwise specified (n.o.s.)”.	**3** Liquid mixtures which are assessed or provisionally assessed under regulation 6.3 of *MARPOL* Annex II as falling into Pollution Category *Z* or *OS*, and which do not present safety hazards, may be carried under the appropriate entry in this chapter for “Noxious or Non-Noxious Liquid Substances, not otherwise specified (n.o.s.)”.	Wording correction

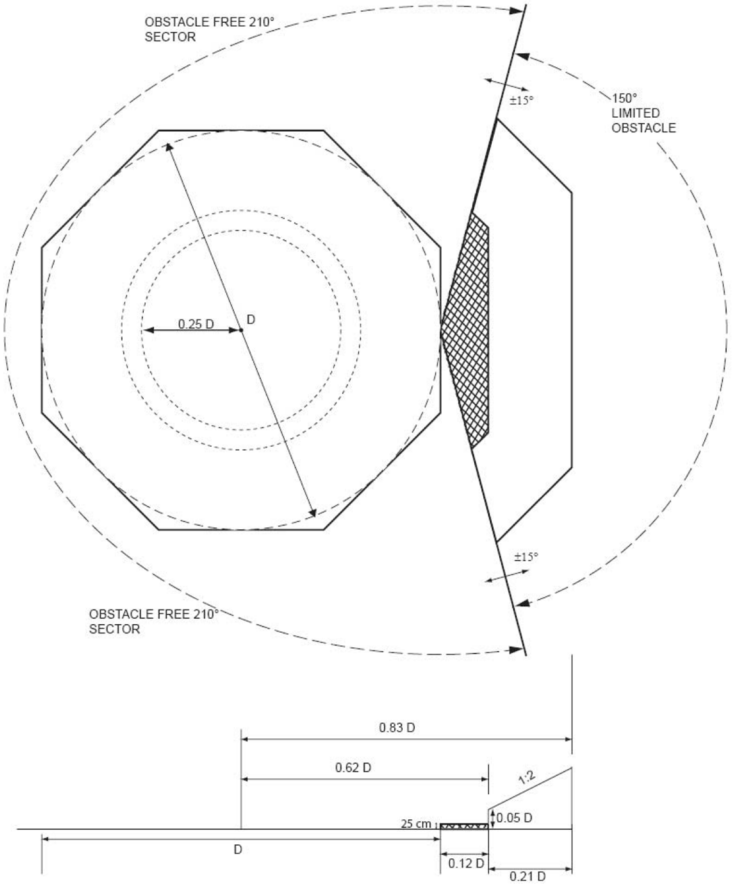
Rules for the survey and construction of steel ships Part O Chapter 1 1.2.7

Correction	Present	Note
Ships intended for navigation in ice covered waters are to be reinforced in accordance with the requirements of **Chapter ~~5~~8, Part I**.	Ships intended for navigation in ice covered waters are to be reinforced in accordance with the requirements of **Chapter 5, Part I**.	Reference correction

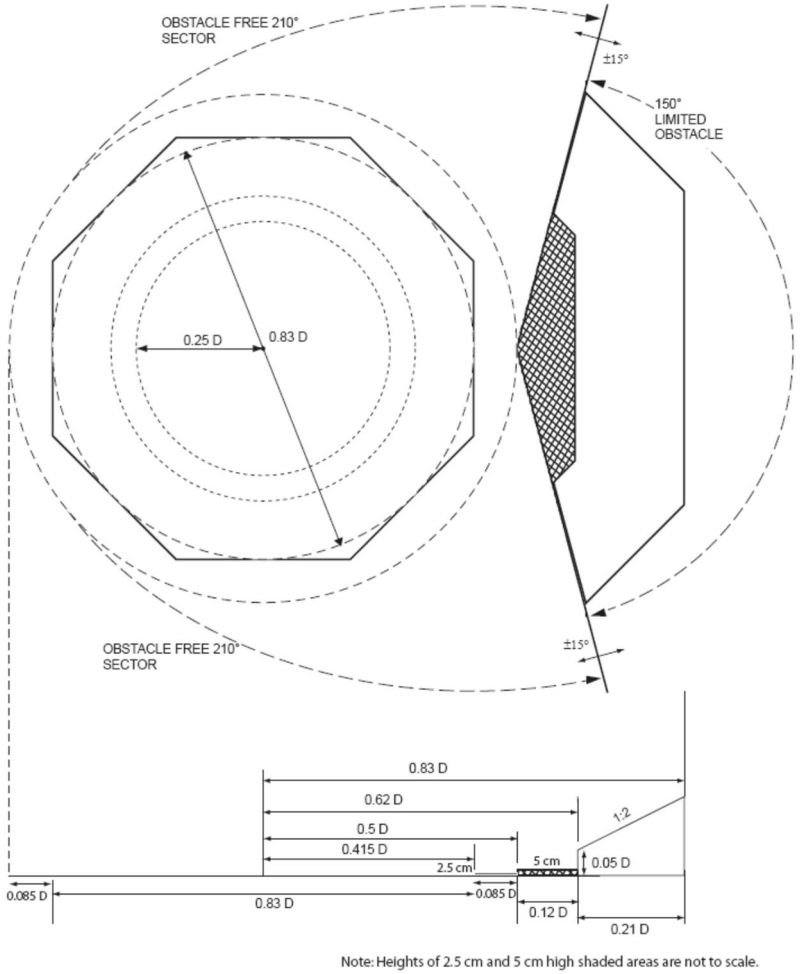
Rules for the survey and construction of steel ships Part P Chapter 6 6.5.1-2

Correction	Present	Note
2 Ships intended for navigation in ice covered waters are to be reinforced in accordance with the requirements of **Chapter ~~5~~8, Part I**.	**2** Ships intended for navigation in ice covered waters are to be reinforced in accordance with the requirements of **Chapter 5, Part I**.	Reference correction

Rules for the survey and construction of steel ships Part P Chapter 17 Fig. P17.2

Correction	Present	Note
Fig. P17.2 Helideck Obstacle Limitation Sector (Single Main Rotor Helicopters)  Note: Where the dynamic load bearing area of the helideck enclosed by the *FATO* perimeter marking is a shape other than circular, the extent of the *LOS* ~~segments~~as defined in **17.3.2(3)** are represented as lines parallel to the perimeter of the landing area rather than arcs. **Fig. P17.2** has been constructed on the assumption that an octagonal helideck is provided.		Wording correction

Rules for the survey and construction of steel ships Part P Chapter 17 Fig. P17.3

Correction	Present	Note
Fig. P17.3 Helideck Obstacle Limitation Sector (Single Main Rotor Helicopters for Benign Climate Conditions as Accepted by the Coastal State)  Note: Where the dynamic load bearing area of the helideck enclosed by the *FATO* perimeter marking is a shape other than circular, the extent of the *LOS* ~~segments~~as defined in **17.3.2(3)** are represented as lines parallel to the perimeter of the landing area rather than arcs. **Fig. P17.3** has been constructed on the assumption that an octagonal helideck is provided.		Wording correction

Rules for the survey and construction of steel ships Part P Chapter 18 18.3.2

Correction	Present	Note
If not included in the official log or tour record, the following additional information or records are to be maintained for a period acceptable to the Administration:	If not included in the official log or tour record, the following additional information or records are to be maintained for a period acceptable to the Administration:	
(1) Survey records for Periodical Surveys	(1) Survey record<u>s</u> for Periodical Surveys	Wording correction
(2) Inspection and maintenance records related to means of access specified in **9.6.5**	(2) Inspection and maintenance records related to means of access specified in **9.6.5**	
(3) Light ship data alterations log specified in **12.5.2-5(3)(b)ii), Part B**	(3) Light ship data alterations log specified in **12.5.2-5(3)(b)ii), Part B**	
(4) Testing records and equipment changes for anchors and related equipment specified in **10.3.3**	(4) Testing records and equipment changes for anchors and related equipment specified in **10.3.3**	
(5) Maintenance, inspection and testing records related to fire-fighting systems specified in **15.2.16-4**	(5) Maintenance, inspection and testing records related to fire-fighting systems specified in **15.2.16-4**	
(6) Maintenance records related to life-saving equipment specified in **<u>2.2.3-</u>1<u>.</u>(1.1-8<u>,</u>), Chapter 1<u>2</u> of the Rules for Safety Equipment**	(6) Maintenance records related to life-saving equipment specified in **1.1.1-8, Chapter 1 of the Rules for Safety Equipment**	Reference correction
(7) Inspections of cranes specified in **Rules for Cargo Handling Appliances**	(7) Inspections of cranes specified in **Rules for Cargo Handling Appliances**	
(8) Rated capacities of lifting and hoisting equipment specified in **9.4.1-2**	(8) Rated capacities of lifting and hoisting equipment specified in **9.4.1-2**	
(9) Muster lists specified in **18.2.11-3**	(9) Muster lists specified in **18.2.11-3**	
(10) The electrical equipment register specified in **13.4**	(10) The electrical equipment register specified in **13.4**	
(11) Maintenance and repair of all electrical equipment in hazardous areas for continued certification in accordance with the international standards referred to in paragraph **13.4**	(11) Maintenance and repair of all electrical equipment in hazardous areas for continued certification in accordance with the international standards referred to in paragraph **13.4**	

Rules for the survey and construction of steel ships Part PS Chapter 4 4.4.4-1

Correction	Present	Note
1 In cases where chains are used for mooring lines, the standard length of the part where the chain and fairleader make contact is to be not less than 7 times the ~~chain diameter.~~link length.	**1** In cases where chains are used for mooring lines, the standard length of the part where the chain and fairleader make contact is to be not less than 7 times the chain diameter.	Wording correction

Rules for the survey and construction of steel ships Part PS Chapter 7 7.1.2-1

Correction	Present	Note
1 With respect to machinery installations other than those used solely for the specific operation which is the purpose of the Floating Offshore Facility (the processing of crude oil, etc. extracted from seabeds.), relevant requirements given in **Part D** listed in the following **(1)** to **(46)** as well as the requirements given in this Chapter are to be applied. (The terms "cargo" and "cargo oil" are to be construed as "crude oil", "carry" and "transport" are to be construed as "process/store", "ship" and "tanker" are to be construed as "Floating Offshore Facility".) (1) **1.1.2, Part D** General - General - Equivalency (2) **1.1.3, Part D** General - General - Machinery Installations with Novel Design Features (3) **1.1.4, Part D** General - General - Modification of Requirements (4) **1.1.6, Part D** General - General - Terminology (5) **1.2, Part D** General - Materials (6) **1.3.4, Part D** General - General Requirements for Machinery Installations - Fire protections (7) **1.3.5, Part D** General - General Requirements for Machinery Installations - Ventilating Systems for Machinery Spaces (8) **1.3.6, Part D** General - General Requirements for Machinery Installations ~~- Protection against Noise~~ - Machinery space	**1** With respect to machinery installations other than those used solely for the specific operation which is the purpose of the Floating Offshore Facility (the processing of crude oil, etc. extracted from seabeds.), relevant requirements given in **Part D** listed in the following **(1)** to **(46)** as well as the requirements given in this Chapter are to be applied. (The terms "cargo" and "cargo oil" are to be construed as "crude oil", "carry" and "transport" are to be construed as "process/store", "ship" and "tanker" are to be construed as "Floating Offshore Facility".) (1) **1.1.2, Part D** General - General - Equivalency (2) **1.1.3, Part D** General - General - Machinery Installations with Novel Design Features (3) **1.1.4, Part D** General - General - Modification of Requirements (4) **1.1.6, Part D** General - General - Terminology (5) **1.2, Part D** General - Materials (6) **1.3.4, Part D** General - General Requirements for Machinery Installations - Fire protections (7) **1.3.5, Part D** General - General Requirements for Machinery Installations - Ventilating Systems for Machinery Spaces (8) **1.3.6, Part D** General - General Requirements for Machinery Installations - Protection against Noise	Wording correction

(9) **Chapter 2, Part D** Reciprocating Internal Combustion Engines	(9) **Chapter 2, Part D** Reciprocating Internal Combustion Engines	
(10) **Chapter 3, Part D** Steam Turbines	(10) **Chapter 3, Part D** Steam Turbines	
(11) **Chapter 4, Part D** Gas Turbines	(11) **Chapter 4, Part D** Gas Turbines	
(12) **Chapter 5, Part D** Power Transmission Systems	(12) **Chapter 5, Part D** Power Transmission Systems	
(13) **Chapter 6, Part D** Shaftings	(13) **Chapter 6, Part D** Shaftings	
(14) **Chapter 8, Part D** Torsional Vibration of Shaftings	(14) **Chapter 8, Part D** Torsional Vibration of Shaftings	
(15) **Chapter 9, Part D** Boilers, etc. and Incinerators	(15) **Chapter 9, Part D** Boilers, etc. and Incinerators	
(16) **Chapter 10, Part D** Pressure Vessels	(16) **Chapter 10, Part D** Pressure Vessels	
(17) **Chapter 11, Part D** Welding for Machinery Installations	(17) **Chapter 11, Part D** Welding for Machinery Installations	
(18) **Chapter 12, Part D** Pipes, Valves, Pipe Fittings and Auxiliaries	(18) **Chapter 12, Part D** Pipes, Valves, Pipe Fittings and Auxiliaries	
(19) **13.1, Part D** Piping Systems - General	(19) **13.1, Part D** Piping Systems - General	
(20) **13.2, Part D** Piping Systems - Piping	(20) **13.2, Part D** Piping Systems - Piping	
(21) **13.3, Part D** Piping Systems - Sea Suction Valves and Overboard Discharge Valves	(21) **13.3, Part D** Piping Systems - Sea Suction Valves and Overboard Discharge Valves	
(22) **13.4, Part D** Piping Systems - Scuppers and Sanitary Discharges, etc.	(22) **13.4, Part D** Piping Systems - Scuppers and Sanitary Discharges, etc.	
(23) **13.6, Part D** Piping Systems - Air Pipes	(23) **13.6, Part D** Piping Systems - Air Pipes	
(24) **13.7, Part D** Piping Systems - Overflow Pipes	(24) **13.7, Part D** Piping Systems - Overflow Pipes	
(25) **13.8, Part D** Piping Systems - Sounding Pipes	(25) **13.8, Part D** Piping Systems - Sounding Pipes	
(26) **13.9.1, Part D** Piping Systems - Fuel Oil Systems - General	(26) **13.9.1, Part D** Piping Systems - Fuel Oil Systems - General	
(27) **13.9.2, Part D** Piping Systems - Fuel Oil Systems - Fuel Oil Filling Pipes	(27) **13.9.2, Part D** Piping Systems - Fuel Oil Systems - Fuel Oil Filling Pipes	
(28) **13.9.4, Part D** Piping Systems - Fuel Oil Systems - Drip Trays and Drainage System	(28) **13.9.4, Part D** Piping Systems - Fuel Oil Systems - Drip Trays and Drainage System	
(29) **13.9.5, Part D** Piping Systems - Fuel Oil Systems - Fuel Oil Heaters	(29) **13.9.5, Part D** Piping Systems - Fuel Oil Systems - Fuel Oil Heaters	
(30) **13.10.1, Part D** Piping Systems - Lubricating Oil Systems and Hydraulic Oil Systems - General	(30) **13.10.1, Part D** Piping Systems - Lubricating Oil Systems and Hydraulic Oil Systems - General	
(31) **13.11, Part D** Piping Systems - Thermal Oil Systems	(31) **13.11, Part D** Piping Systems - Thermal Oil Systems	
(32) **13.13, Part D** Piping Systems - Pneumatic Piping	(32) **13.13, Part D** Piping Systems - Pneumatic Piping	

System (33) **13.14, Part D** Piping Systems - Steam Piping Systems and Condensate Systems (34) **13.15.3, Part D** Piping Systems - Feed Water Systems for Boilers - Distilling Plant (35) **13.15.4, Part D** Piping Systems - Feed Water Systems for Boilers - Pipes passing through Tanks (36) **13.16, Part D** Piping Systems - Exhaust Gas Piping Arrangement (37) **13.17, Part D** Piping Systems - Tests (38) **14.1.1-1, Part D** Piping Systems for Tankers - General - Scope (39) **14.1.2, Part D** Piping Systems for Tankers - General - Drawings and Data (40) **14.2, Part D** Piping Systems for Tankers - Cargo Oil Pumps, Cargo Oil Piping Systems, Pipings in Cargo Oil Tanks, etc. (41) **14.3, Part D** Piping Systems for Tankers - Piping Systems for Cargo Oil Pump Rooms, Cofferdams and Tanks adjacent to Cargo Oil Tanks (42) **14.4, Part D** Piping Systems for Tankers - Ships only carrying Oils having a Flashpoint above 60°C (43) **14.6, Part D** Piping Systems for Tankers - Tests (44) **Chapter 17, Part D** Refrigerating Machinery and Controlled Atmosphere Systems (45) **Chapter 18, Part D** Automatic and Remote Control (46) **Chapter 24, Part D** Spare Parts, Tools and Instruments	System (33) **13.14, Part D** Piping Systems - Steam Piping Systems and Condensate Systems (34) **13.15.3, Part D** Piping Systems - Feed Water Systems for Boilers - Distilling Plant (35) **13.15.4, Part D** Piping Systems - Feed Water Systems for Boilers - Pipes passing through Tanks (36) **13.16, Part D** Piping Systems - Exhaust Gas Piping Arrangement (37) **13.17, Part D** Piping Systems - Tests (38) **14.1.1-1, Part D** Piping Systems for Tankers - General - Scope (39) **14.1.2, Part D** Piping Systems for Tankers - General - Drawings and Data (40) **14.2, Part D** Piping Systems for Tankers - Cargo Oil Pumps, Cargo Oil Piping Systems, Pipings in Cargo Oil Tanks, etc. (41) **14.3, Part D** Piping Systems for Tankers - Piping Systems for Cargo Oil Pump Rooms, Cofferdams and Tanks adjacent to Cargo Oil Tanks (42) **14.4, Part D** Piping Systems for Tankers - Ships only carrying Oils having a Flashpoint above 60°C (43) **14.6, Part D** Piping Systems for Tankers - Tests (44) **Chapter 17, Part D** Refrigerating Machinery and Controlled Atmosphere Systems (45) **Chapter 18, Part D** Automatic and Remote Control (46) **Chapter 24, Part D** Spare Parts, Tools and Instruments	

Rules for the survey and construction of steel ships Part PS Chapter 7 7.1.2-2

Correction	Present	Note
2 With respect to machinery installations used solely for a specific operation which is the purpose of the Floating Offshore Facility (the processing of crude oil, etc. extracted	**2** With respect to machinery installations used solely for a specific operation which is the purpose of the Floating Offshore Facility (the processing of crude oil, etc. extracted	

from seabeds.), relevant requirements given in **Part D** listed in the following **(1)** to **(25)** as well as the requirements given in **7.1.3** and **7.1.4** are to be applied. (The terms "cargo" and "cargo oil" are to be construed as "crude oil", "carry" and "transport" are to be construed as "process/store", "ship" and "tanker" are to be construed as "Floating Offshore Facility".) (1) **1.1.2, Part D** General - General - Equivalency (2) **1.1.3, Part D** General - General - Machinery Installations with Novel Design Features (3) **1.1.4, Part D** General - General - Modification of Requirements (4) **1.1.6, Part D** General - General - Terminology (5) **1.2, Part D** General - Materials (6) **1.3.4, Part D** General - General Requirements for Machinery Installations - Fire Protections (7) **1.3.5, Part D** General - General Requirements for Machinery Installations - Ventilating Systems for Machinery Spaces (8) **1.3.6, Part D** General - General Requirements for Machinery Installations ~~- Protection against Noise~~ Machinery space (9) **2.2.2-4, Part D** Reciprocating Internal Combustion Engines - Materials, Construction and Strength - Construction, Installation and General (10) **2.2.2-5, Part D** Reciprocating Internal Combustion Engines - Materials, Construction and Strength - Construction, Installation and General (11) **2.2.2-6, Part D** Reciprocating Internal Combustion Engines - Materials, Construction and Strength - Construction, Installation and General (12) **2.4, Part D** Reciprocating Internal Combustion Engines - Safety Devices (13) **2.5.4, Part D** Reciprocating Internal Combustion Engines - Associated Installations - Fuel Oil	from seabeds.), relevant requirements given in **Part D** listed in the following **(1)** to **(25)** as well as the requirements given in **7.1.3** and **7.1.4** are to be applied. (The terms "cargo" and "cargo oil" are to be construed as "crude oil", "carry" and "transport" are to be construed as "process/store", "ship" and "tanker" are to be construed as "Floating Offshore Facility".) (1) **1.1.2, Part D** General - General - Equivalency (2) **1.1.3, Part D** General - General - Machinery Installations with Novel Design Features (3) **1.1.4, Part D** General - General - Modification of Requirements (4) **1.1.6, Part D** General - General - Terminology (5) **1.2, Part D** General - Materials (6) **1.3.4, Part D** General - General Requirements for Machinery Installations - Fire Protections (7) **1.3.5, Part D** General - General Requirements for Machinery Installations - Ventilating Systems for Machinery Spaces (8) **1.3.6, Part D** General - General Requirements for Machinery Installations - Protection against Noise (9) **2.2.2-4, Part D** Reciprocating Internal Combustion Engines - Materials, Construction and Strength - Construction, Installation and General (10) **2.2.2-5, Part D** Reciprocating Internal Combustion Engines - Materials, Construction and Strength - Construction, Installation and General (11) **2.2.2-6, Part D** Reciprocating Internal Combustion Engines - Materials, Construction and Strength - Construction, Installation and General (12) **2.4, Part D** Reciprocating Internal Combustion Engines - Safety Devices (13) **2.5.4, Part D** Reciprocating Internal Combustion Engines - Associated Installations - Fuel Oil	Wording correction

Arrangements (14) **3.3, Part D** Steam Turbines - Safety Devices (15) **4.3, Part D** Gas Turbines - Safety Devices (16) **5.2.5, Part D** Power Transmission Systems - Materials and Construction - Lubricating Oil Arrangements (17) **Chapter 9, Part D** Boilers, etc. and Incinerators (18) **Chapter 10, Part D** Pressure Vessels (19) **Chapter 11, Part D** Welding for Machinery Installations (20) **13.9.1, Part D** Piping Systems - Fuel Oil Systems - General (21) **13.9.2, Part D** Piping Systems - Fuel Oil Systems - Fuel Oil Filling Pipes (22) **13.9.4, Part D** Piping Systems - Fuel Oil Systems - Drip Trays and Drainage System (23) **13.9.5, Part D** Piping Systems - Fuel Oil Systems - Fuel Oil Heaters (24) **13.10.1, Part D** Piping Systems - Lubricating Oil Systems and Hydraulic Oil Systems - General (25) **13.11, Part D** Piping Systems - Thermal Oil Systems	Arrangements (14) **3.3, Part D** Steam Turbines - Safety Devices (15) **4.3, Part D** Gas Turbines - Safety Devices (16) **5.2.5, Part D** Power Transmission Systems - Materials and Construction - Lubricating Oil Arrangements (17) **Chapter 9, Part D** Boilers, etc. and Incinerators (18) **Chapter 10, Part D** Pressure Vessels (19) **Chapter 11, Part D** Welding for Machinery Installations (20) **13.9.1, Part D** Piping Systems - Fuel Oil Systems - General (21) **13.9.2, Part D** Piping Systems - Fuel Oil Systems - Fuel Oil Filling Pipes (22) **13.9.4, Part D** Piping Systems - Fuel Oil Systems - Drip Trays and Drainage System (23) **13.9.5, Part D** Piping Systems - Fuel Oil Systems - Fuel Oil Heaters (24) **13.10.1, Part D** Piping Systems - Lubricating Oil Systems and Hydraulic Oil Systems - General (25) **13.11, Part D** Piping Systems - Thermal Oil Systems	

Rules for the survey and construction of steel ships Part PS Chapter 9 9.3.2

Correction	Present	Note
Drawings and data to be submitted are generally as follows: (1) Drawings and data for approval (a) Piping diagrams (including oil processing systems, water processing systems, flare/gas disposal systems and crude oil tanks) (b) Flare/gas release area arrangements (c) Riser compensating and tensioning systems (d) Electrical equipment and cable installation arrangement plans	Drawings and data to be submitted are generally as follows: (1) Drawings and data for approval (a) Piping diagrams (including oil processing systems, water processing systems, flare/gas disposal systems and crude oil tanks) (b) Flare/gas release area arrangements (c) Riser compensating and tensioning systems (d) Electrical equipment and cable installation arrangement plans	

(e) Wiring system diagrams including normal working currents, rated currents, prospective short-circuit currents in the circuits, line drops of voltages, type of cables, ~~cable sizes~~cross-sectional area of conductors, ratings and settings of circuit breakers, ratings of fuses and switches, and breaking capacities of circuit breakers and fuses	(e) Wiring system diagrams including normal working currents, rated currents, prospective short-circuit currents in the circuits, line drops of voltages, type of cables, cable sizes, ratings and settings of circuit breakers, ratings of fuses and switches, and breaking capacities of circuit breakers and fuses	Wording correction
(f) Summary of safety systems	(f) Summary of safety systems	
(g) Test procedures (However, in cases where test procedures conform to codes or standards deemed appropriate by the Society or in cases where provided with certificates deemed appropriate by the Society, Surveyors may modify test items, extents, etc.)	(g) Test procedures (However, in cases where test procedures conform to codes or standards deemed appropriate by the Society or in cases where provided with certificates deemed appropriate by the Society, Surveyors may modify test items, extents, etc.)	
(2) Reference drawings and data	(2) Reference drawings and data	
(a) Process description and operating philosophy	(a) Process description and operating philosophy	
(b) Process flow diagrams including heat and mass balance	(b) Process flow diagrams including heat and mass balance	
(c) Heat radiation and dispersion calculations	(c) Heat radiation and dispersion calculations	
(d) Activation logic of pressure relief systems	(d) Activation logic of pressure relief systems	
(e) Process shutdown system philosophy	(e) Process shutdown system philosophy	
(f) Injection shutdown system philosophy	(f) Injection shutdown system philosophy	
(g) Corrosion/erosion monitoring and maintenance systems	(g) Corrosion/erosion monitoring and maintenance systems	
(h) Summary data for control systems and emergency shutdown systems	(h) Summary data for control systems and emergency shutdown systems	
(i) Risk assessment data, if performed	(i) Risk assessment data, if performed	

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Correction	Present	Note
1 The section modulus of the hull for the midship part is not to be less than obtained from the following formulae, whichever is greater: Z_1: $0.95K_1L^2B$ (~~Cb~~$C_b + 0.7$) (cm^3) Z_2: $6.63C[1.28K_2L^2BC_b(1 + 0.04L/B) + Ms]$ (cm^3) K_1: As obtained from the following formulae: $L \geq 90m$: $10.75 - (\frac{300-L}{100})^{3/2}$ $L < 90m$: $0.03L + 5$ C_b: Block coefficient, the ratio of the volume of the moulded displacement corresponding to the load line to LBd. K_2: $0.0028L + 0.46$ C: As given in **Table Q12.1**. Ms: Longitudinal bending moment in still water specified in **-2** (kN-m).	**1** The section modulus of the hull for the midship part is not to be less than obtained from the following formulae, whichever is greater: Z_1: $0.95K_1L^2B$ ($Cb + 0.7$) (cm^3) Z_2: $6.63C[1.28K_2L^2BC_b(1 + 0.04L/B) + Ms]$ (cm^3) K_1: As obtained from the following formulae: $L \geq 90m$: $10.75 - (\frac{300-L}{100})^{3/2}$ $L < 90m$: $0.03L + 5$ C_b: Block coefficient, the ratio of the volume of the moulded displacement corresponding to the load line to LBd. K_2: $0.0028L + 0.46$ C: As given in **Table Q12.1**. Ms: Longitudinal bending moment in still water specified in **-2** (kN-m).	Wording correction

Rules for the survey and construction of steel ships Part R Chapter 17 17.1.3

Correction	Present	Note
The engineering analysis is to be prepared based on the Guidelines on Alternative Design and Arrangements for Fire Safety (*MSC/Circ*.1002 (including amendments approved as *MSC.1/Circ*.1552), hereinafter referred to as "the Alternative Design Guidelines".) developed by the *IMO* and is to include, as a minimum, the following elements: (1) determination of the ship type and space(s) concerned; (2) identification of prescriptive requirement(s) with which the ship or the space(s) will not comply; (3) identification of the fire and explosion hazards of the ship or the space(s) concerned; (a) identification of the possible ignition sources; (b) identification of the fire growth potential of each space concerned; (c) identification of the smoke and toxic effluent generation potential for each space concerned; (d) identification of the potential for the spread of fire, smoke or of toxic effluents from the space(s) concerned to other spaces; (4) determination of the required fire safety performance criteria for the ships or the space(s) concerned addressed by the prescriptive requirement(s); (a) performance criteria are to be based on the fire safety objectives and on the functional requirements of this chapter; (b) performance criteria are to provide a degree of safety level not less than that achieved by using the prescriptive requirements; and (c) performance criteria are to be quantifiable and measurable; (5) detailed description of the alternative design and	The engineering analysis is to be prepared based on the Guidelines on Alternative Design and Arrangements for Fire Safety (*MSC/Circ*.1002 (including amendments approved as *MSC/Circ*.1552), hereinafter referred to as "the Alternative Design Guidelines".) developed by the *IMO* and is to include, as a minimum, the following elements: (1) determination of the ship type and space(s) concerned; (2) identification of prescriptive requirement(s) with which the ship or the space(s) will not comply; (3) identification of the fire and explosion hazards of the ship or the space(s) concerned; (a) identification of the possible ignition sources; (b) identification of the fire growth potential of each space concerned; (c) identification of the smoke and toxic effluent generation potential for each space concerned; (d) identification of the potential for the spread of fire, smoke or of toxic effluents from the space(s) concerned to other spaces; (4) determination of the required fire safety performance criteria for the ships or the space(s) concerned addressed by the prescriptive requirement(s); (a) performance criteria are to be based on the fire safety objectives and on the functional requirements of this chapter; (b) performance criteria are to provide a degree of safety level not less than that achieved by using the prescriptive requirements; and (c) performance criteria are to be quantifiable and measurable; (5) detailed description of the alternative design and	Wording correction

	arrangements, including the list of the assumptions used in the design and any proposed operational restrictions or conditions; and		arrangements, including the list of the assumptions used in the design and any proposed operational restrictions or conditions; and	
(6)	technical justification demonstrating that the alternative design and arrangements meet the required fire safety performance criteria.	(6)	technical justification demonstrating that the alternative design and arrangements meet the required fire safety performance criteria.	

Rules for the survey and construction of steel ships Part X Chapter 2 2.1.1

Correction	Present	Note
The following drawings and data are, in principle, to be submitted. (1) Plans and documents for approval: (a) Plans and documents for computer-based systems subject to **Chapter 3** that are required to be submitted for approval purposes are specified in **2.2.1** according to system category. Summaries of said plans and documents are shown in **Tables X2.1** and **X2.2**. However, for computer-based systems approved for use in accordance with **Chapter 8, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use**, plans and documents submitted for the approval of use may be reutilized. (b) Plans and documents for computer-based systems subject to **Chapter 4** that are required to be submitted for approval purposes are specified in **4.4.1(1), (2), (3), (4)** and **(6)**. Summaries of said plans and documents are shown in **Table X2.3**. However, for computer-based systems approved for use in accordance with **Chapter 10, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use**, where appropriate "Test Reports" specified in **4.4.1(10)** are submitted, plans and documents submitted for the approval of use may be reutilized except for "Computer-based Systems Asset Inventory" specified in **4.4.1(1)** and "Topology Diagram" specified in **4.4.1(2)**. (c) Plans and documents for computer-based	The following drawings and data are, in principle, to be submitted. (1) Plans and documents for approval: (a) Plans and documents for computer-based systems subject to **Chapter 3** that are required to be submitted for approval purposes are specified in **2.2.1** according to system category. Summaries of said plans and documents are shown in **Tables X2.1** and **X2.2**. However, for computer-based systems approved for use in accordance with **Chapter 8, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use**, plans and documents submitted for the approval of use may be reutilized. (b) Plans and documents for computer-based systems subject to **Chapter 4** that are required to be submitted for approval purposes are specified in **4.4.1(1), (2), (3), (4)** and **(6)**. Summaries of said plans and documents are shown in **Table X2.3**. However, for computer-based systems approved for use in accordance with **Chapter 10, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use**, where appropriate "Test Reports" specified in **4.4.1(10)** are submitted, plans and documents submitted for the approval of use may be reutilized except for "Computer-based Systems Asset Inventory" specified in **4.4.1(1)** and "Topology Diagram" specified in **4.4.1(2)**. (c) Plans and documents for computer-based	

systems subject to **Chapter 5** that are required to be submitted for approval purposes are specified in **2.2.3-3(4), (5), (6), (7), (8)** and ~~(8~~**2.2.3-4(2)**. Summary of plans and documents with related actions are shown in **Table X2.4**. Summary of requirements and related plans and documents are shown in **Table X2.5**. (d) Other plans and documents considered necessary by the Society （(2)は省略）	systems subject to **Chapter 5** that are required to be submitted for approval purposes are specified in **2.2.3-3(4), (5), (6), (7)** and **(8)**. Summary of plans and documents with related actions are shown in **Table X2.4**. Summary of requirements and related plans and documents are shown in **Table X2.5**. (d) Other plans and documents considered necessary by the Society （(2)は省略）	Reference correction

Rules for the survey and construction of steel ships Part X Chapter 2 Table X2.2

Table X2.2 Systems Integrator's Plans and Documents to be Submitted
(Related to Chapter 3 COMPUTER-BASED SYSTEMS)

#	Referenced requirements	Plans and documents	Category I		Categories II and III	
			Reference	Approval	Reference	Approval
1	**2.2.1-3(2)** and **3.4.3-2**	Quality plan	-	-	-	○*
2	**2.2.1-3(3)** and **3.4.3-3**	List of system categorisations	For reference (regardless of category) ○			
3	**2.2.1.~~43~~ 3(4)** and **3.4.3-4**	Risk assessment report (For determining system category)	For reference (regardless of category) ○*			
4	**2.2.1-3(5)** and **3.4.3-5**	Vessel's system architecture	○*	-	○*	-
5	**2.2.1-3(6)** and **3.4.3-6**	SAT program	-	-	-	○
6	**2.2.1-3(6)** and **3.4.3-6**	SAT report	-	-	○	-
7	**2.2.1-3(7)** and **3.4.3-7**	SOST program	-	-	-	○
8	**2.2.1-3(7)** and **3.4.3-7**	SOST report	-	-	○	-
9	**2.2.1-3(8)** and **3.4.3-8**	Change management procedure	-	-	-	○*

(Notes)
Approval: Plans and documents to be submitted for approval
Reference: Plans and documents to be submitted for reference
○ : Submission required
○*: Submission required only when deemed necessary by the Society or its surveyor
See **3.3.1** for information on system categories

Reference correction

Rules for the survey and construction of steel ships Part X Chapter 2 Table X2.3

Table X2.3 Supplier's Plans and Documents to be Submitted
(Related to Chapter 4 CYBER RESILIENCE OF ON-BOARD SYSTEMS AND EQUIPMENT)

#	Document (Referenced requirements)	Requirements (Referenced requirements)	Reference	Approval	Note
1	Computer-based system asset inventory **(4.4.1(1))**	To be incorporated in vessel asset inventory **(5.4.2(1))**	-	○(1), (2)	
2	Topology diagrams **(4.4.1(2))**	Enabling system integrator to design security zones and conduits **(5.4.3(1))**	-	○(1), (2)	
3	Description of security ~~Capabilities~~ capabilities **(4.4.1(3))**	Required security capabilities **(4.4.2)** Additional security capabilities, if applicable **(4.4.3)**	-	○(1)	Wording correction
4	Test procedure ~~for~~of security ~~Capabilities~~ capabilities **(4.4.1(4))**	Required security capabilities **(4.4.2)** Additional security capabilities, if applicable **(4.4.3)**	-	○(1)	Wording correction
5	Security configuration ~~Guidelines~~ guidelines **(4.4.1(5))**	Network and security configuration settings (No.**29** in **Table X4.1**)	○(1)	-	Wording correction
6	Secure development lifecycle document **(4.4.1(6))**	Secure development lifecycle requirements **(4.5)**	-	○(1)	Wording correction
7	Plans for maintenance and ~~Verification~~ verification of the computer-based system **(4.4.1(7))**	Security functionality verification (No.**19** in **Table X4.1**)	○(1)	-	Wording correction
8	Information supporting the owner's incident response and recovery ~~plans~~plan **(4.4.1(8))**	Auditable events (No.**13** in **Table X4.1**) Deterministic output (No.**20** in **Table X4.1**) System backup (No.**26** in **Table X4.1**)	○(1)	-	Wording correction

		System recovery and reconstitution (No.27 in **Table X4.1**)		
9	Management of change plan (**4.4.1(9)**)	Management of change process (**Chapter 3**)	○(1)	-
10	Test reports (**4.4.1(10)**)	Configuration of security capabilities and hardening (**4.4.1(5)** and **4.5.8**)	○(2)	-

(Notes)
Approval: Plans and documents to be submitted for approval
Reference: Plans and documents to be submitted for reference
○: Submission required
(1): Submitted when approval of use has not been obtained in accordance with **Chapter 10, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use**
(2): Submitted when approval of use has been obtained in accordance with **Chapter 10, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use**

Rules for the survey and construction of steel ships Part X Chapter 2 Table X2.4

Correction

Table X2.4 Systems Integrator's or Shipowner's Plans and Documents to be Submitted
(Related to Chapter 5 CYBER RESILIENCE OF SHIPS)

#	Document (Referenced requirements)	Systems integrator			Shipowner			
		Design	Construction	Commissioning	Operation	1st AS	AS/IS	SS
1	Approved supplier documentation (**2.2.3**)	-	Maintain	Maintain	Maintain	-	-	-
2	Zones and conduit diagram (**2.2.3-3(4)**)	Submit	Maintain	Maintain	Maintain	-	-	-
3	Cyber security design description (**2.2.3-3(5)**)	Submit	Maintain	Maintain	Maintain	-	-	-
4	Vessel asset inventory (**2.2.3-3(6)**)	Submit	Maintain	Maintain	Maintain	-	-	-
5	Risk assessment for the exclusion of computer-based systems (**2.2.3-3(7)**)*	Submit	Maintain	Maintain	Maintain	-	-	-
6	Description of compensating countermeasures (**2.2.3-3(8)**)*	Submit	Maintain	Maintain	Maintain	-	-	-

Present

Note

	7	Ship cyber resilience test procedure (**2.2.3-4(2)**)	-	Submit	Demon-strate	Maintain	-	-	Demon-strate		
	8	Ship cyber security and resilience program (**2.2.3-5(7)**) - Management of change (MoC) (**5.4.2(1)(d)iv)**) - Management of software updates (**5.4.2(1)(d)iv)**) - Management of firewalls (**5.4.3(1)(d)iv)**) - Management of malware protection (**5.4.3(3)(d)iv)**) - Management of access control (**5.4.3(4)(d)iv**）) - Management of access control (**5.4.3(4)(d)iv**）) - Management of remote access (**5.4.3(6)(d)iv**）) - Management of mobile and portable devices (**5.4.3(7)(d)iv**）) - Detection of security anomalies (**5.4.4(1)(d)iv**）) - Verification of security functions (**5.4.4(2)(d)iv**）) - Incident response plans (**5.4.5(1)(d)iv**）)	-	-	-	Maintain	Submit	Demon-strate	-		

	- Recovery plans (**5.4.6(1)(d)iv**)								

(Notes)
* : If applicable
Submit: The stakeholder is to submit the document to the Society for verification and approval of compliance with requirements in **Chapter 5**.
Maintain: The stakeholder is to keep the document updated in accordance with procedure for management of change (MoC). Updated document and change management records are to be submitted to the Society as per ~~**Table X2.2**~~**Chapter 3**.
Demonstrate: The stakeholder is to demonstrate compliance to the Society in accordance with the approved document.
1st AS : First Annual Survey
AS/IS : Subsequent Annual Survey/Intermediate survey
SS : Special Survey

Reference correction

Rules for the survey and construction of steel ships Part X Chapter 2 Table X2.5

Correction	Present	Note

Table X2.5 Summary of Requirements and Documents (Related to Chapter 5 CYBERESILIENCE OF SHIPS)

(省略)		
Incident response plan (**5.4.5(1)**)		
Computer-based system security capabilities	-	-
Computer-based system documentation	Description of security capabilities Test procedure for security capabilities Information supporting incident response and recovery plans	**4.4.1(3)** **4.4.1(4)** **4.4.1(8)**
Vessel design documentation	Design description Ship cyber resilience test procedure	**5.4.5(1)(d)i)** **5.4.5(1)(d)iii)**
Ship cyber security and resilience program	Incident response plans	**5.4.5(1)(d)iv)**
Local, independent and/or manual operation (**5.4.5(2)**)		
Computer-based system security capabilities	-	-
Computer-based system documentation	Description of security capabilities Test procedure for security capabilities Information supporting incident response and recovery plans	**4.4.1(3)** **4.4.1(4)** **4.4.1(8)**
Vessel design documentation	Design description Ship cyber resilience test procedure	**5.4.5(2)(d)i)** **5.4.5(2)(d)iii)**

Reference correction

	Ship cyber security and resilience program	Incident response plans	**5.4.5(2)(d)iv)**		
	(Omitted)				

Rules for the survey and construction of steel ships Part X Chapter 2 2.2.1-2

Correction	Present	Note
2 Verification Items for System Suppliers	**2** Verification Items for System Suppliers	
(1) Quality plan (and quality manual) (see **3.4.2-1**)	(1) Quality plan (and quality manual) (see **3.4.2-1**)	
(a) Category I: This requirement is not applicable. (hereafter referred to as "N/A" in this Chapter)	(a) Category I: This requirement is not applicable. (hereafter referred to as "N/A" in this Chapter)	
(b) Categories II and III:	(b) Categories II and III:	
i) Quality plan (and quality manual) are to be submitted for approval by the Society.	i) Quality plan (and quality manual) are to be submitted for approval.	Wording correction
ii) Quality plan (and quality manual) are to be made available to Surveyor during FAT.	ii) Quality plan (and quality manual) are to be made available during FAT.	Wording correction
(2) Unique identification of systems and software (see **3.4.2-2**)	(2) Unique identification of systems and software (see **3.4.2-2**)	
(a) Category I: N/A	(a) Category I: N/A	
(b) Categories II and III: Application of the identification system is verified as a part of the FAT (see **3.4.2-7**) and SAT (see **3.4.3-6**)	(b) Categories II and III: Application of the identification system is verified as a part of the FAT (see **3.4.2-7**) and SAT (see **3.4.3-6**)	
(3) System description (System specification and design) (see **3.4.2-3**)	(3) System description (System specification and design) (see **3.4.2-3**)	
(a) Category I: The system description documentation is to be submitted for reference when deemed necessary by the Society.	(a) Category I: The system description documentation is to be submitted for reference when deemed necessary by the Society.	
(b) Categories II and III: The system description documentation is to be submitted for approval by the Society.	(b) Categories II and III: The system description documentation is to be submitted for approval.	Wording correction
(4) Environmental compliance of hardware components (see **3.4.2-4**)	(4) Environmental compliance of hardware components (see **3.4.2-4**)	
(a) Category I: Environmental tests may be omitted. However, certificates issued in accordance with **Chapter 1, Part 7 of the Guidance for the**	(a) Category I: Environmental tests may be omitted. However, certificates issued in accordance with **Chapter 1, Part 7 of the Guidance for the**	

Approval and Type Approval of Materials and Equipment for Marine Use or documents proving the passing of the environmental tests specified in **18.7.1(1), Part D** are to be submitted for reference when deemed necessary by Society (see **3.3.2**). (b) Categories II and III: Certificates issued in accordance with **Chapter 1, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use** or documents proving the passing of the environmental tests specified in **18.7.1(1), Part D** are to be submitted for reference.	**Approval and Type Approval of Materials and Equipment for Marine Use** or documents proving the passing of the environmental tests specified in **18.7.1(1), Part D** are to be submitted for reference when deemed necessary by Society (see **3.3.2**). (b) Categories II and III: Certificates issued in accordance with **Chapter 1, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use** or documents proving the passing of the environmental tests specified in **18.7.1(1), Part D** are to be submitted for reference.	
(5) Software code creation, parameterisation, and testing (see **3.4.2-5**) (a) Category I: N/A (b) Categories II and III: Software test report is to be submitted for reference when deemed necessary by the Surveyor.	(5) Software code creation, parameterisation, and testing (see **3.4.2-5**) (a) Category I: N/A (b) Categories II and III: Software test report is to be submitted for reference when deemed necessary by the Surveyor.	
(6) Internal system testing before FAT (see **3.4.2-6**) (a) Category I: N/A (b) Categories II and III: i) Internal system test report is to be available to Surveyor during survey (FAT). ii) Internal system test report is to be submitted for reference when deemed necessary by the Surveyor.	(6) Internal system testing before FAT (see **3.4.2-6**) (a) Category I: N/A (b) Categories II and III: i) Internal system test report is to be available during survey (FAT). ii) Internal system test report is to be submitted for reference when deemed necessary by the Surveyor.	Wording correction
(7) FAT before installation on board (see **3.4.2-7**) (a) Category I: N/A (b) Categories II and III: i) The FAT program is to be submitted for approval by the Society before the test. ii)- The FAT is to be witnessed by the Surveyor. iii) The FAT report is to be submitted for	(7) FAT before installation on board (see **3.4.2-7**) (a) Category I: N/A (b) Categories II and III: i) The FAT program is to be submitted for approval before the test. ii) The FAT is to be witnessed by the Surveyor. iii) The FAT report is to be submitted for	Wording correction

reference. iv) Additional FAT documentation (e.g. user manuals and internal system test reports specified in **-6**) is to be made available to Surveyor during the FAT. v) Additional FAT documentation (e.g. user manuals and internal system test reports specified in **-6**) may be required for reference when deemed necessary by the ~~Surveyor.~~ Society.	reference. iv) Additional FAT documentation (e.g. user manuals and internal system test reports specified in **-6**) is to be made available during the FAT. v) Additional FAT documentation (e.g. user manuals and internal system test reports specified in **-6**) may be required for reference when deemed necessary by the Surveyor.	Wording correction Wording correction
(8) Secure and controlled software installation on the vessel (see **3.4.2-8**) (a) Category I: N/A (b) Categories II and III: The change management procedure is to be submitted for approval~~.~~ by the Society. The change management procedure may be included in quality plan (and quality manual).	(8) Secure and controlled software installation on the vessel (see **3.4.2-8**) (a) Category I: N/A (b) Categories II and III: The change management procedure is to be submitted for approval. The change management procedure may be included in quality plan (and quality manual).	Wording correction

Rules for the survey and construction of steel ships Part X Chapter 2 2.2.1-3

Correction	Present	Note
3 Verification Items for Systems Integrators (1) Appointed systems integrator (see **3.5.1-1**) The Society is to be informed in a timely manner by owners about the systems integrators appointed to be responsible for implementing any changes to the systems in conjunction with system suppliers. (2) Quality plan (see **3.4.3-2**) (a) Category I: N/A (b) Categories II and III: i) Quality plan is to be made available for verification by the Surveyor during surveys (SAT/SOST). ii) Quality plan is to be submitted for the approval when deemed necessary by the	**3** Verification Items for Systems Integrators (1) Appointed systems integrator (see **3.5.1-1**) The Society is to be informed in a timely manner by owners about the systems integrators appointed to be responsible for implementing any changes to the systems in conjunction with system suppliers. (2) Quality plan (see **3.4.3-2**) (a) Category I: N/A (b) Categories II and III: i) Quality plan is to be made available for verification by the Surveyor during surveys (SAT/SOST). ii) Quality plan is to be submitted for the approval when deemed necessary by the	

Society. (3) Determining the category of the system in question (see **3.4.3-3**) The categories for the different systems are to be documented in the list of system categorisations and submitted to the Society for reference. (4) Risk assessment of the system (see **3.4.3-4**) Risk assessment report may be required for reference when deemed necessary by the Society. (5) Define the vessel's system architecture (see **3.4.3-5**) The vessel's system architecture is to be submitted for reference when deemed necessary by the Society. (6) System acceptance test (SAT) on board the vessel (see **3.4.3-6**) (a) Category I: N/A (b) Categories II and III: i) The SAT program is to be submitted to the Surveyor for approval before the test. ii) The SAT is to be witnessed by the Surveyor. iii) The SAT report is to be submitted to the Society for reference. (7) SOST at the vessel level (see **3.4.3-7**) (a) Category I: N/A (b) Categories II and III: i) The SOST program is to be submitted to the Surveyor for approval before the test. ii) The SOST is to be witnessed by the Surveyor. iii) The SOST report is to be submitted to the Society for reference. (8) Change management (see **3.4.3-8**) (a) Category I: N/A (b) Categories II and III: The change management procedure is to be submitted for approval when	Society. (3) Determining the category of the system in question (see **3.4.3-3**) The categories for the different systems are to be documented in the list of system categorisations and submitted for reference. (4) Risk assessment of the system (see **3.4.3-4**) Risk assessment report may be required for reference when deemed necessary by the Society. (5) Define the vessel's system architecture (see **3.4.3-5**) The vessel's system architecture is to be submitted for reference when deemed necessary by the Society. (6) System acceptance test (SAT) on board the vessel (see **3.4.3-6**) (a) Category I: N/A (b) Categories II and III: i) The SAT program is to be submitted to the Surveyor for approval before the test. ii) The SAT is to be witnessed by the Surveyor. iii) The SAT report is to be submitted to the Society for reference. (7) SOST at the vessel level (see **3.4.3-7**) (a) Category I: N/A (b) Categories II and III: i) The SOST program is to be submitted to the Surveyor for approval before the test. ii) The SOST is to be witnessed by the Surveyor. iii) The SOST report is to be submitted to the Society for reference. (8) Change management (see **3.4.3-8**) (a) Category I: N/A (b) Categories II and III: The change management procedure is to be submitted for approval when	Wording correction

deemed necessary by the Society.	deemed necessary by the Society.	

Rules for the survey and construction of steel ships Part X Chapter 2 2.2.3-5

Correction	Present	Note
5 During the operational life of the ship (1) After the ship has been delivered to the shipowner, the shipowner is to manage technical and organisational security countermeasures by establishing and implementing processes as specified in **Chapter 5**. (2) Modifications to the computer-based systems in scope of applicability of **Chapter 5** are to be carried out in accordance with the management of change (MoC) requirements in **3.6~~5~~**. This includes keeping documentation of the computer-based systems up to date. ((3) to (9) are omitted.)	**5** During the operational life of the ship (1) After the ship has been delivered to the shipowner, the shipowner is to manage technical and organisational security countermeasures by establishing and implementing processes as specified in **Chapter 5**. (2) Modifications to the computer-based systems in scope of applicability of **Chapter 5** are to be carried out in accordance with the management of change (MoC) requirements in **3.6**. This includes keeping documentation of the computer-based systems up to date. ((3) to (9) are omitted.)	Reference correction

Rules for the survey and construction of steel ships Part X Chapter 3 3.1.4

Correction	Present	Note
The terms used in this Chapter are defined as follows. (1) "Black-box description" means a description of a system's functionality and behaviour and performance as observed from outside the system in question. (2) "Black-box test methods" means verification of the functionality, performance and robustness of a system, sub-system or component by only manipulating the inputs and observing the outputs. This does not require any knowledge of the system's inner workings and focuses only on the observable behaviour of the system or component being tested in order to achieve the desired level of verification. (3) "Computer-based system" means a programmable	The terms used in this Chapter are defined as follows. (1) "Black-box description" means a description of a system's functionality and behaviour and performance as observed from outside the system in question. (2) "Black-box test methods" means verification of the functionality, performance and robustness of a system, sub-system or component by only manipulating the inputs and observing the outputs. This does not require any knowledge of the system's inner workings and focuses only on the observable behaviour of the system or component being tested in order to achieve the desired level of verification. (3) "Computer-based system" means a programmable	

electronic device, or interoperable set of programmable electronic devices, organised to achieve one or more specified purposes such as collection, processing, maintenance, use, sharing, dissemination or disposition of information. Onboard computer-based systems include Information Technology (IT) and Operational Technology (OT) systems, and may be a combination of sub-systems connected via network. Onboard computer-based systems may be connected directly or via public means of communications (e.g. the Internet) to ~~on-shore~~ashore computer-based systems, other vessels' computer-based systems and/or other facilities. ((4) to (24) are omitted.)	electronic device, or interoperable set of programmable electronic devices, organised to achieve one or more specified purposes such as collection, processing, maintenance, use, sharing, dissemination or disposition of information. Onboard computer-based systems include Information Technology (IT) and Operational Technology (OT) systems, and may be a combination of sub-systems connected via network. Onboard computer-based systems may be connected directly or via public means of communications (e.g. the Internet) to on-shore computer-based systems, other vessels' computer-based systems or other facilities. ((4) to (24) are omitted.)	Wording correction

Rules for the survey and construction of steel ships Part X Chapter 4 4.1.2-2

Correction	Present	Note
2 This Chapter applies to systems and interfaces for the following **(1)** and **(2)**. (1) Operational Technology (OT) systems onboard ships, i.e. those computer-based systems using data to control or monitor physical processes that can be vulnerable to cyber incidents and, if compromised, could lead to dangerous situations for human safety, safety of the vessel and/or threat to the environment. In particular, the computer-based systems used for the operation of the following ship functions and systems, if present onboard, are to be considered: (a) Propulsion (b) Steering (c) Anchoring and mooring (d) Electrical power generation and distribution (e) Fire detection and extinguishing systems (f) Bilge and ballast systems, loading computer	**2** This Chapter applies to systems and interfaces for the following **(1)** and **(2)**. (1) Operational Technology (OT) systems onboard ships, i.e. those computer-based systems using data to control or monitor physical processes that can be vulnerable to cyber incidents and, if compromised, could lead to dangerous situations for human safety, safety of the vessel and/or threat to the environment. In particular, the computer-based systems used for the operation of the following ship functions and systems, if present onboard, are to be considered: (a) Propulsion (b) Steering (c) Anchoring and mooring (d) Electrical power generation and distribution (e) Fire detection and extinguishing systems (f) Bilge and ballast systems, loading computer	

(g) Watertight integrity and flooding detection (h) Lighting (e.g. emergency lighting, low locations, navigation lights) (i) Any required safety system whose disruption or functional impairing may pose risks to ship operations (e.g. emergency shutdown system, cargo safety system, pressure vessel safety system, gas detection system) (j) Navigational systems required by statutory regulations (k) Internal and external communication systems required by class rules and statutory regulations For navigation and radiocommunication systems, the application of *IEC* 61162-460 or other equivalent standards in lieu of the required security capabilities in **4.4.2** and **4.4.3** may be accepted by the Society, on the condition that requirements in this Chapter are complied with. (l) Other systems or interfaces considered necessary by the Society ((2) is omitted.)	(g) Watertight integrity and flooding detection (h) Lighting (e.g. emergency lighting, low locations, navigation lights) (i) Any required safety system whose disruption or functional impairing may pose risks to ship operations (e.g. emergency shutdown system, cargo safety system, pressure vessel safety system, gas detection system) (j) Navigational systems required by statutory regulations (k) Internal and external communication systems required by class rules and statutory regulations For navigation and radiocommunication systems, the application of *IEC* 61162-460 or other equivalent standards in lieu of the required security capabilities in **4.4** may be accepted by the Society, on the condition that requirements in this Chapter are complied with. (l) Other systems or interfaces considered necessary by the Society ((2) is omitted.)	Wording correction

Rules for the survey and construction of steel ships Part X Chapter 4 4.4.1

Correction	Present	Note
The following documents are to be submitted to the Society for review and approval in accordance with the requirements in this Chapter (see also **4.6.2**). ((1) is omitted.)) (2) Topology diagrams (a) The physical topology diagram is to illustrate the physical architecture of the system. It is to be possible to identify the hardware components in the computer-based system asset inventory. The diagram is to illustrate the following:	The following documents are to be submitted to the Society for review and approval in accordance with the requirements in this Chapter (see also **4.6.2**). ((1) is omitted.)) (2) Topology diagrams (a) The physical topology diagram is to illustrate the physical architecture of the system. It is to be possible to identify the hardware components in the computer-based system asset inventory. The diagram is to illustrate the following:	

i) All endpoints and network devices, including identification of redundant units ii) Communication cables (networks, serial links), including communication with I/O units iii) Communication cables to other networks or systems (b) The logical topology diagram is to illustrate the data flow between components in the system. The diagram is to illustrate the following: i) Communication endpoints (e.g. workstations, controllers and servers) ii) Network devices (switches, routers, firewalls) iii) Physical and virtual computers iv) Physical and virtual communication paths v) Communication protocols (c) One combined topology diagram may be acceptable if all requested information can be clearly illustrated. (3) Description of security capabilities (a) This document is to describe how the computer-based system with its hardware and software components meets the required security capabilities in **4.4.1~~1~~2**. (b) Any network interfaces to other computer-based systems in the scope of applicability of this Chapter are to be described. The description is to include destination computer-based system, data flows, and communication protocols. If the System integrator has allocated the destination computer-based system to another security zone, components providing protection of the security zone boundary (see **5.4.3(2)(a)**) are to be	i) All endpoints and network devices, including identification of redundant units ii) Communication cables (networks, serial links), including communication with I/O units iii) Communication cables to other networks or systems (b) The logical topology diagram is to illustrate the data flow between components in the system. The diagram is to illustrate the following: i) Communication endpoints (e.g. workstations, controllers and servers) ii) Network devices (switches, routers, firewalls) iii) Physical and virtual computers iv) Physical and virtual communication paths v) Communication protocols (c) One combined topology diagram may be acceptable if all requested information can be clearly illustrated. (3) Description of security capabilities (a) This document is to describe how the computer-based system with its hardware and software components meets the required security capabilities in **4.4.1**. (b) Any network interfaces to other computer-based systems in the scope of applicability of this Chapter are to be described. The description is to include destination computer-based system, data flows, and communication protocols. If the System integrator has allocated the destination computer-based system to another security zone, components providing protection of the security zone boundary (see **5.4.3(2)(a)**) are to be	Reference correction

described in detail if delivered as part of the computer-based system. (c) Any network interfaces to other systems or networks outside the scope of applicability of this Chapter (untrusted networks) are to be described. The description is to specify compliance with the additional security capabilities in **4.4.3**, and include relevant procedures or instructions for the crew. Components providing protection of the security zone boundary (see **5.4.3(2)(a)**) are to be described in detail if delivered as part of the computer-based system. (d) A separate chapter is to be designated for each requirement. All hardware and software components in the system are to be addressed in the description, as relevant. (e) If any requirement is not fully met, this is to be specified in the description, and compensating countermeasures are to be proposed. The compensating countermeasures should the following: i) protect against the same threats as the original requirement, ii) provide an equal level of protection as the original requirement, iii) not be a security control that is required by other requirements in this Chapter, and iv) not introduce a higher security risk. (f) Any supporting documents (e.g. OEM information) necessary to verify compliance with the requirements are to be referenced in the description and submitted. ((4) to (10) are omitted.)	described in detail if delivered as part of the computer-based system. (c) Any network interfaces to other systems or networks outside the scope of applicability of this Chapter (untrusted networks) are to be described. The description is to specify compliance with the additional security capabilities in **4.4.3**, and include relevant procedures or instructions for the crew. Components providing protection of the security zone boundary (see **5.4.3(2)(a)**) are to be described in detail if delivered as part of the computer-based system. (d) A separate chapter is to be designated for each requirement. All hardware and software components in the system are to be addressed in the description, as relevant. (e) If any requirement is not fully met, this is to be specified in the description, and compensating countermeasures are to be proposed. The compensating countermeasures should the following: i) protect against the same threats as the original requirement, ii) provide an equal level of protection as the original requirement, iii) not be a security control that is required by other requirements in this Chapter, and iv) not introduce a higher security risk. (f) Any supporting documents (e.g. OEM information) necessary to verify compliance with the requirements are to be referenced in the description and submitted. ((4) to (10) are omitted.)	

Rules for Marine Pollution Prevention Systems Part 3 Chapter 1 1.1.1-3

Correction	Present	Note
3 For ships of oil tankers designed to have the construction carrying liquid cargo in bulk in part of cargo oil tanks, the requirements relevant to oil tankers specified in **1.2.1**, **2.3.2**, **3.2.1~~(4)(b~~-1(3)**, **3.3.1-1**, **3.3.1-3** through **3.3.1-8**, and **3.3.2-1** through **3.3.2-4** of the Rules apply to the construction of such cargo spaces. However, where the total volume of the cargo spaces is less than 1,000m^3, the requirements of **3.3.1-2** of the Rules may be applied in place of the requirements of **3.3.1-1** and **3.3.1-3** through **3.3.1-8** of the Rules.	**3** For ships of oil tankers designed to have the construction carrying liquid cargo in bulk in part of cargo oil tanks, the requirements relevant to oil tankers specified in **1.2.1**, **2.3.2**, **3.2.1(4)(b)**, **3.3.1-1**, **3.3.1-3** through **3.3.1-8**, and **3.3.2-1** through **3.3.2-4** of the Rules apply to the construction of such cargo spaces. However, where the total volume of the cargo spaces is less than 1,000m^3, the requirements of **3.3.1-2** of the Rules may be applied in place of the requirements of **3.3.1-1** and **3.3.1-3** through **3.3.1-8** of the Rules.	Reference correction

Rules for Marine Pollution Prevention Systems Part 3 Chapter 1 1.2.3-1

Correction	Present	Note
1 For ships with an aggregated oil fuel capacity of "*C*" as defined in **1.2.3-~~10~~3(10)**, of 600m^3 and above, the location of oil fuel tanks is to comply with the provisions of following **-4** to **-10**. Notwithstanding the above, small oil fuel tanks as defined in **-3(9)** need not to comply with the provisions of **-4** to **-10**, provided that the aggregate capacity of such excluded small tanks is not greater than 600m^3.	**1** For ships with an aggregated oil fuel capacity of "*C*" as defined in **1.2.3-10(10)**, of 600m^3 and above, the location of oil fuel tanks is to comply with the provisions of following **-4** to **-10**. Notwithstanding the above, small oil fuel tanks as defined in **-3(9)** need not to comply with the provisions of **-4** to **-10**, provided that the aggregate capacity of such excluded small tanks is not greater than 600m^3.	Reference correction

Rules for Marine Pollution Prevention Systems Part 3 Chapter 2 2.3.4

Correction	Present	Note
Oily Bilge water holding tanks fitted onto ships complying with the requirements given in **2.4.2-2** are to satisfy the following requirements: ((1) to (3) are omitted.) (4) The arrangement is to be such that it is capable of transferring bilge to both the oily bilge water holding tank and shore reception facilities. In this case, it is to be provided with a standard discharge connection specified in **Table 3-~~1~~3** in **2.2.3**.	Oily Bilge water holding tanks fitted onto ships complying with the requirements given in **2.4.2-2** are to satisfy the following requirements: ((1) to (3) are omitted.) (4) The arrangement is to be such that it is capable of transferring bilge to both the oily bilge water holding tank and shore reception facilities. In this case, it is to be provided with a standard discharge connection specified in **Table 3-1** in **2.2.3**.	Reference correction

Rules for Marine Pollution Prevention Systems Part 3 Chapter 2 2.4.2-1

Correction	Present	Note
1 Except ships exclusively engaged in voyages in special area, for ships of 4,000 *gross tonnage* and above other than oil tankers and oil tankers of 150 *gross tonnage* and above, the equipment required ~~according~~ in ~~the column~~**Table 3-4** for ships of 10,000 *gross tonnage* and above are to be provided for discharging dirty ballast water carried in the fuel oil tanks in accordance with **1.2.1-2** into the sea.	**1** Except ships exclusively engaged in voyages in special area, for ships of 4,000 *gross tonnage* and above other than oil tankers and oil tankers of 150 *gross tonnage* and above, the equipment required according in the column for ships of 10,000 *gross tonnage* and above are to be provided for discharging dirty ballast water carried in the fuel oil tanks in accordance with **1.2.1-2** into the sea.	Wording correction

Rules for Marine Pollution Prevention Systems Part 8 Chapter 3 3.1.4

Correction	Present	Note
For the purpose of this Chapter, the following definitions apply: ((1) to (12) are omitted.) (13) "Gas carrier" means a cargo ship constructed or adapted and used for the carriage in bulk of any liquefied gas but does not include LNG carrier specified in **(~~17~~15)**.	For the purpose of this Chapter, the following definitions apply: ((1) to (12) are omitted.) (13) "Gas carrier" means a cargo ship constructed or adapted and used for the carriage in bulk of any liquefied gas but does not include LNG carrier specified in **(17)**.	Reference correction

Rules for Marine Pollution Prevention Systems Part 8 Chapter 3 Table8.8

Correction

Table 8-8 Reduction Factors (In Percentage) for EEDI Relative to the EEDI Reference Line

Ship Type	Size	Reduction Factors (%)					
		Phase 0	Phase 1	Phase 2		Phase 3	
		1 Jan. 2013- 31 Dec. 2014	1 Jan. 2015 - 31 Dec. 2019	1 Jan. 2020 - 31 Mar. 2022	1 Jan. 2020 - 31 Dec. 2024	1 Apr. 2022 and onwards	1 Jan. 2025 and onwards
Bulk Carrier	20,000 DWT -	0	10		20		30
	10,000 - 20,000 DWT	n/a	0-10(1)		0-20(1)		0-30(1)
Gas Carrier	15,000 DWT -	0	10	20		30	
	10,000 - 15,000 DWT	0	10		20		30
	2,000 - 10,000 DWT	n/a	0-10(1)		0-20(1)		0-30(1)
Tanker	20,000 DWT -	0	10		20		30
	4,000 - 20,000 DWT	n/a	0-10(1)		0-20(1)		0-30(1)
Container Ship	200,000 DWT -	0	10	20		50	

Present

Note

	120,000 - 200,000 DWT	0	10	20		45	
	80,000 - 120,000 DWT	0	10	20		40	
	40,000 - 80,000 DWT	0	10	20		35	
	15,000 - 40,000 DWT	0	10	20		30	
	10,000 - 15,000 DWT	n/a	0-10(1)	0-20(1)		15-30(1)	
General Cargo Ships	15,000 DWT -	0	10	15		30	
	3,000 - 15,000 DWT	n/a	0-10(1)	0-15(1)		0-30(1)	
Refrigerated Cargo Carrier	5,000 DWT -	0	10		15		30
	3,000 - 5,000 DWT	n/a	0-10(1)		0-15(1)		0-30(1)
Combination Carrier	20,000 DWT -	0	10		20		30
	4,000 - 20,000 DWT	n/a	0-10(1)		0-20(1)		0-30(1)
LNG carrier(3)	10,000 DWT -	n/a	10 (2)	20		30	
Ro-ro cargo ship (vehicle carrier) (3)	10,000 DWT -	n/a	5(2)		15		30
Ro-ro cargo ship(3)	2,000 DWT -	n/a	5(2)		20		30
	1,000 - 2,000 DWT	n/a	0-5(1) (2)		0-20(1)		0-30(1)
Ro-ro passenger ship(3)	1000 DWT-	n/a	5(2)		20		30
	250 - 1,000 DWT	n/a	0-5(1) (2)		0-20(1)		0-30(1)
Cruise passenger ship having non-conventional propulsion(3)	85,000 GT -	n/a	5 (2)	20		30	
	25,000 - 85,000 GT	n/a	0-5(1) (2)	0-20(1)		0-30(1)	

Notes:

1 Reduction factor to be linearly interpolated between the two values dependent upon vessel size. The lower value of the reduction factor is to be applied to the smaller ship size.

2 Phase 1 commences for those ships on 1 September 2015.

3 Reduction factor applies to those ships delivered on or after 1 September 2019, as defined in ~~paragraph 43 of regulation 2.~~**3.1.4(1).**

Reference correction

Rules for Ballast Water Management Installations Part 4 Chapter 2 2.2.4-3

Correction	Present	Note
3 When *BWMS* categories 2, 4, 5, 6, 7a and 7b are installed on board, the following measures **(1)** to **(8)** **are to be implemented.** (1) Procedures for chemical substances or dangerous gases are to be in accordance with the Material Safety Data Sheet (*MSDS*) and *BWM*.2/*Circ*.20. (2) Materials, coatings used for the chemical storage tank interiors, piping and fittings are to be resistant to such chemical substances. (3) Chemical substances (even when not defined as a "dangerous liquid" in **2.1.1(3)**) and gas storage tanks are to satisfy the following **(a)** to **(c)**. (a) Independent tanks containing dangerous liquids (e.g. sulfuric acid (H_2SO_4)) or dangerous gases (e.g. oxygen (O_2)) that are permanently fixed on board are to satisfy **Chapter 10, Part D of the Rules for the Survey and Construction of Steel Ships** (b) Independent tanks not containing dangerous liquids (e.g. sodium sulphite, sodium biosulphite or sodium thiosulfphate neutralisers)and not containing dangerous gases (e.g. nitrogen (N_2)) that are ~~not~~ permanently fixed on board are to satisfy standards recognized by the Society (c) Portable tanks are to satisfy the IMDG Code or standards recognized by the Society (4) When chemical substances are stored in integral tanks, ship shell plating is not to form any boundary of the tank. (5) Dangerous liquid and dangerous gas storage tank air pipes are to be led to discharging safe locations as described in **2.2.1-13(1)** and **(2)**.	**3** When *BWMS* categories 2, 4, 5, 6, 7a and 7b are installed on board, the following measures **(1)** to **(8)** **are to be implemented.** (1) Procedures for chemical substances or dangerous gases are to be in accordance with the Material Safety Data Sheet (*MSDS*) and *BWM*.2/*Circ*.20. (2) Materials, coatings used for the chemical storage tank interiors, piping and fittings are to be resistant to such chemical substances. (3) Chemical substances (even when not defined as a "dangerous liquid" in **2.1.1(3)**) and gas storage tanks are to satisfy the following **(a)** to **(c)**. (a) Independent tanks containing dangerous liquids (e.g. sulfuric acid (H_2SO_4)) or dangerous gases (e.g. oxygen (O_2)) that are permanently fixed on board are to satisfy **Chapter 10, Part D of the Rules for the Survey and Construction of Steel Ships** (b) Independent tanks not containing dangerous liquids (e.g. sodium sulphite, sodium biosulphite or sodium thiosulfphate neutralisers)and not containing dangerous gases (e.g. nitrogen (N_2)) that are not permanently fixed on board are to satisfy standards recognized by the Society (c) Portable tanks are to satisfy the IMDG Code or standards recognized by the Society (4) When chemical substances are stored in integral tanks, ship shell plating is not to form any boundary of the tank. (5) Dangerous liquid and dangerous gas storage tank air pipes are to be led to discharging safe locations as described in **2.2.1-13(1)** and **(2)**.	Wording correction

(6) Operation manuals containing chemical injection procedures, alarm systems, measures in case of emergency, etc. are to be maintained on board. (7) Dangerous liquid storage tanks and their associated components (e.g. pumps and filters) are to be provided with spill trays or secondary containment systems of sufficient volume to contain potential leakages from tank openings, gauge glasses, pumps, filters and piping fittings. (8) In addition to **(7)** above, for safety or pollution assessments of the concerned chemical substances, consideration is to be given the segregation of drains from such spill trays (or secondary containment systems), or piping systems from engine room bilge systems, or from cargo pump room bilge systems, as applicable. When necessary, arrangements are to be provided within spill trays (or within secondary containment systems) for the detection of dangerous liquids or dangerous gases.	(6) Operation manuals containing chemical injection procedures, alarm systems, measures in case of emergency, etc. are to be maintained on board. (7) Dangerous liquid storage tanks and their associated components (e.g. pumps and filters) are to be provided with spill trays or secondary containment systems of sufficient volume to contain potential leakages from tank openings, gauge glasses, pumps, filters and piping fittings. (8) In addition to **(7)** above, for safety or pollution assessments of the concerned chemical substances, consideration is to be given the segregation of drains from such spill trays (or secondary containment systems), or piping systems from engine room bilge systems, or from cargo pump room bilge systems, as applicable. When necessary, arrangements are to be provided within spill trays (or within secondary containment systems) for the detection of dangerous liquids or dangerous gases.	

Rules for Ballast Water Management Installations Part 4 Chapter 3 3.2.1

Correction	Present	Note
BWMR are to be categorised as the following **(1)** and **(2)** in accordance with **Chapter 9, Part R of the Rules for the Survey and Construction of Steel Ships** ~~and Regulation II-2/9 of *SOLAS*~~.	*BWMR* are to be categorised as the following **(1)** and **(2)** in accordance with **Chapter 9, Part R of the Rules for the Survey and Construction of Steel Ships** and Regulation II-2/9 of *SOLAS*.	Wording correction
(1) *BWMR* containing oil-fired inert gas generators (i.e. *BWMS* categories 3b and 3c) are to be treated as machinery spaces of category A in accordance with **9.2.3-2(6)** and **9.2.4-2(6), Part R of the Rules for the Survey and Construction of Steel Ships**.	(1) *BWMR* containing oil-fired inert gas generators (i.e. *BWMS* categories 3b and 3c) are to be treated as machinery spaces of category A.	Reference correction
(2) Other *BWMR* are to be considered as other machinery spaces and are to be categorised, depending on the ship type in accordance with ~~Regulations II-2/9.2.2.3~~	(2) Other *BWMR* are to be considered as other machinery spaces and are to be categorised, depending on the ship type in accordance with Regulations II-2/9.2.2.3 (10) or (11), 9.2.2.4 (7) of *SOLAS* or **9.2.3-2(7)** and **9.2.4-2(7), Part R of the Rules for the Survey and**	Wording correction

~~(10) or (11), 9.2.2.4 (7) of *SOLAS* or~~ **9.2.3-2(7)** and **9.2.4-2(7), Part R of the Rules for the Survey and Construction of Steel Ships**.	**Construction of Steel Ships**.	

Rules for Integrated Fire Control Systems Chapter 1 1.1.6

Correction	Present	Note
Terms used in the Rules are defined in the following **(1)** to **(3)** in addition to those terms defined in **Part R of Rules for the Survey and Construction of Steel Ships** ~~(hereinafter referred to as "the Rules for Steel Ships").~~. (1) Flammable oils are those oils listed in the following **(a)** to **(g)**. (a) Cargo oil (b) Fuel oil (c) Lubricating oil (d) Hydraulic oil (except for non-flammable oils) (e) Thermal oil (f) Waste oil (g) Fuel oil additives (2) Fire risk objects are those piping systems and equipment, listed in the following **(a)** to **(i),** which contain flammable oils and represent a particular danger in case of fire. (a) Flammable oil pipes including their joints attached to reciprocating internal combustion engines (b) Joints in flammable oil pipes (c) Flammable oil pumps (d) Flammable oil strainers (e) Heat exchangers for flammable oil (f) Flammable oil purifiers and clarifiers (g) Fuel oil burning units for boilers, thermal oil heaters, inert gas generators and incinerators (h) Level gauges, fittings and oil trays for flammable oil tanks (i) Sounding pipe heads for double bottom fuel oil tanks (3) Sources of ignition are listed in the following **(a)** to	Terms used in the Rules are defined in the following **(1)** to **(3)** in addition to those terms defined in **Part R of Rules for the Survey and Construction of Steel Ships** (hereinafter referred to as "the Rules for Steel Ships"). (1) Flammable oils are those oils listed in the following **(a)** to **(g)**. (a) Cargo oil (b) Fuel oil (c) Lubricating oil (d) Hydraulic oil (except for non-flammable oils) (e) Thermal oil (f) Waste oil (g) Fuel oil additives (2) Fire risk objects are those piping systems and equipment, listed in the following **(a)** to **(i),** which contain flammable oils and represent a particular danger in case of fire. (a) Flammable oil pipes including their joints attached to reciprocating internal combustion engines (b) Joints in flammable oil pipes (c) Flammable oil pumps (d) Flammable oil strainers (e) Heat exchangers for flammable oil (f) Flammable oil purifiers and clarifiers (g) Fuel oil burning units for boilers, thermal oil heaters, inert gas generators and incinerators (h) Level gauges, fittings and oil trays for flammable oil tanks (i) Sounding pipe heads for double bottom fuel oil tanks (3) Sources of ignition are listed in the following **(a)** to	Wording correction

(f). (a) Exhaust gas pipes (b) Steam pipes (c) Turbochargers (d) Electrical equipment (e) Boilers, thermal oil heaters and incinerators (f) Open flames (if any)	**(f).** (a) Exhaust gas pipes (b) Steam pipes (c) Turbochargers (d) Electrical equipment (e) Boilers, thermal oil heaters and incinerators (f) Open flames (if any)	

Rules for Hull Monitoring Systems Chapter 2 2.2.4-2

Correction	Present	Note
2 Initial set-up and its verification are to be carried out as follows: (1) Strain gauges are to be initially set in ballast conditions or light ship conditions in accordance with the requirements given in **3.3.1-1**. (2) Verification of the initial set-up mentioned ~~-~~**(1)** above is to be carried out in full draught conditions within a period of three months in the presence of a Surveyor. During such verification, stress levels obtained from strain gauges are to be compared with outputs of any loading instruments or calculations using loading manuals. In cases where the difference is greater than 50μ strain, those procedures stipulated in **(1)** and ~~**(2)**~~the above mentioned procedures are to be repeated.	**2** Initial set-up and its verification are to be carried out as follows: (1) Strain gauges are to be initially set in ballast conditions or light ship conditions in accordance with the requirements given in **3.3.1-1**. (2) Verification of the initial set-up mentioned **-1** above is to be carried out in full draught conditions within a period of three months in the presence of a Surveyor. During such verification, stress levels obtained from strain gauges are to be compared with outputs of any loading instruments or calculations using loading manuals. In cases where the difference is greater than 50μ strain, those procedures stipulated in **(1)** and **(2)** above are to be repeated.	Reference correction Wording correction

Rules for High Speed Craft Part 2 Chapter 2 2.1.2-1

Correction	Present	Note
1 When it is intended to build a craft to the classification with the Society, the plans and documents specified in **(1)** to **(3)** below are to be submitted for the approval by the Society before the work is commenced. Plans and documents may be subjected to examination by the Society prior to the submission of the application for the classification of the craft in accordance with the provision specified otherwise by the Society: (1) Hull (Omitted) (s) Means of escape (indicating width, etc., of the escape route) (t) fire extinguishing arrangements ~~(u) fittings for examination~~ (indicating the arrangement, type, capacity, numbers, etc., of fire-extinguishing appliances, fire pumps, fire main hydrants, fire hoses and nozzles, fireman's outfits, fire alarms and fire detection systems, etc.) (u) fittings for examination (v) Plans showing arrangement of ship's identification number specified in **1.1.7, Part 1 of the Rules** (Omitted)	**1** When it is intended to build a craft to the classification with the Society, the plans and documents specified in **(1)** to **(3)** below are to be submitted for the approval by the Society before the work is commenced. Plans and documents may be subjected to examination by the Society prior to the submission of the application for the classification of the craft in accordance with the provision specified otherwise by the Society: (1) Hull (Omitted) (s) Means of escape (indicating width, etc., of the escape route) (t) fire extinguishing arrangements (u) fittings for examination (indicating the arrangement, type, capacity, numbers, etc., of fire-extinguishing appliances, fire pumps, fire main hydrants, fire hoses and nozzles, fireman's outfits, fire alarms and fire detection systems, etc.) (v) Plans showing arrangement of ship's identification number specified in **1.1.7, Part 1 of the Rules** (Omitted)	Wording correction Wording correction

Rules for High Speed Craft Part 2 Chapter 3 3.8.1-2

Correction	Present	Note
2 In addition to -1, general examinations for the following items in **(1)** to **(3)** are to be carried out. (1) Main propulsion machinery Reciprocating internal combustion engines are to be examined in accordance with the following	**2** In addition to -1, general examinations for the following items in **(1)** to **(3)** are to be carried out. (1) Main propulsion machinery Reciprocating internal combustion engines are to be examined in accordance with the following	

requirements in **(a)** to **(c)**; (a) The essential part of the crankcase and cylinder jacket, the foundation bolts, the chock liners and the tie rod bolts are to be generally examined. (b) The doors of the crankcase and the explosion relief devices of the crankcase and scavenge space are to be generally examined. (c) The anti-vibration dampers, detuners, balancers, ~~etc.~~and compensators are to be generally examined.	requirements in **(a)** to **(c)**; (a) The essential part of the crankcase and cylinder jacket, the foundation bolts, the chock liners and the tie rod bolts are to be generally examined. (b) The doors of the crankcase and the explosion relief devices of the crankcase and scavenge space are to be generally examined. (c) The anti-vibration dampers, detuners, balancers, etc. are to be generally examined.	Wording correction

Rules for High Speed Craft Part 2 Chapter 3 3.9.2-1

Correction	Present	Note
1 Surveys of Shafts Kind 1*A* (1) Surveys of shafts kind 1*A* are to be the Ordinary Survey specified in **Table 3.9.2** and are to be carried out within 5 years from the date of completion (survey due date) of the Classification Survey or the previous Ordinary Survey. (2) In addition to **(1)** above, surveys for shafts Kind 1*A* which are used corrosion resistant materials specified in **6.2.7-1.(3), Part D of the Rules** are to be the Partial Surveys specified in **Table 3.9.2** and are to be carried out within 36 *months* from the date of completion (survey due date) of the Classification Survey or the previous Ordinary Survey specified in **(1)** above. In cases where the results of the Partial Survey are not satisfactory, the Ordinary Survey specified in **Table 3.9.2** is to be carried out. (3) For the surveys referred to **(1)** and **(2)** above completed ~~with~~within 3 *months* prior to the survey due date, the next period is to start from the survey due date.	**1** Surveys of Shafts Kind 1*A* (1) Surveys of shafts kind 1*A* are to be the Ordinary Survey specified in **Table 3.9.2** and are to be carried out within 5 years from the date of completion (survey due date) of the Classification Survey or the previous Ordinary Survey. (2) In addition to **(1)** above, surveys for shafts Kind 1*A* which are used corrosion resistant materials specified in **6.2.7-1.(3), Part D of the Rules** are to be the Partial Surveys specified in **Table 3.9.2** and are to be carried out within 36 *months* from the date of completion (survey due date) of the Classification Survey or the previous Ordinary Survey specified in **(1)** above. In cases where the results of the Partial Survey are not satisfactory, the Ordinary Survey specified in **Table 3.9.2** is to be carried out. (3) For the surveys referred to **(1)** and **(2)** above completed with 3 *months* prior to the survey due date, the next period is to start from the survey due date.	Wording correction

Rules for High Speed Craft Part 2 Chapter 3 3.9.2-2

Correction	Present	Note
2 Surveys of Shafts Kind 2 (1) Surveys of shafts Kind 2 are to be the Ordinary Surveys specified in **Table 3.9.2** and are to be carried out in accordance with the following **(~~1~~a)** and **(~~2~~b)** periods (survey due dates). (a) Concurrently with Special Surveys; and (b) Within 36 *months* from the date of completion of the Classification Survey or the previous Ordinary Survey (2) For the surveys referred to **(1)** above completed ~~with~~within 3 *months* prior to the survey due date, the next period is to start from the survey due date.	**2** Surveys of Shafts Kind 2 (1) Surveys of shafts Kind 2 are to be the Ordinary Surveys specified in **Table 3.9.2** and are to be carried out in accordance with the following **(1)** and **(2)** periods (survey due dates). (a) Concurrently with Special Surveys; and (b) Within 36 *months* from the date of completion of the Classification Survey or the previous Ordinary Survey (2) For the surveys referred to **(1)** above completed with 3 *months* prior to the survey due date, the next period is to start from the survey due date.	Wording correction Wording correction

Rules for High Speed Craft Part 2 Chapter 3 Table 3.9.2

Correction	Present	Note
Table 3.9.2 Surveys of Water Lubricated Shafts – Shafts Kind 1*A* and Kind 2		

Items	Examinations	Ordinary Survey	Partial Survey	Extension Survey	
				1 year	3 months
(Omitted)					
5 Sealing device for stern tube	(1) Verification of the satisfactory conditions of inboard seals ~~during the re-installation of the shaft and propeller~~. (For ordinary surveys, the verification is carried out during the re-installation of the shaft and propeller.)	○	○	○	○

Wording correction

Rules for High Speed Craft Part 2 Chapter 3 Table 3.9.3

Correction

Table 3.9.3 Surveys of Oil Lubricated Shafts – Shafts Kind 1*B* or 1*C*

Items	Examinations	Ordinary Survey	Partial Survey	Simplified Partial Survey	Extension Survey		
					2.5 years	1 year	3 months
(Omitted)							

Notes

*1: If the test results of the oil analysis suggest that the sample oil does not represent the lubricating oil in the stern tube and is suspected to be invalid (e.g., when only iron (Fe) exceeds the upper limit of **(b)i)**, item **11**, it is suspected that rust in the lubricating oil tank is the cause.), the surveyor is to instruct the shipowner (or the ship management company) to promptly re-perform the oil analysis and to be verified the test results of the oil analysis by the time of the first periodical survey ~~(excluding those specified in **1.1.3-1(5), Part B of the Rules for the Survey and Construction of Steel Ships)**~~ on or after the day 3 *months* after the day of receiving the said instruction.

*2: Notwithstanding **(b)ii)**, item **11**, in the case of environmentally acceptable lubricants (EAL), observation of any trends (such as TAN (total acid number), viscosity and change in colour etc.) based on periodical oil analysis may be made. In such cases, observations of TAN trends are to be made based on sequential analyssis in conjunction with limits for continued use in service defined by oil makers.

Present

Table 3.9.3 Surveys of Oil Lubricated Shafts – Shafts Kind 1*B* or 1*C*

Items	Examinations	Ordinary Survey	Partial Survey	Simplified Partial Survey	Extension Survey		
					2.5 years	1 year	3 months
(Omitted)							

Notes

*1: If the test results of the oil analysis suggest that the sample oil does not represent the lubricating oil in the stern tube and is suspected to be invalid (e.g., when only iron (Fe) exceeds the upper limit of **(b)i)**, item **11**, it is suspected that rust in the lubricating oil tank is the cause.), the surveyor is to instruct the shipowner (or the ship management company) to promptly re-perform the oil analysis and to be verified the test results of the oil analysis by the time of the first periodical survey ~~(excluding those specified in **1.1.3-1(5), Part B of the Rules for the Survey and Construction of Steel Ships)**~~ on or after the day 3 *months* after the day of receiving the said instruction.

*2: Notwithstanding **(b)ii)**, item **11**, in the case of environmentally acceptable lubricants (EAL), observation of any trends (such as TAN (total acid number), viscosity and change in colour etc.) based on periodical oil analysis may be made. In such cases, observations of TAN trends are to be made based on sequential analyssis in conjunction with limits for continued use in service defined by oil makers.

Note

Wording correction

Rules for High Speed Craft Part 2 Chapter 3 Table 3.9.4

Correction

Table 3.9.4 Surveys of Fresh Water Lubricated Shafts – Shafts Kind 1*W*

Items	Examinations	Ordinary Survey	Partial Survey	Simplified Partial Survey	Extension Survey		
					2.5 years	1 year	3 months
11 Review of records etc.	(1) Examinations are to be carried out in accordance with the following **(a)** to **(g)**. (a) Service records are to be reviewed. (b) Review of test records of the fresh water analysis is to be carried out to confirm that the reference standards specified in following **i)** and **ii)** are complied with.		○	○	○	○	○

Present

Table 3.9.4 Surveys of Fresh Water Lubricated Shafts – Shafts Kind 1*W*

Items	Examinations	Ordinary Survey	Partial Survey	Simplified Partial Survey	Extension Survey		
					2.5 years	1 year	3 months
11 Review of records etc.	(1) Examinations are to be carried out in accordance with the following **(a)** to **(g)**. (a) Service records are to be reviewed. (b) Review of test records of the fresh water analysis is to be carried out to confirm that the reference standards specified in following **i)** and **ii)** are complied with.		○	○	○	○	○

Note

		i) Chloride content and sodium content (Upper limit) : 1) Chloride: 60 *ppm* 2) Sodium (Na): 70 *ppm* ii) pH : Lower limit values determined based upon characteristics of the ~~correction inhibitors~~corrosion inhibitor used, but not to be less than 11 iii) Metal particles (upper limit) : 1) Iron (Fe): 25 *ppm* 2) Chromium (Cr): 5 *ppm* 3) Nickel (Ni): 5 *ppm* 4) Copper (Cu): 40 *ppm* 5) Silicon (Si): 30 *ppm* iv) Bearing particles (non-metallic content): No polymer resins are to be found by micro-filter or microscopic testing (c) Fresh water sample test is to be carried out. (d) Verification of no reported repairs by grinding or welding of shafts or propellers is to be carried out. (e) Examination of the lubricating fresh water record book. (f) For 1year and 3month extension surveys, review of the previous clearance recordings is to be carried out. (g) Confirmation from the chief engineer that the shafting arrangement is in good working condition is to be obtained.								Wording correction

Rules for High Speed Craft Part 5 Chapter 2 2.2.1-1

Correction	Present	Note
The design load for bottom construction (P_B) is to be obtained in accordance with following requirements. ~~V_{S1}~~$V_S = F_m\sqrt{gLs}$ (m/sec) F_m : As obtained from the following formula. $F_m = 0.8761\sqrt{A_f} - 0.0565A_f - 0.0677/A_f - 0.4726$	The design load for bottom construction (P_B) is to be obtained in accordance with following requirements. $V_{S1} = F_m\sqrt{gLs}$ (m/sec) F_m : As obtained from the following formula. $F_m = 0.8761\sqrt{A_f} - 0.0565A_f - 0.0677/A_f - 0.4726$	Wording correction

Rules for High Speed Craft Part 6 Chapter 1 Table 6.1.8

Correction

Table 6.1.8 Coefficients m and n

Boundary Condition(2)		*m* and *n*					
End 1	End 2	At End 1(1)		Mid Span(1)		At End 2(1)	
		m	*n*	*m*	*n*	*m*	*n*
Fixed	Fixed	83.3	5	41.7	3	83.3	5
Supported	Fixed	55	3.8	70.3	4.3	125	6.3
Supported	Supported	80	5	125	3	80	5

Notes:

(1) The position at End 1 and 2 means the part for 0.2*l* from each end. And, Mid Span means the part for 0.6*l* amidships.

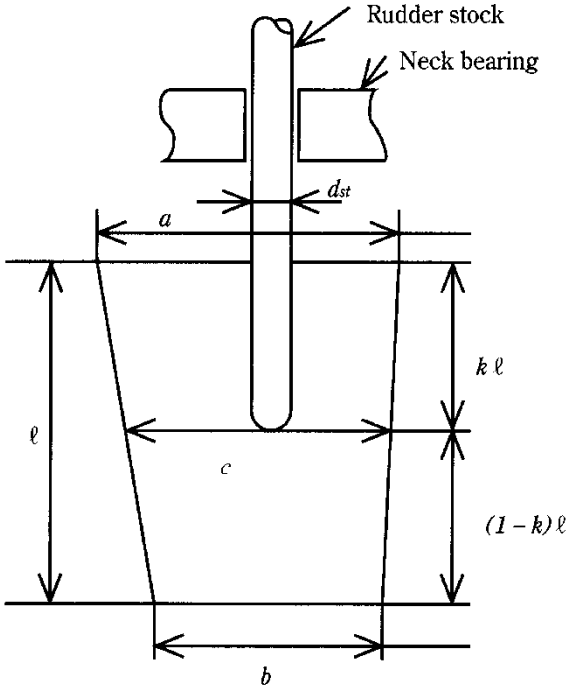
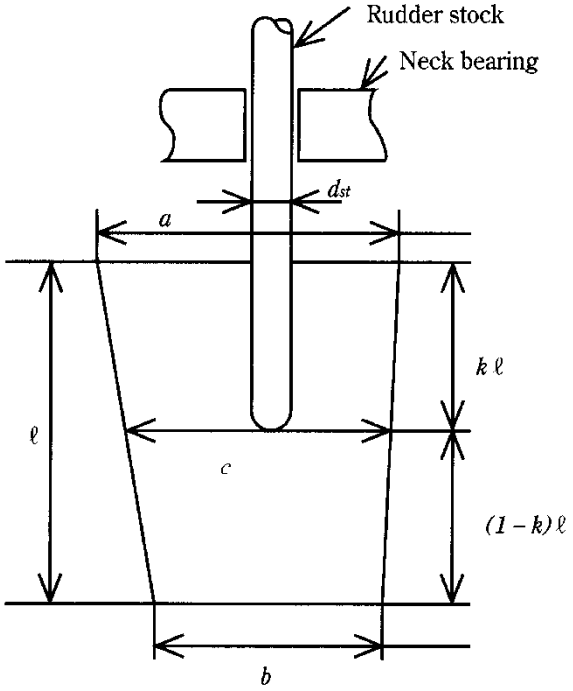
(2) "Fixed" means a case where the scantlings (sectional areas, section modulus and sectional moment of inertia) of girder adjacent to the girder concerned are larger than those of the girder concerned. When the scantlings of the girder concerned are larger than those of adjacent girder, the boundary conditions should be "Supported".

(3) In case where boundary conditions are considered as intermediate values of "fixed" and "supported", the severer condition is be selected.

Present

Note: Wording correction

Rules for High Speed Craft Part 6 Chapter 1 Fig. 6.1.2

Correction	Present	Note
Fig. 6.1.2 Measurement of a, b, c and d  ~~Notes:~~ ~~(1) The position at End 1 and 2 means the part for 0.2/ from each end. And, Mid Span means the part for 0.6/ amidships.~~ ~~(2) "Fixed" means a case where the scantlings (sectional areas, section modulus and sectional moment of inertia) of girder adjacent to the girder concerned are larger than those of the girder concerned. When the scantlings of the girder concerned are larger than those of adjacent girder, the boundary conditions should be "Supported".~~ ~~(3) In case where boundary conditions are considered as intermediate values of "fixed" and "supported", the severer condition is be selected.~~	Fig. 6.1.2 Measurement of a, b, c and d  Notes: (1) The position at End 1 and 2 means the part for 0.2/ from each end. And, Mid Span means the part for 0.6/ amidships. (2) "Fixed" means a case where the scantlings (sectional areas, section modulus and sectional moment of inertia) of girder adjacent to the girder concerned are larger than those of the girder concerned. When the scantlings of the girder concerned are larger than those of adjacent girder, the boundary conditions should be "Supported". (3) In case where boundary conditions are considered as intermediate values of "fixed" and "supported", the severer condition is be selected.	Wording correction

Rules for High Speed Craft Part 7 Chapter 2 Table 7.2.1-1

Correction

Table 7.2.1-1 Minimum Height of Hatchway Coamings and Minimum Sill Height of Doorways ($L \geq 30m$)

Service area	Position	Hatchway coamings (*mm*)	Small weathertight hatchway coamings		Access openings in superstructure end bulkheads/ deck house (*mm*)	Access openings in companinoways (*mm*)	Machinery space openings (*mm*)
			A (*mm*)	*B* (*mm*)			
Others	I	600	450	380	380	600	600
	II	450	380	230	380	380	380
Coasting service	I	600	450	380	380	450	600
	II	450	380	230	300	300	380
Smooth water service	I	450	380	230	300	300	300
	II	300	230	180	100	100	150

Notes:

A: Hatchways, area of which is smaller than $1.5m^2$, and which are fitted with closing means of other than *B* stated below.

B: Hatchways, area of which is smaller than $0.45m^2$, and which are fitted with closing means capable of operating form inside and outside.

Present

Table 7.2.1-1 Minimum Height of Hatchway Coamings and Minimum Sill Height of Doorways ($L \geq 30m$)

Service area	Position	Hatchway coamings (*mm*)	Small weathertight hatchway coamings		Access openings in superstructure end bulkheads/ deck house (*mm*)	Access openings in companinoways (*mm*)	Machinery space openings (*mm*)
			A (*mm*)	*B* (*mm*)			
Others	I	600	450	380	380	600	600
	II	450	380	230	380	380	380
Coasting service	I	600	450	380	380	450	600
	II	450	380	230	300	300	380
Smooth water service	I	450	380	230	300	300	300
	II	300	230	180	100	100	150

Notes:

A: Hatchways, area of which is smaller than $1.5m^2$, and which are fitted with closing means of other than *B* stated below.

B: Hatchways, area of which is smaller than $0.45m^2$, and which are fitted with closing means capable of operating form inside and outside.

Note: Wording correction

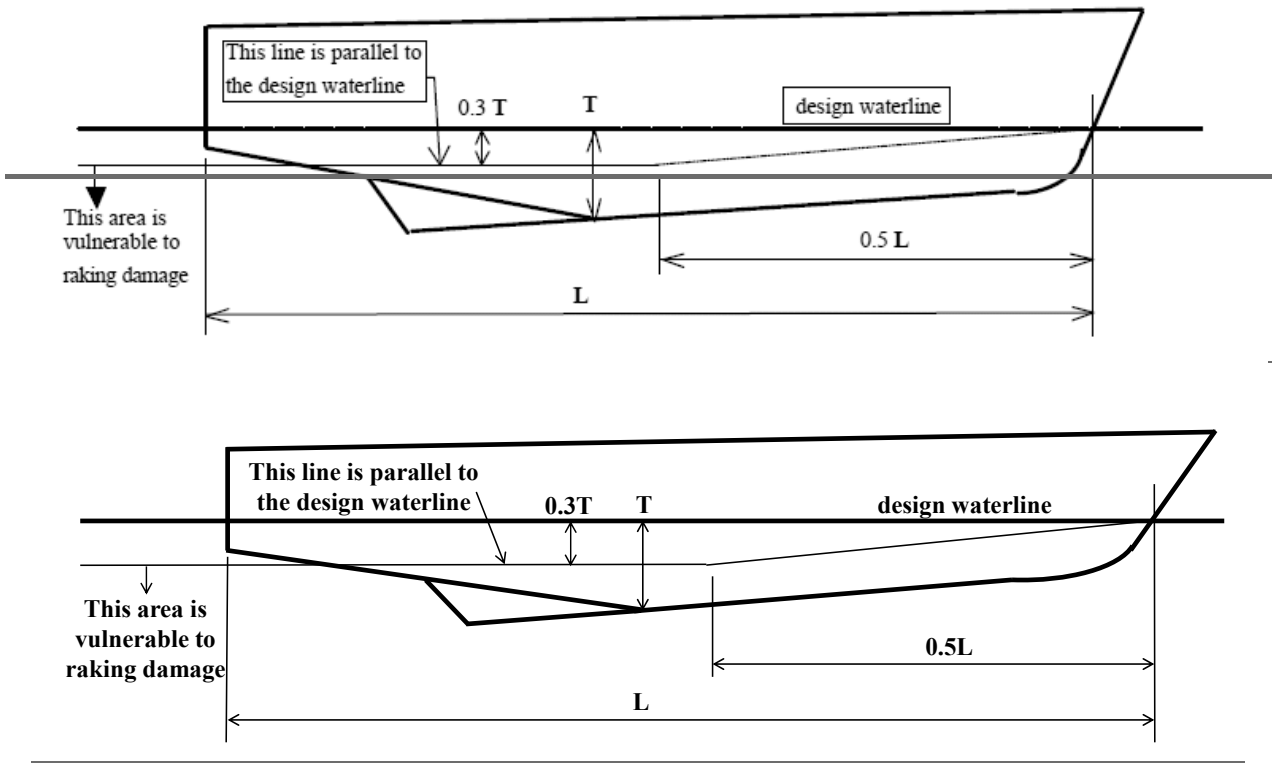
Rules for High Speed Craft Part 7 Chapter 3 3.5.1-1

Correction	Present	Note
1 Side scuttles to spaces within enclosed superstructures, those fitted up to the side and front walls of deckhouses and companionways on the freeboard deck which have unprotected deck openings ~~leadng~~leading to spaces below the freeboard deck inside and those exposed to direct below of seas are to be class *C* side scuttles with hinged dead-light complying with the requirements in or equivalent thereto.	**1** Side scuttles to spaces within enclosed superstructures, those fitted up to the side and front walls of deckhouses and companionways on the freeboard deck which have unprotected deck openings leadng to spaces below the freeboard deck inside and those exposed to direct below of seas are to be class *C* side scuttles with hinged dead-light complying with the requirements in or equivalent thereto.	Wording correction

Rules for High Speed Craft Part 7 Chapter 3 3.5.1-2

Correction	Present	Note
2 Spaces which are fitted with windows applying this are not to be the reserve of buoyancy as defined in **1.2.1, Part 8 of the Rules**.	**2** Spaces which are fitted with windows applying this are not to be the reserve of buoyancy.	Reference correction

Rules for High Speed Craft Part 8 Chapter 1 Fig. 8.1.5

Correction	Present	Note
Fig. 8.1.5 Extent of Bottom Damage in Areas Vulnerable to Raking Damage  *T* : design waterline (*m*)		Wording correction

Rules for High Speed Craft Part 9 Chapter 3 3.3.1-1

Correction	Present	Note
1 Gas turbines (excluding those driving emergency generators) are to be provided with an overspeed protective device. This device is to be so adjusted that the output shaft speed may not exceed the maximum continuous speed by more than 15 % and is to have the functions specified in **3.2.2-**	**1** Gas turbines (excluding those driving emergency generators) are to be provided with an overspeed protective device. This device is to be so adjusted that the output shaft speed may not exceed the maximum continuous speed by more than 15 % and is to have the functions specified in **3.2.2-**	

~~2~~3.	2.	Reference correction

Rules for High Speed Craft Part 10 Chapter 2 2.1.3-1

Correction	Present	Note
1 Electric machinery parts subject to mechanical strength are to be of defect-free sound material. Their proper fits~~ and~~, clearances and other workmanship are to be consistent with the best marine practice and experience.	**1** Electric machinery parts subject to mechanical strength are to be of defect-free sound material. Their proper fits and clearances are to be consistent with the best marine practice and experience.	Wording correction

Rules for High Speed Craft Part 10 Chapter 2 2.1.4-1

Correction	Present	Note
~~1 Non-current-carrying exposed~~**1** Exposed metal parts of electrical equipment which are not intended to be live but which are liable under fault conditions to become live are to be effectively earthed except the following : (1) They are supplied at a voltage not exceeding 55 *V d.c.* or 55 *V a.c.* root mean square between conductors. However, auto-transformers are not to be used for the purpose of achieving this voltage. (2) They are supplied at a voltage not exceeding 250 *V* by safety isolating transformers supplying only one consuming device. (3) They are constructed in accordance with the principle of double isolation.	**1** Non-current-carrying exposed metal parts of electrical equipment which are not intended to be live but which are liable under fault conditions to become live are to be effectively earthed except the following : (1) They are supplied at a voltage not exceeding 55 *V d.c.* or 55 *V a.c.* root mean square between conductors. However, auto-transformers are not to be used for the purpose of achieving this voltage. (2) They are supplied at a voltage not exceeding 250 *V* by safety isolating transformers supplying only one consuming device. (3) They are constructed in accordance with the principle of double isolation.	Wording correction

Rules for High Speed Craft Part 10 Chapter 2 2.3.3-2

Correction	Present	Note
2 The making capacity of every circuit-breaker or switch intended to be capable of being closed, if necessary, on short-circuit, is not to be less than the maximum value of the short-circuit current at the point of installation. On alternating current this maximum value corresponds to the peak value ~~allowing for maximum asymmetry.~~.	**2** The making capacity of every circuit-breaker or switch intended to be capable of being closed, if necessary, on short-circuit, is not to be less than the maximum value of the short-circuit current at the point of installation. On alternating current this maximum value corresponds to the peak value allowing for maximum asymmetry.	Wording correction

Rules for High Speed Craft Part 10 Chapter 2 2.5.8-1

Correction	Present	Note
1 The upper limit of the scale of every voltmeter is to be approximately 120% of the ~~normal~~rated voltage of the circuit.	**1** The upper limit of the scale of every voltmeter is to be approximately 120% of the normal voltage of the circuit.	Wording correction

Rules for High Speed Craft Part 10 Chapter 4 4.1.2

Correction	Present	Note
For the electrical equipment in the enclosed compartments adjoining cargo holds and having openings such non-gastight door, hatch, scuttle and the like in their bulkheads decks, requirements in **4.1.1** are generally to be applied.	For the electrical equipment in the compartments adjoining cargo holds and having openings such non-gastight door, hatch, scuttle and the like in their bulkheads decks, requirements in **4.1.1** are generally to be applied.	Wording correction

Rules for High Speed Craft Part 11 Chapter 2 2.4.1

Correction	Present	Note
The requirements in **2.4.2**, **2.4.3** and **2.4.3**~~3~~**4** are to apply only to passenger craft, unless otherwise specified elsewhere.	The requirements in **2.4.2** and **2.4.3** are to apply only to passenger craft, unless otherwise specified elsewhere.	Reference correction

Rules for the Survey and Construction of Passenger Ships Part 2 Chapter 1 1.1.7-2

Correction	Present	Note
2 When laid-up ships are about to be re-entering their services, the following surveys and the surveys for the specific matters which have been postponed due to being laid-up, if any, are to be carried out. (1) When any Periodical Survey or Planned Machinery Survey designated before lay-up has not been due, surveys equivalent to the Intermediate Surveys specified in **Chapter 3 of this Part,** corresponding to the age of the ship, are to be carried out. (2) When Periodical Surveys or Planned Machinery Surveys designated before lay-up have already become due, these Periodical Surveys or Planned Machinery Surveys are, in ~~principal~~principle, to be carried out. However in case where two or more kinds of the Periodical Surveys have already become due, the Special Survey is to be carried out.	**2** When laid-up ships are about to be re-entering their services, the following surveys and the surveys for the specific matters which have been postponed due to being laid-up, if any, are to be carried out. (1) When any Periodical Survey or Planned Machinery Survey designated before lay-up has not been due, surveys equivalent to the Intermediate Surveys specified in **Chapter 3 of this Part,** corresponding to the age of the ship, are to be carried out. (2) When Periodical Surveys or Planned Machinery Surveys designated before lay-up have already become due, these Periodical Surveys or Planned Machinery Surveys are, in principal, to be carried out. However in case where two or more kinds of the Periodical Surveys have already become due, the Special Survey is to be carried out.	Wording correction

Rules for the Survey and Construction of Inland Waterway Ships Part 2 Chapter 1 1.1.7-2

Correction	Present	Note
2 When laid-up ships are about to be re-entering service, the following surveys and surveys for specific matters which have been postponed due to being laid-up, if any, are to be carried out. (1) If the due dates for Periodical Survey or Planned Machinery Surveys have not transpired while the ship was laid-up, then a survey equivalent to the Annual Surveys specified in **Chapter 3** is to be carried out. (2) If the due dates for Periodical Surveys or Planned Machinery Surveys have transpired while the ship was laid-up, then these Periodical Surveys or Planned Machinery Surveys are, in ~~principal~~principle, to be carried out. However, where two or more kinds of Periodical Surveys are due, only the superlative survey may be carried out.	**2** When laid-up ships are about to be re-entering service, the following surveys and surveys for specific matters which have been postponed due to being laid-up, if any, are to be carried out. (1) If the due dates for Periodical Survey or Planned Machinery Surveys have not transpired while the ship was laid-up, then a survey equivalent to the Annual Surveys specified in **Chapter 3** is to be carried out. (2) If the due dates for Periodical Surveys or Planned Machinery Surveys have transpired while the ship was laid-up, then these Periodical Surveys or Planned Machinery Surveys are, in principal, to be carried out. However, where two or more kinds of Periodical Surveys are due, only the superlative survey may be carried out.	Wording correction

Rules for the Survey and Construction of Inland Waterway Ships Part 2 Chapter 8 8.2.1-3

Correction	Present	Note
3 For the surveys referred to **-1** and **-2** above completed ~~with~~within 3 *months* prior to the survey due date, the next period is to start from the survey due date.	**3** For the surveys referred to **-1** and **-2** above completed with 3 *months* prior to the survey due date, the next period is to start from the survey due date.	Wording correction

Rules for the Survey and Construction of Inland Waterway Ships Part 2 Chapter 8 Table 2.8.2

Correction	Present	Note

Table 2.8.2 Surveys of Water Lubricated Shafts – Shafts Kind 1*A*, Kind 2 and Shafts of Ships Whose Classification Characters are Affixed with the Notation *PSCM-1A*

Items	Examinations	Ordinary Survey	Partial Survey	Alternative Ordinary Survey	Extension Survey	
					1Year	3Month
(Omitted)						
5 Sealing device for stern tube	(1) Verification of the satisfactory conditions of inboard seals ~~during the re-installation of the shaft and propeller~~. (For ordinary surveys, the verification is carried out during the re-installation of the shaft and propeller.)	○	○	○	○	○
(Omitted)						

Wording correction

Rules for the Survey and Construction of Inland Waterway Ships Part 2 Chapter 8 8.3.1-5

Correction	Present	Note
5 For the surveys referred to **-1** to **-4** above completed ~~with~~within 3 *months* prior to the survey due date, the next period is to start from the survey due date.	**5** For the surveys referred to **-1** to **-4** above completed with 3 *months* prior to the survey due date, the next period is to start from the survey due date.	Wording correction

Rules for the Survey and Construction of Inland Waterway Ships Part 2 Chapter 8 Table 2.8.3

Correction	Present	Note

Table 2.8.3 Surveys of Oil Lubricated Shafts – Shafts Kind 1*B* or Shafts of Ships Whose Classification Characters are Affixed with the Notation *PSCM*

(Table is omitted.)

Notes

*1: If the test results of the oil analysis suggest that the sample oil does not represent the lubricating oil in the stern tube and is suspected to be invalid (e.g. when only iron (Fe) exceeds the upper limit of **(b)i), item 11**, it is suspected that rust in the lubricating oil tank is the cause.), the surveyor is to instruct the shipowner (or the ship management company) to promptly re-perform the oil analysis and to be verified the test results of the oil analysis by the time of the first periodical survey (excluding those specified in **1.1.3-1(.(5), Part ~~B~~2 of the Rules ~~for the Survey and Construction of Steel Ships~~**) on or after the day 3 *months* after the day of receiving the said instruction.

*2: Notwithstanding **(b)ii), item 11**, in the case of environmentally acceptable lubricants (EAL), observation of any trends (such as TAN (total acid number), viscosity and change in colour etc.) based on periodical oil analysis may be made. In such cases, observations of TAN trends are to be made based on sequential analyssis in conjunction with limits for continued use in service defined by oil makers.

Wording correction

Rules for the Survey and Construction of Inland Waterway Ships Part 2 Chapter 8 8.4.1-5.

Correction	Present	Note
5 For the surveys referred to **-1** to **-4** above completed ~~with~~within 3 *months* prior to the survey due date, the next period is to start from the survey due date.	**5** For the surveys referred to **-1** to **-4** above completed with 3 *months* prior to the survey due date, the next period is to start from the survey due date.	Wording correction

Rules for the Survey and Construction of Inland Waterway Ships Part 2 Chapter 8 Table 2.8.4

Correction

Table 2.8.4 Surveys of Water Lubricated Shafts – Shafts Kind 1*W*

Items	Examinations	Ordinary Survey	Partial Survey	Simplified Partial Survey	Extension Survey		
					2.5Year	1Year	3Month
(Omitted)							
11 Review of records etc.	(1) Examinations are to be carried out in accordance with the following **(a)** to **(g)**. (a) Service records are to be reviewed. (b) Review of test records of the fresh water analysis is to be carried out to confirm that the reference standards specified in following **i)** and **ii)** are complied with. i) Chloride content and sodium content (upper limit) 1) Chloride: 60 *ppm* 2) Sodium (Na): 70 *ppm* ii) pH: Lower limit values determined based upon characteristics of the ~~correction inhibitors~~corrosion inhibitor used, but not to be less than 11 iii) Metal particles (upper limit) : 1) Iron (Fe): 25 *ppm* 2) Chromium (Cr): 5 *ppm* 3) Nickel (Ni): 5 *ppm* 4) Copper (Cu): 40 *ppm* 5) Silicon (Si): 30 *ppm* iv) Bearing particles (non-metallic content) : No polymer resins are to be found by micro-filter or microscopic testing (c) Fresh water sample test is to be carried out. (d) Verification of no reported repairs by grinding or welding of shafts or propellers is to be carried out.		○	○	○	○	○

Present

Note: Wording correction

		(e) Examination of the lubricating fresh water record book. (f) For 1year and 3month extension surveys, review of the previous clearance recordings is to be carried out. (g) Confirmation from the chief engineer that the shafting arrangement is in good working condition is to be obtained.							
		(Omitted)							

Rules for the Survey and Construction of Inland Waterway Ships Part 8 Chapter 1 1.1.6

Correction	Present	Note
The drawings and data to be submitted are as follows. In cases where the Society deems it to be necessary, the submission of drawings and data other than those specified below may be requested. (1) Tugs and pushers (a) Drawings: (Omitted) vi) Diagrams of wiring systems including normal working currents, rated currents, prospective short-circuit currents in circuits, line drop of voltages, type of cables, ~~cable sizes~~cross-sectional area of conductors, ratings and settings of circuit breakers, ratings of fuses and switches, and breaking capacities of circuit breakers and fuses (Omitted)	The drawings and data to be submitted are as follows. In cases where the Society deems it to be necessary, the submission of drawings and data other than those specified below may be requested. (1) Tugs and pushers (a) Drawings: (Omitted) vi) Diagrams of wiring systems including normal working currents, rated currents, prospective short-circuit currents in circuits, line drop of voltages, type of cables, cable sizes, ratings and settings of circuit breakers, ratings of fuses and switches, and breaking capacities of circuit breakers and fuses (Omitted)	Wording correction

Rules for the Survey and Construction of Inland Waterway Ships Part 8 Chapter 2 2.1.3-1

Correction	Present	Note
1 Electric machinery parts which are required to possess strength are to be made of defect-free sound materials. Their proper fits ~~and~~, clearances and other workmanship are to be consistent with best maritime practices and experience.	**1** Electric machinery parts which are required to possess strength are to be made of defect-free sound materials. Their proper fits and clearances are to be consistent with best maritime practices and experience.	Wording correction

Rules for the Survey and Construction of Ships of Fibreglass Reinforced Plastics Chapter 1 1.3.4-2

Correction	Present	Note
2 For single skin construction the scantlings specified in these Rules may be modified by multiplying by the factors specified in the following **(1)** and **(2)** in case where moulded with an *FRP* having the strength higher than specified in the preceding **-1**: (1) For the thickness, a factor obtained from the following formula: $\sqrt{\frac{150}{\sigma_B}}$ where, σ_B : Bending strength of the *FRP* obtained from the material tests specified in **4.4.4** (~~*kg*~~*N/mm*^{2}) (2) For the section modulus (including section modulus of the transverse section of hull), a factor obtained from the following formula: $\frac{98}{\sigma_T}$ where, σ_T : Tensile strength of the *FRP* obtained from the material tests specified in **4.4.4** (~~*kg*~~*N/mm*^{2})	**2** For single skin construction the scantlings specified in these Rules may be modified by multiplying by the factors specified in the following **(1)** and **(2)** in case where moulded with an *FRP* having the strength higher than specified in the preceding **-1**: (1) For the thickness, a factor obtained from the following formula: $\sqrt{\frac{150}{\sigma_B}}$ where, σ_B : Bending strength of the *FRP* obtained from the material tests specified in **4.4.4** (*kg/mm*^{2}) (2) For the section modulus (including section modulus of the transverse section of hull), a factor obtained from the following formula: $\frac{98}{\sigma_T}$ where, σ_T : Tensile strength of the *FRP* obtained from the material tests specified in **4.4.4** (*kg/mm*^{2})	Wording correction Wording correction

Rules for the Survey and Construction of Ships of Fibreglass Reinforced Plastics Chapter 1 1.3.7-1

Correction	Present	Note
1 The thickness of laminates per ~~play~~ply of chopped mats or roving cloths may be as obtained from the following formula: $\frac{W_G}{10\gamma_R G}+\frac{W_G}{1000\gamma_G}-\frac{W_G}{1000\gamma_R}\,(mm)$ where, W_G : Designed weight per unit area of chopped mats or roving cloths (*g/m*^{2}).	**1** The thickness of laminates per play of chopped mats or roving cloths may be as obtained from the following formula: $\frac{W_G}{10\gamma_R G}+\frac{W_G}{1000\gamma_G}-\frac{W_G}{1000\gamma_R}\,(mm)$ where, W_G : Designed weight per unit area of chopped mats or roving cloths (*g/m*^{2}).	Wording correction

G : Glass content of laminate (ratio in weight) (%), γ_R : Specific gravity of cured resin. γ_G : Specific gravity of chopped mats or roving cloths.	G : Glass content of laminate (ratio in weight) (%), γ_R : Specific gravity of cured resin. γ_G : Specific gravity of chopped mats or roving cloths.	

Rules for the Survey and Construction of Ships of Fibreglass Reinforced Plastics Chapter 3 3.2.2

Correction	Present	Note
In providing the laminating shops with ventilation facilities, thorough considerations are to be given so that they should not give any ~~bat~~bad influence upon the curing of laminates.	In providing the laminating shops with ventilation facilities, thorough considerations are to be given so that they should not give any bat influence upon the curing of laminates.	Wording correction

Rules for the Survey and Construction of Ships of Fibreglass Reinforced Plastics Chapter 3 3.2.4-2

Correction	Present	Note
2 If necessary, suitable dehumidifying appliances are to be provided.	**2** If necessary, suitable dehumidifying appliances to be provided.	Wording correction

Rules for the Survey and Construction of Ships of Fibreglass Reinforced Plastics Chapter 4 4.3.1-1

Correction	Present	Note
1 The tests and inspections specified in **4.1.2** for fibreglass reinforcements to be used for the ~~full~~hull structures of *FRP* ships are to be in accordance with the requirements in the following **-2** to **-4**. In this case, the procedures of tests and inspections are to be in accordance with the discretion of the Society.	**1** The tests and inspections specified in **4.1.2** for fibreglass reinforcements to be used for the full structures of *FRP* ships are to be in accordance with the requirements in the following **-2** to **-4**. In this case, the procedures of tests and inspections are to be in accordance with the discretion of the Society.	Wording correction

Rules for the Survey and Construction of Ships of Fibreglass Reinforced Plastics Chapter 4 4.3.2

Correction	Present	Note
The tests and inspections specified in **4.1.2** for resins for laminating to be used for hull structures of *FRP* ships are to be carried out on the items listed in the following **(1)** to **(9)**. In this case, the procedures of tests and inspections are to be in accordance with the discretion of the Society.	The tests and inspections specified in **4.1.2** for resins for laminating to be used for hull structures of *FRP* ships are to be carried out on the items listed in the following **(1)** to **(9)**. In this case, the procedures of tests and inspections are to be in accordance with the discretion of the Society.	

(1) Viscosity and thixotropy, (2) Gel time, the minimum cure time and the peak exotherm temperature, (3) Acid value, (4) Water absorption rate of ~~cats~~cast test specimens, (5) Tensile elongation and tensile strength of cast test specimens, (6) Load deflection temperature of cast test specimens, (7) Barcol hardness obtained from laminated test specimens, (8) Bending strength and modulus of bending elasticity obtained from laminated test specimens (in the standard condition), (9) Tensile strength and modulus of bending elasticity obtained from laminated test specimens (in the standard condition),	(1) Viscosity and thixotropy, (2) Gel time, the minimum cure time and the peak exotherm temperature, (3) Acid value, (4) Water absorption rate of cats test specimens, (5) Tensile elongation and tensile strength of cast test specimens, (6) Load deflection temperature of cast test specimens, (7) Barcol hardness obtained from laminated test specimens, (8) Bending strength and modulus of bending elasticity obtained from laminated test specimens (in the standard condition), (9) Tensile strength and modulus of bending elasticity obtained from laminated test specimens (in the standard condition),	Wording correction

Rules for the Survey and Construction of Ships of Fibreglass Reinforced Plastics Chapter 4 4.3.5-4

Correction	Present	Note
4 Timbers and plywoods are to be tested and inspected on the items in the following **(1)** to **(4)** : (1) Compressive strength and modules of compressive elasticity, (2) Tensile strength and modulus of tensile elasticity (only in case where timbers ~~of~~for plywoods are reckoned in tensile strength). (3) Bending strength and modules of bending elasticity (only in case where timbers or plywoods are reckoned in bending strength), (4) Shearing strength obtained from specimens of sandwich construction.	**4** Timbers and plywoods are to be tested and inspected on the items in the following **(1)** to **(4)** : (1) Compressive strength and modules of compressive elasticity, (2) Tensile strength and modulus of tensile elasticity (only in case where timbers of plywoods are reckoned in tensile strength). (3) Bending strength and modules of bending elasticity (only in case where timbers or plywoods are reckoned in bending strength), (4) Shearing strength obtained from specimens of sandwich construction.	Wording correction

Rules for the Survey and Construction of Ships of Fibreglass Reinforced Plastics Chapter 4 4.4.4-3

Correction	Present	Note
3 The *FRP* material tests are to be carried out, at least on the structural members listed in the following **(1)** to **(4)**. The *FRP* material tests on the other members are to be carried out only in case where scantlings are modified in accordance with the requirements in **1.3.4-2**. (1) Bottom shell laminates, (2) Side shell laminates, (3) Upper deck laminates, (4) Bulkhead (only ~~of~~for sandwich construction).	**3** The *FRP* material tests are to be carried out, at least on the structural members listed in the following **(1)** to **(4)**. The *FRP* material tests on the other members are to be carried out only in case where scantlings are modified in accordance with the requirements in **1.3.4-2**. (1) Bottom shell laminates, (2) Side shell laminates, (3) Upper deck laminates, (4) Bulkhead (only of sandwich construction).	Wording correction

Rules for the Survey and Construction of Ships of Fibreglass Reinforced Plastics Chapter 8 8.2.2-1

Correction	Present	Note
1 The aggregated thickness of inner laminates, outer laminates and cores of sandwich construction is not to be less than obtained from the following formulae, whichever is greater: $0.1C_1Sh$ (mm) C_2t_f (mm) where, S : Spacing of longitudinal beams ~~of~~for transverse beams (m). h: As specified in **8.2.3** (kN/m^2). t_f: Thickness of deck laminates in case of single skin construction specified in **8.2.1** (mm). C_1 and C_2: As specified in **7.3.3-1**.	**1** The aggregated thickness of inner laminates, outer laminates and cores of sandwich construction is not to be less than obtained from the following formulae, whichever is greater: $0.1C_1Sh$ (mm) C_2t_f (mm) where, S: Spacing of longitudinal beams of transverse beams (m). h: As specified in **8.2.3** (kN/m^2). t_f: Thickness of deck laminates in case of single skin construction specified in **8.2.1** (mm). C_1 and C_2: As specified in **7.3.3-1**.	Wording correction

Rules for the Survey and Construction of Ships of Fibreglass Reinforced Plastics Chapter 10 10.2.1-4

Correction	Present	Note
4 The webs of centre girders are to extend to the top of floors ~~of~~for bottom transverse girders.	**4** The webs of centre girders are to extend to the top of floors of bottom transverse girders.	Wording correction

Rules for the Survey and Construction of Ships of Fibreglass Reinforced Plastics Chapter 12 12.1.3

Correction	Present	Note
The section modulus of under-deck girders is not to be less than obtained from the following formula: $Cbhl^2$ (cm^3) where, b : Distance between the mid-points of spaces from the girder to the adjacent girders or the inner edges of brackets (m). (*See* **Fig. 12.1**) l : Distance between the supporting points of girders (m). (*See* **Fig. 12.1**) h : As specified in **8.2.3** (kN/m^2). Where, however, h is to be in accordance with the requirements in **8.2.3-3**, h is to be as specified in the followings ・Afore 0.3L from the fore end: 0.13L+4.5 (kN/m^2) ・Abaft 0.3L from the fore end: 0.11L+4.5 (kN/m^2) C : Coefficient given below: ・~~Midship~~The part 0.4L amidships・・・・・・・・4.3 ・Elsewhere・・・・・・・・・・・・・・・・3.4	The section modulus of under-deck girders is not to be less than obtained from the following formula: $Cbhl^2$ (cm^3) where, b : Distance between the mid-points of spaces from the girder to the adjacent girders or the inner edges of brackets (m). (*See* **Fig. 12.1**) l : Distance between the supporting points of girders (m). (*See* **Fig. 12.1**) h : As specified in **8.2.3** (kN/m^2). Where, however, h is to be in accordance with the requirements in **8.2.3-3**, h is to be as specified in the followings ・Afore 0.3L from the fore end: 0.13L+4.5 (kN/m^2) ・Abaft 0.3L from the fore end: 0.11L+4.5 (kN/m^2) C : Coefficient given below: ・Midship part・・・・・・・・4.3 ・Elsewhere・・・・・・・・・・4.3	Wording correction

Rules for the Survey and Construction of Ships of Fibreglass Reinforced Plastics Chapter 14 14.2.5

Correction	Present	Note
The section modulus of girders supporting frames and bulkhead stiffeners is not to be less than obtained from the following formula: $42Shl^2$ (~~cm^2~~cm^3) where, l : Total length of girders including the length of end connection (m). S : Breadth of the area supported by the girders (m). h : Vertical distance measured from the mid-	The section modulus of girders supporting frames and bulkhead stiffeners is not to be less than obtained from the following formula: $42Shl^2$ (cm^2) where, l : Total length of girders including the length of end connection (m). S : Breadth of the area supported by the girders (m). h : Vertical distance measured from the mid-point of	Wording correction

point of *S* to the mid-point of the height between the top of overflow pipe and the top of tank (*m*).	*S* to the mid-point of the height between the top of overflow pipe and the top of tank (*m*).	

Rules for the Survey and Construction of Ships of Fibreglass Reinforced Plastics Chapter 19 19.2.2

Correction	Present	Note
The surfaces of fuel oil tanks made of *FRP* facing the spaces such as main engine rooms, etc. where there may be usually heat of fire ~~and~~are to be provided with proper measures for flame retardation and flame-resistance. In case of engines using petrols, the fuel oil tanks are to be metallic.	The surfaces of fuel oil tanks made of *FRP* facing the spaces such as main engine rooms, etc. where there may be usually heat of fire and to be provided with proper measures for flame retardation and flame-resistance. In case of engines using petrols, the fuel oil tanks are to be metallic.	Wording correction

Rules for Floating Docks Chapter 1 1.1.1-1

Correction	Present	Note
1 The survey and construction of floating docks to be registered in accordance with the ~~Regulation~~**Regulations for** ~~classification~~**the Classification and Registry of Ships** are to be as prescribed in the Rules.	**1** The survey and construction of floating docks to be registered in accordance with the Regulation for classification and Registry are to be as prescribed in the Rules.	Wording correction

Rules for Floating Docks Chapter 1 1.1.1-3

Correction	Present	Note
3 The relevant portions of the ~~**Regulations**~~**Rules for the** ~~**Classification**~~**Survey and** ~~**Registry**~~**Construction of Steel Ships** apply to essential constructions, machinery and equipment not specified in the Rules, as may be required.	**3** The relevant portions of the **Regulations for the Classification and Registry of Ships** apply to essential constructions, machinery and equipment not specified in the Rules, as may be required.	Wording correction

Rules for Floating Docks Chapter 2 2.1.3

Correction	Present	Note
From the commencement of the work until the completion, of the dock, the Surveyors are to examine the materials, workmanship and arrangements. The surveys are required at; (1) When the material tests prescribed in **Part K** and **Part L of the Rules for the Survey and Construction of Steel Ships** are carried out. (2) When the welding procedure test and radiographic test prescribed in **Part M of the Rules for the Survey and Construction of Steel Ships** are carried out. (3) When designated by the Surveyors during shop work, sub-assembly work or assembly of blocks. (4) When a part of dock is completed. (5) When tests specified in **2.1.3**~~**3**~~**4** are carried out.	From the commencement of the work until the completion, of the dock, the Surveyors are to examine the materials, workmanship and arrangements. The surveys are required at; (1) When the material tests prescribed in **Part K** and **Part L of the Rules for the Survey and Construction of Steel Ships** are carried out. (2) When the welding procedure test and radiographic test prescribed in **Part M of the Rules for the Survey and Construction of Steel Ships** are carried out. (3) When designated by the Surveyors during shop work, sub-assembly work or assembly of blocks. (4) When a part of dock is completed. (5) When tests specified in **2.1.3** are carried out.	Reference correction

Rules for Floating Docks Chapter 2 2.3.3-2

Correction	Present	Note
2 Special survey is to include compliance with all Intermediate Survey requirements, and the Surveyor is to satisfy himself, by examination, that all means of protection to openings are in good condition and are readily accessible. Effect is also to be given to the following requirements. (1) Pontoon and wing wall ~~thanks~~tanks are to be cleaned, examined internally, and water tested to the satisfaction of the Surveyor. At the discretion of the Surveyor, fuel oil tanks forming part of the main structure need not be examined internally until the dock is more than 15 *years* old. (2) Spaces above safety deck are to be examined internally, removing linings, etc. where necessary for inspection. Air pipes extending below deck to form air cushions are also to be examined. (3) Where the surface of plating is covered with cement, composition, or wood sheathing, the covering is to be removed as may be required for examination of the plating (4) The thickness of any part of the structure where wastage is evident may be required by the Surveyor to be determined by an approved method. Where necessary the structure is to be renewed	**2** Special survey is to include compliance with all Intermediate Survey requirements, and the Surveyor is to satisfy himself, by examination, that all means of protection to openings are in good condition and are readily accessible. Effect is also to be given to the following requirements. (1) Pontoon and wing wall thanks are to be cleaned, examined internally, and water tested to the satisfaction of the Surveyor. At the discretion of the Surveyor, fuel oil tanks forming part of the main structure need not be examined internally until the dock is more than 15 *years* old. (2) Spaces above safety deck are to be examined internally, removing linings, etc. where necessary for inspection. Air pipes extending below deck to form air cushions are also to be examined. (3) Where the surface of plating is covered with cement, composition, or wood sheathing, the covering is to be removed as may be required for examination of the plating (4) The thickness of any part of the structure where wastage is evident may be required by the Surveyor to be determined by an approved method. Where necessary the structure is to be renewed	Wording correction

Rules for Floating Docks Chapter 2 2.3.3-5

Correction	Present	Note
5 ~~Surverys~~Surveys of boilers are to be in accordance with the requirements of **Chapter 7, Part B of the Rules for the Survey and Construction of Steel Ships**. Surveys of machinery, piping, valves, pumps, and electrical equipment are to be in accordance with the relevant requirements of **Chapter 5, Part B of the Rules for the Survey and**	**5** Surverys of boilers are to be in accordance with the requirements of **Chapter 7, Part B of the Rules for the Survey and Construction of Steel Ships**. Surveys of machinery, piping, valves, pumps, and electrical equipment are to be in accordance with the relevant requirements of **Chapter 5, Part B of the Rules for the Survey and**	Wording correction

Construction of Steel Ships as far as applicable.	**Construction of Steel Ships** as far as applicable.	

Rules for Floating Docks Chapter 4 4.2.4

Correction	Present	Note
The wind heeling moment may be calculated from the following formula. $0.613\times10^{-3}\times V^2AH\ (kN\cdot m)$ where : A : the longitudinal projected area of the exposed surface considered at every stage of inclining exposed areas of docked ship (m^2). $H=\Delta H+\frac{1}{2}d\ (m)$ ΔH : Vertical distance from the center of A to the water line of the dock (m). d : draught of the dock (m). V : wind velocity (m/sec.), the wind velocity is not to be less than 25m/sec. in general. However, the values of the wind velocity will depend on the service location and the mode of operation of the dock, and may be considered more precisely in each case.	The wind heeling moment may be calculated from the following formula. $0.613\times10^{-3}\times V^2AH\ (kN\cdot m)$ where : A : the longitudinal projected area of the exposed surface considered at every stage of inclining exposed areas of docked ship (m^2). $H=\Delta H+\frac{1}{2}d\ (m)$ ΔH : Vertical distance from the center of A to the water line of the dock (m). d : draught of the dock (m). V : wind velocity (m/sec.), the wind velocity is not to be than 25m/sec. in general. However, the values of the wind velocity will depend on the service location and the mode of operation of the dock, and may be considered more precisely in each case.	Wording correction

Rules for Floating Docks Chapter 6 6.1.1

Correction	Present	Note
The pressure vessels other than those belonging to Group 3 and essential machinery such as generator driving and auxiliary machinery which are necessary for operations of the docks, are generally to be in accordance with the relevant provisions of the ~~Ship Rulers.~~**Rules for the Survey and Construction of Steel Ships**.	The pressure vessels other than those belonging to Group 3 and essential machinery such as generator driving and auxiliary machinery which are necessary for operations of the docks, are generally to be in accordance with the relevant provisions of the Ship Rulers.	Wording correction

Rules for the Construction and Certification of Freight Containers Chapter 1 1.1.4

Correction	Present	Note
Terms used in these Rules are defines as follows unless otherwise specially provided: ((1) to (7) are omitted.) (8) "Internal dimensions" are the ~~minimum~~ internal dimensions of the container including any permanent attachments except top cover fitting. ((9) to (11) are omitted.)	Terms used in these Rules are defines as follows unless otherwise specially provided: ((1) to (7) are omitted.) (8) "Internal dimensions" are the minimum internal dimensions of the container including any permanent attachments except top cover fitting. ((9) to (11) are omitted.)	Wording correction

Rules for the Construction and Certification of Freight Containers Chapter 2 2.1.1

Correction	Present	Note
1 Each type of container proposed for Design Type Approval is to comply with the relevant requirements in **Chapters 5**, **6** and **7** in respect to its structural arrangements, scantlings, materials etc. and a sample unit of the type is to undergo the tests and inspections specified in **Chapters 5** to **7**. However, in case where any container has the Design Type Approval of ***CSC***, the Society will examine the specified documents and omit part ~~of~~or whole of the required tests and inspection.	**1** Each type of container proposed for Design Type Approval is to comply with the relevant requirements in **Chapters 5**, **6** and **7** in respect to its structural arrangements, scantlings, materials etc. and a sample unit of the type is to undergo the tests and inspections specified in **Chapters 5** to **7**. However, in case where any container has the Design Type Approval of ***CSC***, the Society will examine the specified documents and omit part of whole of the required tests and inspection.	Wording correction

Rules for the Construction and Certification of Freight Containers Chapter 4 4.1.1

Correction	Present	Note
1 Tests and inspections during production are to be carried out as required by **4.2** ~~for~~. For containers of special types not fully covered in the Rules, tests and inspections will be carried out in general in accordance with these regulations and/or an agreed specification.	**1** Tests and inspections during production are to be carried out as required by **4.2** for containers of special types not fully covered in the Rules, tests and inspections will be carried out in general in accordance with these regulations and/or an agreed specification.	Wording correction

Rules for the Construction and Certification of Freight Containers Chapter 4 4.2.1

Correction	Present	Note
1 For type-series containers manufactured in the works with Approval of Manufacturing Procedure, the following tests and inspections are to be carried out to the satisfaction of the Surveyor. ((1) to (6) are omitted.) (7) Stacking, lifting from top corner fittings and floor tests specified in **5.5** or **6.5** or **7.5** for one container selected at random from every fifty container. For thermal containers, thermal and performance tests specified in **6.5** are to be added to the above mentioned tests. The kinds of tests and their frequencies may be modified depending on the test results previously obtained. The test hours of the thermal test and the performance test of refrigerating unit may by modified under acceptance of the Society.	**1** For type-series containers manufactured in the works with Approval of Manufacturing Procedure, the following tests and inspections are to be carried out to the satisfaction of the Surveyor. ((1) to (6) are omitted.) (7) Stacking, lifting from top corner fittings and floor tests specified in **5.5** or **6.5** or **7.5** for one container selected at random from every fifty container. For thermal containers, thermal and performance tests specified in **6.5** to be added to the above mentioned tests. The kinds of tests and their frequencies may be modified depending on the test results previously obtained. The test hours of the thermal test and the performance test of refrigerating unit may by modified under acceptance of the Society.	Wording correction

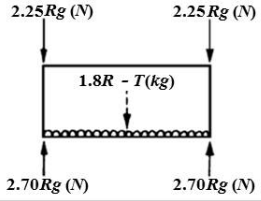
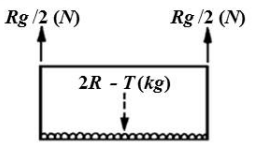
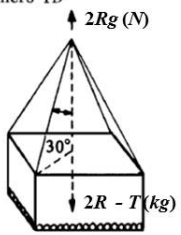
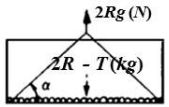
Rules for the Construction and Certification of Freight Containers Chapter 4 4.2.2

Correction	Present	Note
The following tests and inspections are to be carried out to the satisfaction of the Surveyor. ((1) to (6) are omitted.) (7) Strength tests specified in **5.5** or **6.5** or **7.5** for one container selected at random from every fifty containers which have been built at the same period to the same design and specifications. ~~Thermal~~For thermal containers, thermal and performance ~~test~~tests specified in **6.5** are to be added to the above mentioned tests ~~for thermal container~~. The kind of test and their frequency may be modified depending on the test results previously obtained.	The following tests and inspections are to be carried out to the satisfaction of the Surveyor. ((1) to (6) are omitted.) (7) Strength tests specified in **5.5** or **6.5** or **7.5** for one container selected at random from every fifty containers which have been built at the same period to the same design and specifications. Thermal and performance test to be added to the above mentioned tests for thermal container. The kind of test and their frequency may be modified depending on the test results previously obtained.	Wording correction

Rules for the Construction and Certification of Freight Containers Chapter 5 Table 5.1

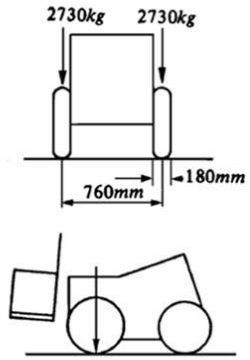
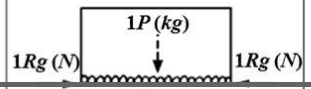
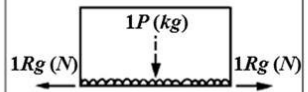
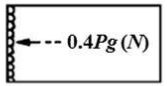
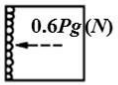
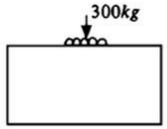
Correction	Present	Note

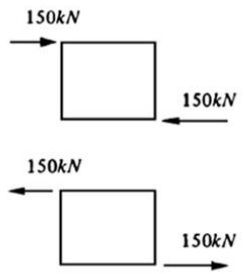
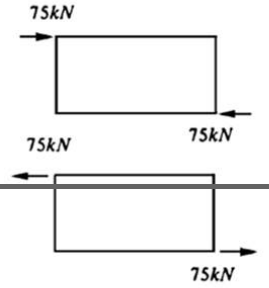
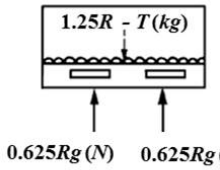
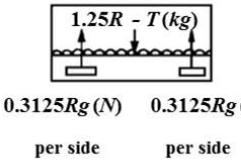
Table 5.1 Loads and Forces to be Applied

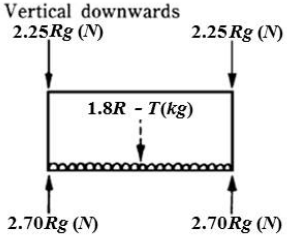
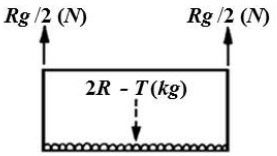
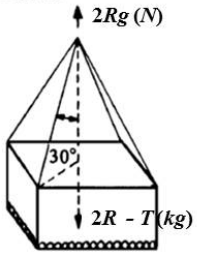
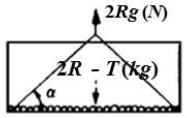
Item	Where Applied	Direction	Notes
Stacking	Top corner fittings Off-set by 38*mm* longitudinally and 25.4*mm* laterally	Vertical downwards 	Concentrated eccentrically applied load $9Rg\ (N)$ ($\frac{9}{4}Rg\ (N)$ per top corner fitting)
Top Lifting	Top corner fittings	Vertically upwards for containers 1*A*, 1*AA*, 1*B*, 1*BB*, 1*C* and 1*CC* 	Lifting force $2Rg\ (N)$ ($\frac{2}{4}Rg\ (N)$ per top corner fitting)
		30° to the vertical for containers 1*D* 	
Bottom Lifting	Bottom corner fittings Spacing between the line of action of the lifting force and the outer face of the corner fitting is not further than 38*mm*.	*a*: Angle to the horizontal 	Lifting force $2Rg\ (N)$

	a
1*A*, 1*AA*	30
1*B*, 1*BB*	37
1*C*, 1*CC*	45
1*D*	60

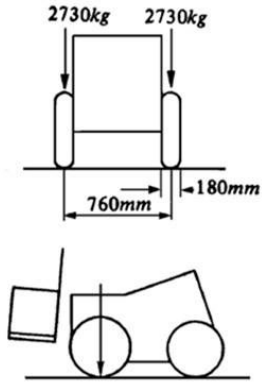
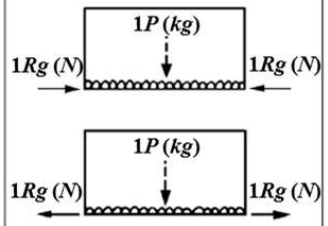
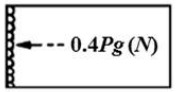
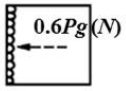
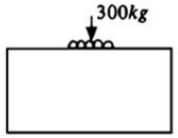
Wording correction

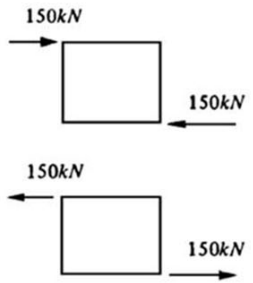
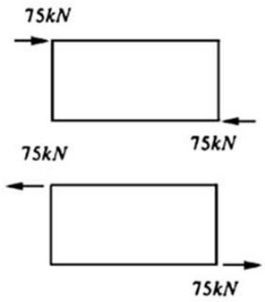
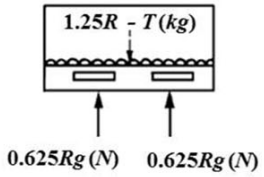
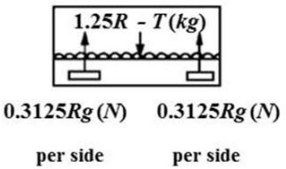
Item	Where Applied	Direction	Notes
Wheel loading	Floor	Vertically downward 	5460kg per an axle (2730kg per a wheel) wheel width: 180mm contact area: 142cm^2 wheel centers: 760mm
Restraint	Bottom corner fittings	Longitudinal 	Concentrated force 2Rg (N) ($\frac{2}{2}Rg$ (N) per one side)
			
End wall	End wall	Outwards normal to the end 	Uniformly distributed load 0.4Pg (N)
Side wall	Side wall	Outwards normal to the side 	Uniformly distributed load 0.6Pg (N)
Roof	An area of 600mm×300mm located at the weakest area	Downwards normal to the roof 	Uniformly distributed load 300kg

Item	Where Applied	Direction	Notes
Rigidity (transverse) For containers 1*A*, 1*AA*, 1*B*, 1*C* and 1*CC*	Top corner fittings	Transverse 	Concentrated force 150*kN* per top corner fitting
Rigidity (longitudinal) For containers 1*A*, 1*AA*, 1*B*, 1*C* and 1*CC*	Top corner fittings	Longitudinal 	Concentrated force 75*kN* per top corner fittings
For lift pocket For 1*C*, 1*CC* and 1*D* containers (when fitted)	Fork lift pockets	Vertically upwards 	Distributed load $\frac{1.25}{2}Rg\,(N)$ per fork lift pocket
Grappler lifting position (when fitted)	Grappler lifting position	Vertically upwards 	Distributed load $\frac{1.25}{4}Rg\,(N)$ per grappler lifting position

Item	Where Applied	Direction	Notes
Stacking	Top corner fittings Off-set by 38*mm* longitudinally and 25.4*mm* laterally	Vertical downwards 	Concentrated eccentrically applied load $9Rg\,(N)$ ($\frac{9}{4}Rg\,(N)$ per top corner fitting)
Top Lifting	Top corner fittings	Vertically upwards for containers 1*A*, 1*AA*, 1*B*, 1*BB*, 1*C* and 1*CC*  30° to the vertical for containers 1*D* 	Lifting force $2Rg\,(N)$ ($\frac{2}{4}Rg\,(N)$ per top corner fitting)
Bottom Lifting	Bottom corner fittings Spacing between the line of action of the lifting force and the outer face of the corner fitting is not further than 38*mm*.	*a* : Angle to the horizontal 	Lifting force $2Rg\,(N)$

	a
1*A*, 1*AA*	30°
1*B*, 1*BB*	37°
1*C*, 1*CC*	45°
1*D*	60°

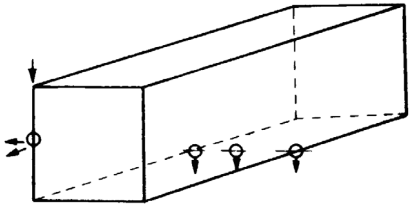
Item	Where Applied	Direction	Notes
Wheel loading	Floor	Vertically downward 	5460kg per an axle (2730kg per a wheel) wheel width: 180mm contact area: 142cm² wheel centers: 760mm
Restraint	Bottom corner fittings	Longitudinal 	Concentrated force 2Rg (N) ($\frac{2}{2}$ Rg (N) per one side)
End wall	End wall	Outwards normal to the end 	Uniformly distributed load 0.4Pg (N)
Side wall	Side wall	Outwards normal to the side 	Uniformly distributed load 0.6Pg (N)
Roof	An area of 600mm×300mm located at the weakest area	Downwards normal to the roof 	Uniformly distributed load 300kg

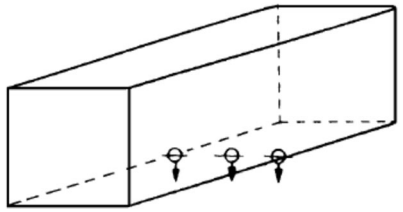
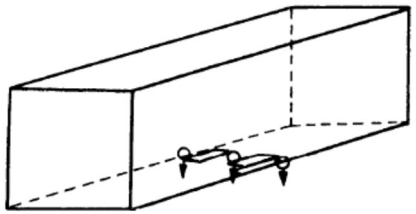
Item	Where Applied	Direction	Notes
Rigidity (transverse) For containers 1*A*, 1*AA*, 1*B* 1*BB*, 1*C* and 1*CC*	Top corner fittings	Transverse 	Concentrated force 150*kN* per top corner fitting
Rigidity (longitudinal) For containers 1*A*, 1*AA*, 1*B* 1*BB*, 1*C* and 1*CC*	Top corner fittings	Longitudinal 	Concentrated force 75*kN* per top corner fittings
For lift pocket For 1*C*, 1*CC* and 1*D* containers (when fitted)	Fork lift pockets	Vertically upwards 	Distributed load $\frac{1.25}{2}Rg\,(N)$ per fork lift pocket
Grappler lifting position (when fitted)	Grappler lifting position	Vertically upwards 	Distributed load $\frac{1.25}{4}Rg\,(N)$ per grappler lifting position

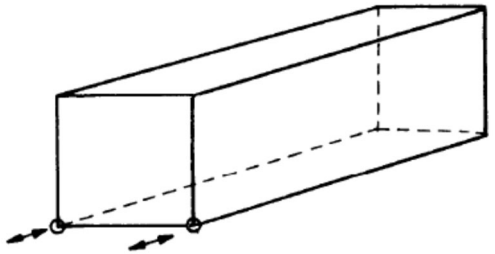
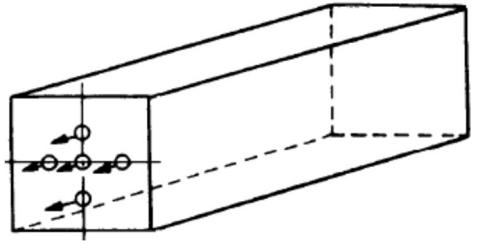
Rules for the Construction and Certification of Freight Containers Chapter 5 Table 5.2

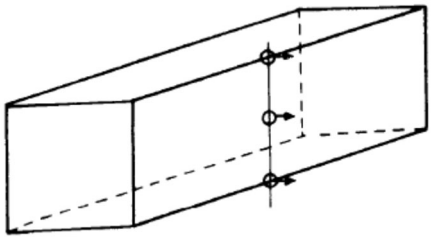
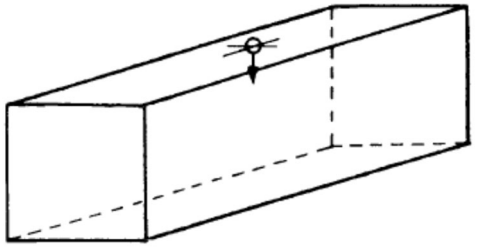
Correction	Present	Note

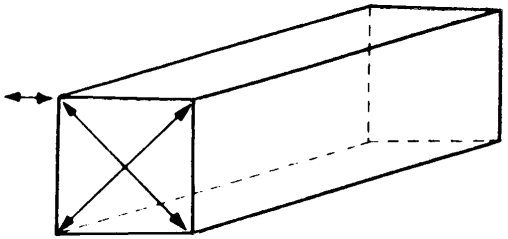
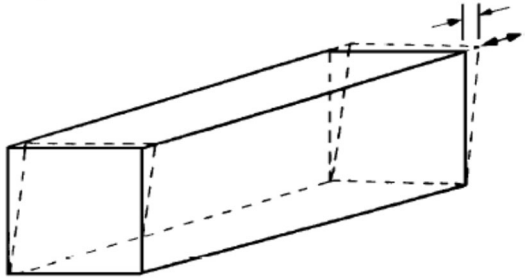
Table 5.2 Test Procedures and Measurements

Tests	Procedures and Measurements
Stacking	Procedure - Internal load: 1.8 *R-T*(*kg*) uniformly distributed over the base. - Applied forces: With the container in the normal position supported at the base corner fittings, compressive forces equivalent to 2.25 *R*(*kg*) are to be applied to each corner post through rigidly held dummy corner fittings arranged to simulate an overstowed corner base. The test is to be repeated to cover for all positions of offset namely 38 *mm* longitudinally and 25.4 *mm* laterally. For containers with doors, stacking loads are also to be added under the one door off condition. Measurements: i) Deflections at lowest point of both side rails and at the longitudinal centre line of the base which may be taken before the application of axial loads. ii) Deflections in two directions at midheight, or other point of maximum deflection of the corner posts. iii) Permanent set remaining on removal of the load. 
Top Lifting	Procedure - Internal load: 2*R-T*(*kg*) uniformly distributed over the base. - Applied forces: With the container in the normal position, lifting forces are to be applied gradually to the top corner fittings. i) Vertically to 1*A*, 1*AA*, 1*B*, 1*BB*, 1*C* and 1*CC* containers. ii) At 30 to the vertical in the case of 1*D* containers. The container shall be supported for 5 *minutes*. Measurements: i) While loaded and supported by the four bottom corner fittings before lifting clear, the deflection at lowest points of both side rails and at the longitudinal centre line of the base. ii) Any distress due to lifting. iii) Permanent set remaining on removal of the load.

<table>
<tr><td></td><td></td><td>  </td><td></td></tr>
<tr><td>Bottom Lifting</td><td>Procedure
- Internal load: 2 R-T(kg) uniformly distributed over the base.
- Applied forces: With the container in the normal position, lifting forces are to be applied gradually through the bottom corner fitting side apertures as follows:
<s>Direction of applied forces
1A, 1AA 30° to horizontal
1B, 1BB 37° to horizontal
1C, 1CC 45° to horizontal
1D 60° to horizontal</s>
<table><tr><td></td><td>Direction of applied forces</td></tr><tr><td>1A, 1AA</td><td>30° to horizontal</td></tr><tr><td>1B, 1BB</td><td>37° to horizontal</td></tr><tr><td>1C, 1CC</td><td>45° to horizontal</td></tr><tr><td>1D</td><td>60° to horizontal</td></tr></table>The container shall be supported for 5 minutes.
Measurements: Any distress due to lifting.</td><td></td><td>Wording correction</td></tr>
<tr><td>Floor Strength</td><td>Procedure
- Internal load: Nil.
- Applied forces: With container supported at the bottom corner fittings, a vehicle equipped with 180 mm wide wheels at 760 mm centres each having a contact area of 142 <s>mm²</s><u>cm²</u> loaded to an axle load of 5,460 kg is to be manoeuvered over the entire floor area.
Measurements: Deflections and permanent set in three locations of the base.
  </td><td></td><td>Wording correction</td></tr>
</table>

	Restraint	Procedure - Internal load: *R*-*T*(*kg*) uniformly distributed over the base. - Applied forces: With the container in the normal position, anchored by locking devices through the bottom apertures in the bottom corner fittings at one end, loads equivalent to *R* (*kg*) are to be applied to each side rail through the bottom apertures in the bottom corner fittings at the other end first in compression then in tension. Measurements: The change in length of both bottom side rails during and after the test (in each direction). 		
	End Wall	Procedure - Internal load and application: 0.4 *P*(*kg*) uniformly distributed over the wall under test in such a way as to allow free deflection of the end wall. Measurements: Deflection and permanent set at the centre and at least two other locations. 		

	Side Wall	Procedure - Internal load and application: 0.6 *P*(*kg*) uniformly distributed over the wall under test in such a way as to allow free deflection of the side wall and its top and bottom side rails. Each side is to be tested separately but only one side need to be tested when both are similar in construction. Measurements: Deflection and permanent set at the centre of the side wall and the centre of the top and bottom side rails. 		
	Roof Panel	Procedure - Internal load: Nil. - Applied forces: 300 *kg* uniformly distributed over a 600 *mm* × 300 *mm* are at the weakest section of the roof. Measurements: Maximum deflection and permanent set of the section under test. 		

	Transverse Racking	Procedure - Internal load: Nil. - Applied forces: With the container in the normal position anchored by locking devices through the apertures in the bottom corner fittings, transverse racking forces of 150 *kN* (15000 *kgf*) are to be applied separately or simultaneously to each top corner fitting on one side. Lateral restraint is to be taken up by the anchor devices diagonally opposite to the applied forces. The force (s) shall be applied first towards then away from the container. For containers with doors, transverse racking loads are also to be added under the one door off condition. Measurements: Difference in diagonals before, during and after testing. 		
	Longitudinal Racking	Procedure - Internal load: Nil. - Applied forces: With the container in the normal position anchored by locking devices through the apertures in the bottom corner fittings, longitudinal racking forces of 75 *kN* (7500 *kgf*) are to be applied separately or simultaneously to each top corner fitting on one end. Longitudinal restraint is to be taken up by the anchor devices diagonally opposite to the applied forces. The force (s) shall be applied first towards then away from the container. Measurements: Longitudinal displacement of top side rails. 		

	Lifting from Fork Lift Pockets	Procedure - Internal load: 1.25 *R-T*(*kg*) uniformly distributed over the base. -Applied forces: The container shall be supported for 5 *minutes* by two bars 200 *mm* wide inserted in the fork pockets to a depth of 1,828 ± 3 *mm*. Measurements: Undue local distortion during the test and any permanent distortion.		
	Lifting from side Grappler Lift Positions	Procedure -Internal load: 1.25 *R-T*(*kg*) uniformly distributed over the base. -Applied forces: The container shall be supported for 5 *minutes* by pads at the four grappler arm positions. The pads shall be of the same area as the grappler arms intended to be used. Measurements: Undue local distortion during the test and any permanent distortion.		
	Weathertightness	Procedure All surfaces of the container are to be subjected to a water test from a 12.5 *mm* nozzle, with a water pressure of 1 *bar* at the nozzle, which is to be traversed at a speed of approximately 100 *mm* per second at a distance of 1.5 *m* from the surface under test.		

Rules for the Construction and Certification of Freight Containers Chapter 6 6.2.4

Correction	Present	Note
2 Where the condensers are of water cooled type, the design temperature of cooling water for refrigerating units is to be 36℃. The structure is to be designed to allow draining to prevent the water from freezing.	**2** Where the condensers are of water cooled type, the design temperature of cooling water for refrigerating units is to be 36℃.	Wording correction

Rules for the Construction and Certification of Freight Containers Chapter 6 6.4.1

Correction	Present	Note
1 In addition to the markings prescribed in **5.3**, the following items are to be indicated on the exterior of thermal containers provided with refrigerating units. (1) Type of refrigerating unit, date of manufacture, and ~~king~~kind of refrigerant. (2) Output and revolution of the electric motor for refrigerant compressor. (3) Rated voltage, frequency and serial number of phases of the electric motor for refrigerant compressor. (4) Type of electric source (Classification of electric	**1** In addition to the markings prescribed in **5.3**, the following items are to be indicated on the exterior of thermal containers provided with refrigerating units. (1) Type of refrigerating unit, date of manufacture, and king of refrigerant. (2) Output and revolution of the electric motor for refrigerant compressor. (3) Rated voltage, frequency and serial number of phases of the electric motor for refrigerant compressor. (4) Type of electric source (Classification of electric	Wording correction

source, **I**, **II**, or **III** prescribed in ***ISO*** /***IS*** 1496/***II***). (5) Full load current and Total starting current. (6) Minimum internal temperature and ambient temperature (when the condenser is of aircooled)	source, **I**, **II**, or **III** prescribed in ***ISO*** /***IS*** 1496/***II***). (5) Full load current and Total starting current. (6) Minimum internal temperature and ambient temperature (when the condenser is of aircooled)	

Rules for the Construction and Certification of Freight Containers Chapter 6 6.5.5

Correction	Present	Note
Performance test of refrigerating unit is to be carried out as follows: (1) Procedure: (a) The container is to be placed in test chamber where the temperature is held constant at the outside temperature prescribed in **6.2.1-2(1)**. (b) The measuring points of temperature for outside of the container are to be the places prescribed in **Fig.8.13** of **Chapter 8** and for inside of the container the temperatures at air inlet and air outlet are to be recorded ~~a~~lat least. (c) The test is to be performed on the container in its normal operating condition but ventilating devices are to be closed. (d) Using the refrigerating unit, the inside temperature of the container is to be cooled down to the temperature prescribed in **6.2.1-2(1)** and then maintain this temperature for a period of 8 *hours*. (e) After completion of above mentioned test, a non-radiant heater placed in the air stream inside the container is to be turned on, having a capacity of at least 25% of the total heat transfer rate (*U*) of the container established by the thermal test prescribed in **6.5.4** With the heater in operation the refrigerating unit is to be operated for a period of at least 4 *hours*.	Performance test of refrigerating unit is to be carried out as follows: (1) Procedure: (a) The container is to be placed in test chamber where the temperature is held constant at the outside temperature prescribed in **6.2.1-2(1)**. (b) The measuring points of temperature for outside of the container are to be the places prescribed in **Fig.8.13** of **Chapter 8** and for inside of the container the temperatures at air inlet and air outlet are to be recorded al least. (c) The test is to be performed on the container in its normal operating condition but ventilating devices are to be closed. (d) Using the refrigerating unit, the inside temperature of the container is to be cooled down to the temperature prescribed in **6.2.1-2(1)** and then maintain this temperature for a period of 8 *hours*. (e) After completion of above mentioned test, a non-radiant heater placed in the air stream inside the container is to be turned on, having a capacity of at least 25% of the total heat transfer rate (*U*) of the container established by the thermal test prescribed in **6.5.4** With the heater in operation the refrigerating unit is to be operated for a period of at least 4 *hours*.	Wording correction

(f) The capacity of the heater is defined by the formula below; Heating Capacity $= 0.25K \cdot S(\theta_e - \theta_i)$ where: K : The coefficient of heat transfer established by the Thermal test in **6.5.4** (W/m^2℃) S : The mean surface area of the container (m^2) θ_i : Inside temperature prescribed in **6.2.1-2(1)** (℃) θ_e : Outside temperature prescribed in **6.2.1-2(1)** (℃) (2) Measurements: (a) Inside and outside temperatures are to be recorded. (b) The power dissipated of electrical heater is to be recorded. (3) Requirements: It is to be confirmed that the average inside temperature of the container is to be maintained at the specified temperature during the test.	(f) The capacity of the heater is defined by the formula below; Heating Capacity $= 0.25K \cdot S(\theta_e - \theta_i)$ where: K : The coefficient of heat transfer established by the Thermal test in **6.5.4** (W/m^2℃) S : The mean surface area of the container (m^2) θ_i : Inside temperature prescribed in **6.2.1-2(1)** (℃) θ_e : Outside temperature prescribed in **6.2.1-2(1)** (℃) (2) Measurements: (a) Inside and outside temperatures are to be recorded. (b) The power dissipated of electrical heater is to be recorded. (3) Requirements: It is to be confirmed that the average inside temperature of the container is to be maintained at the specified temperature during the test.	

Rules for the Construction and Certification of Freight Containers Chapter 8 8.2.3

Correction	Present	Note
Dimensions of ~~containers~~load transferring areas in base structures are to be in accordance with **Fig. 8.4**.	Dimensions of containers are to be in accordance with **Fig. 8.4**.	Wording correction

Rules for the Construction and Certification of Freight Containers Chapter 8 8.2.7

Correction	Present	Note
Dimensions of ~~Containers~~cooling water connections are to be in accordance with **Fig. 8.8** and **Fig. 8.9**.	Dimensions of Containers are to be in accordance with **Fig. 8.8** and **Fig. 8.9**.	Wording correction

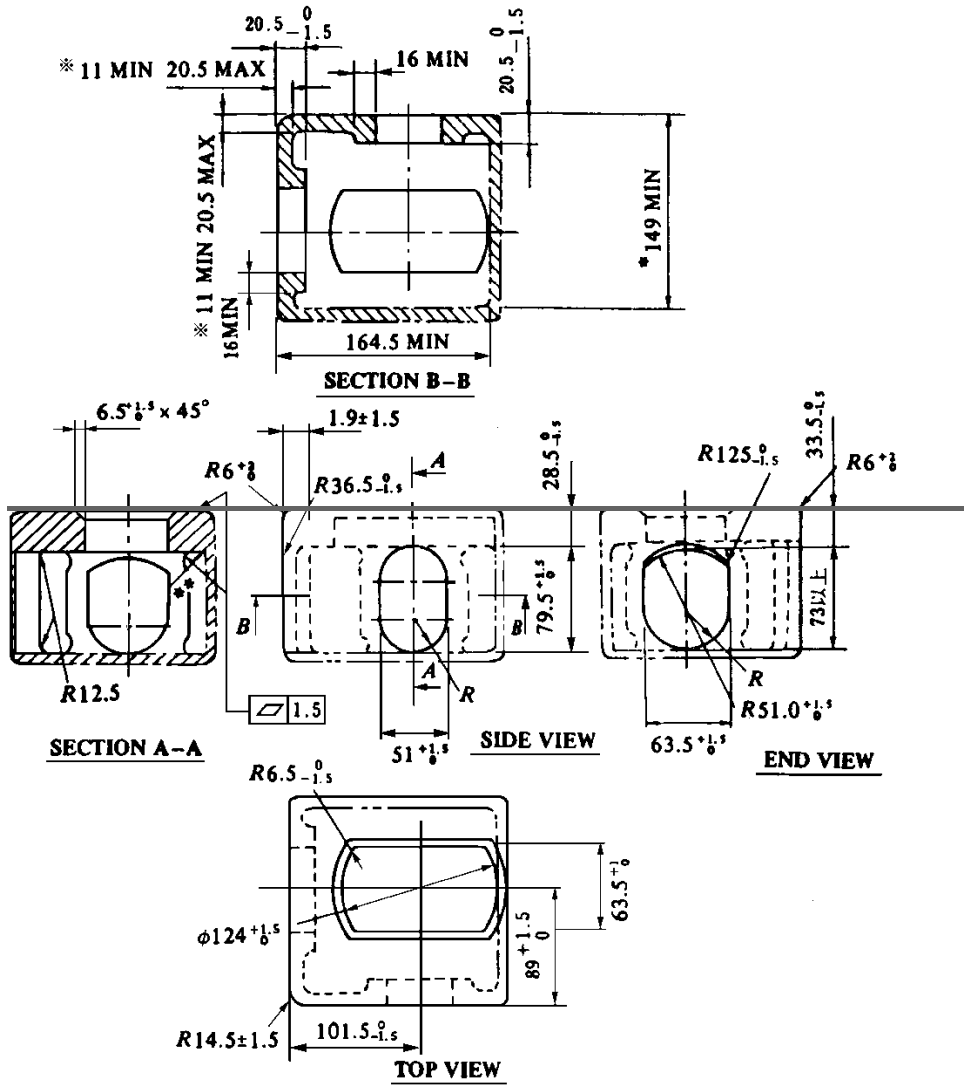
Rules for the Construction and Certification of Freight Containers Chapter 8 8.2.8

Correction	Present	Note
Dimensions of ~~containers~~air inlets and outlets are to be in accordance with **Fig. 8.10**, **Fig. 8.11** and **Fig. 8.12**.	Dimensions of containers are to be in accordance with **Fig. 8.10**, **Fig. 8.11** and **Fig. 8.12**.	Wording correction

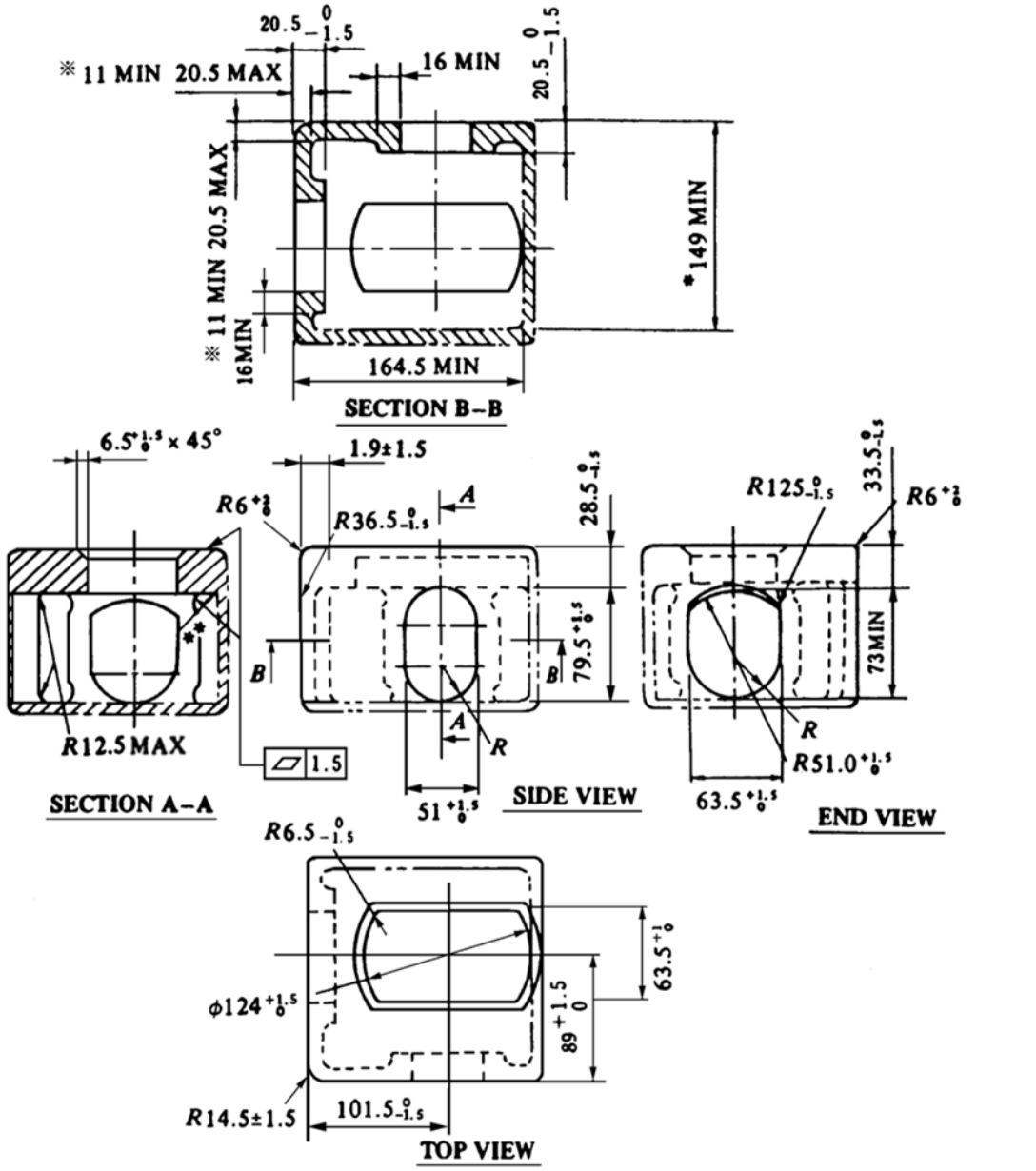
Rules for the Construction and Certification of Freight Containers Chapter 8 8.2.9

Correction	Present	Note
~~Dimensions of containers~~Air temperature measurement points are to be in accordance with **Fig. 8.13**.	Dimensions of containers are to be in accordance with **Fig. 8.13**.	Wording correction

Rules for the Construction and Certification of Freight Containers Chapter 8 Fig.8.2

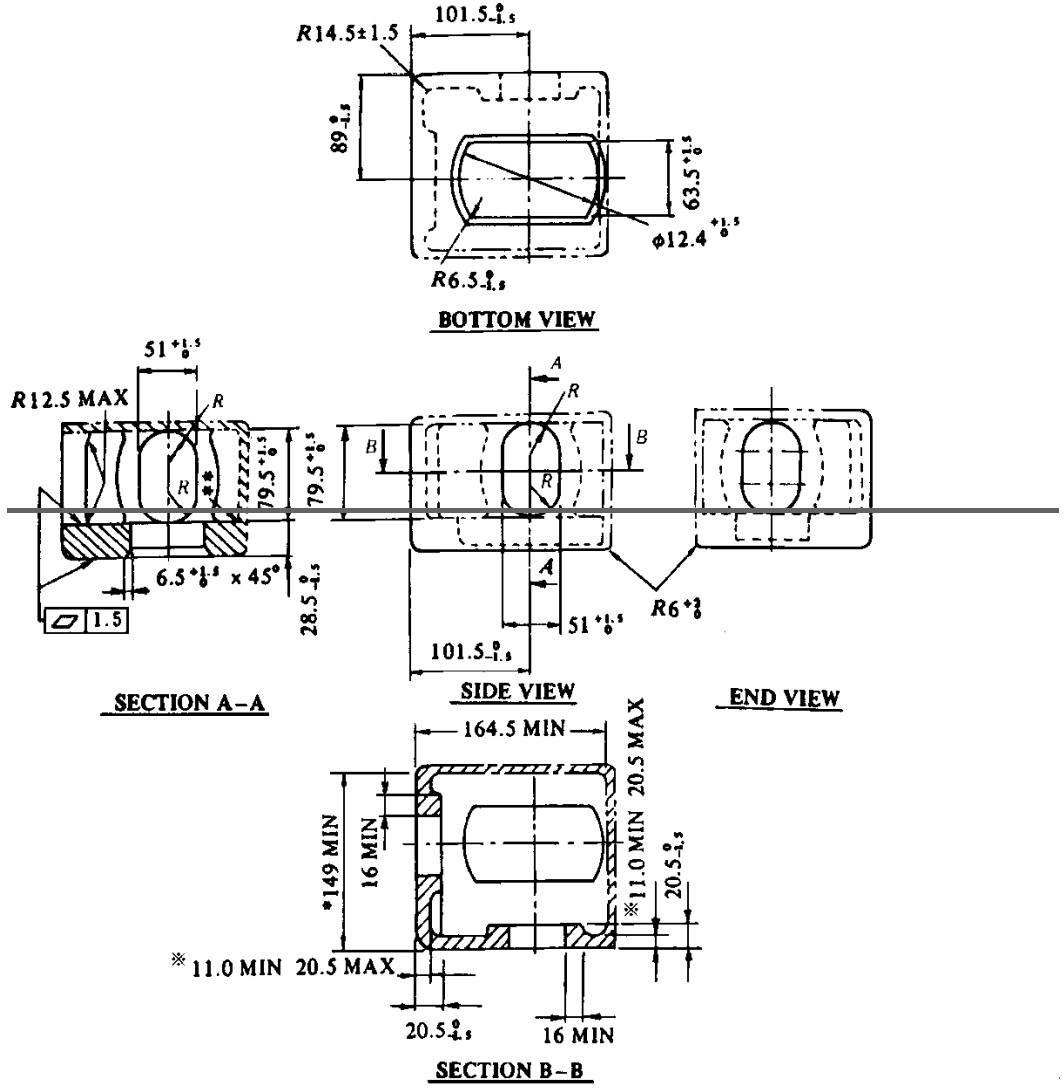
Correction	Present	Note
Fig. 8.2 Top Corner Fitting Dimensions are in millimetres.  		Wording correction

Dimensions are in millimetres.

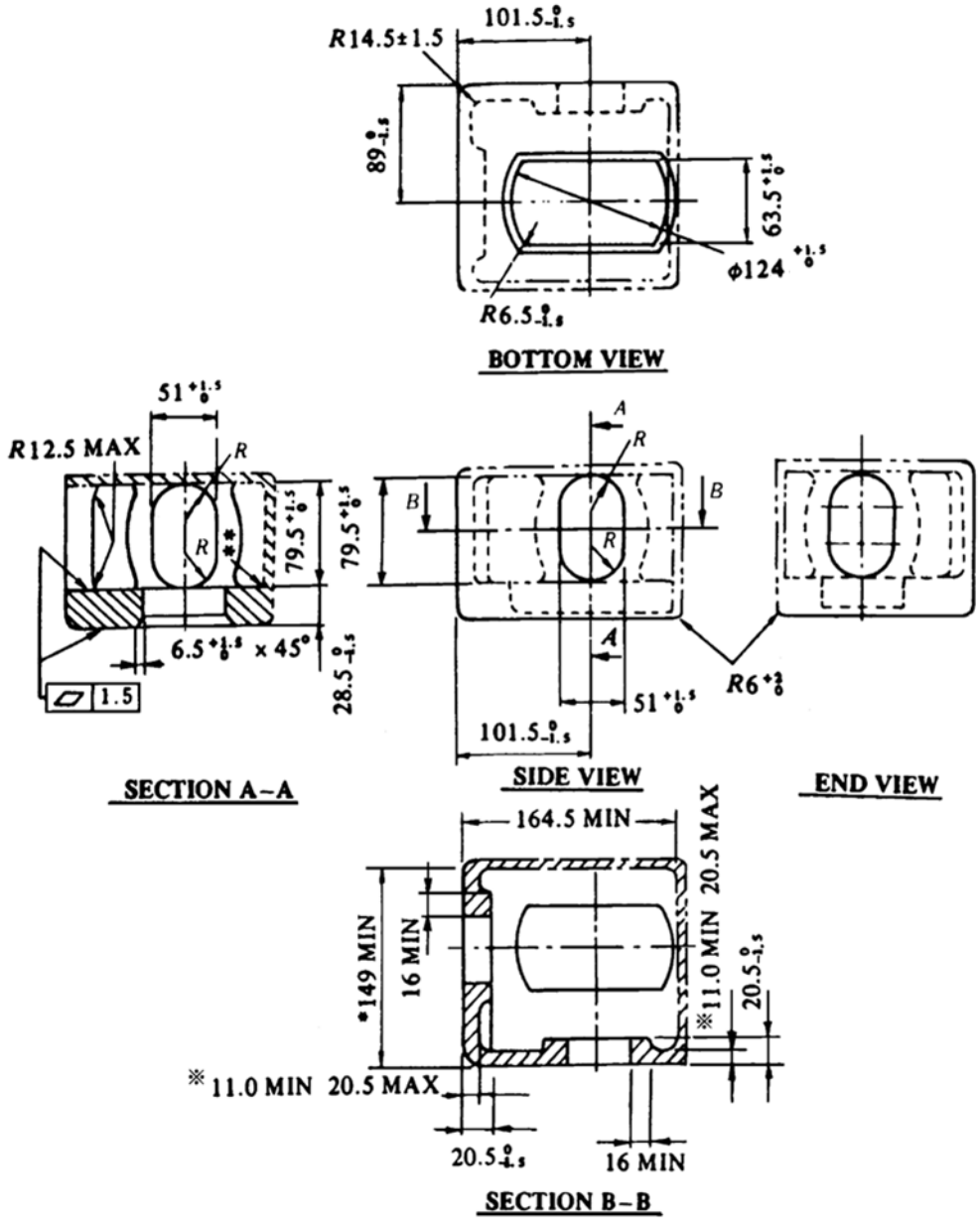


Notes: (1) Left hand fitting of fore end and right hand fitting of aft end are shown. Others are symmetrical to these. (2) Phantom lines (----) show optional walls which may be used to develop a boxed shaped fitting. (3) Where dimensions are not specified for inner and outer edges of apertures, these edges are to given a radius of $3^{0}_{-1.5} mm$. (4) Scantlings indicated by ※are not to be more than the thickness of the adjacent part surrounding a hole at the side or end. (5) In case of corner fittings having the minimum dimension of 149 *mm* indicated by*, the radius indicated by** (where provided) is not to exceed 5.5 *mm*. Where a greater radius is provided, the dimension of 149 *mm* indicated by* is to be increased accordingly.	

Rules for the Construction and Certification of Freight Containers Chapter 8 Fig.8.3

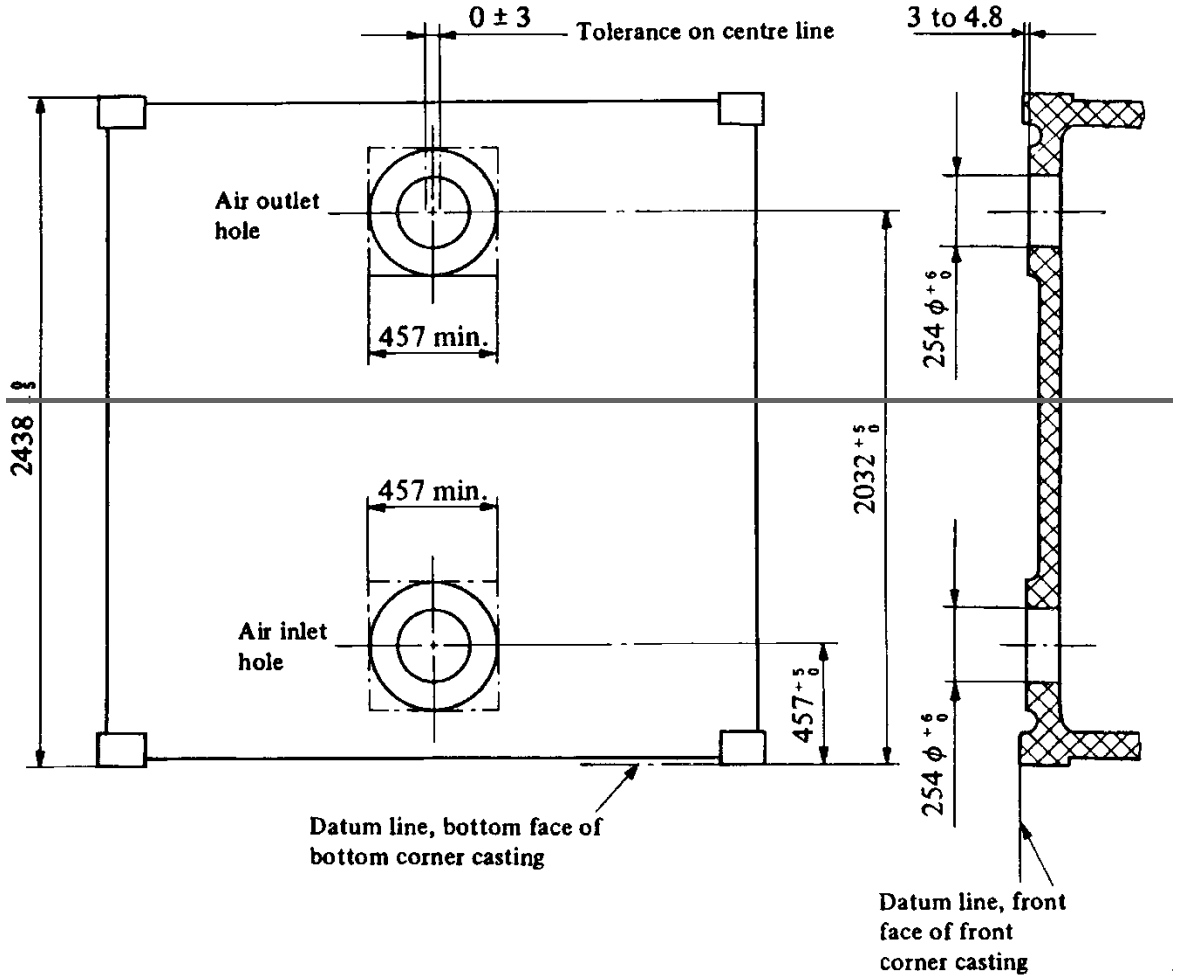
Correction	Present	Note
Fig. 8.3 Bottom Corner Fitting Dimensions are in millimetres.  		Wording correction

Dimensions are in millimetres.

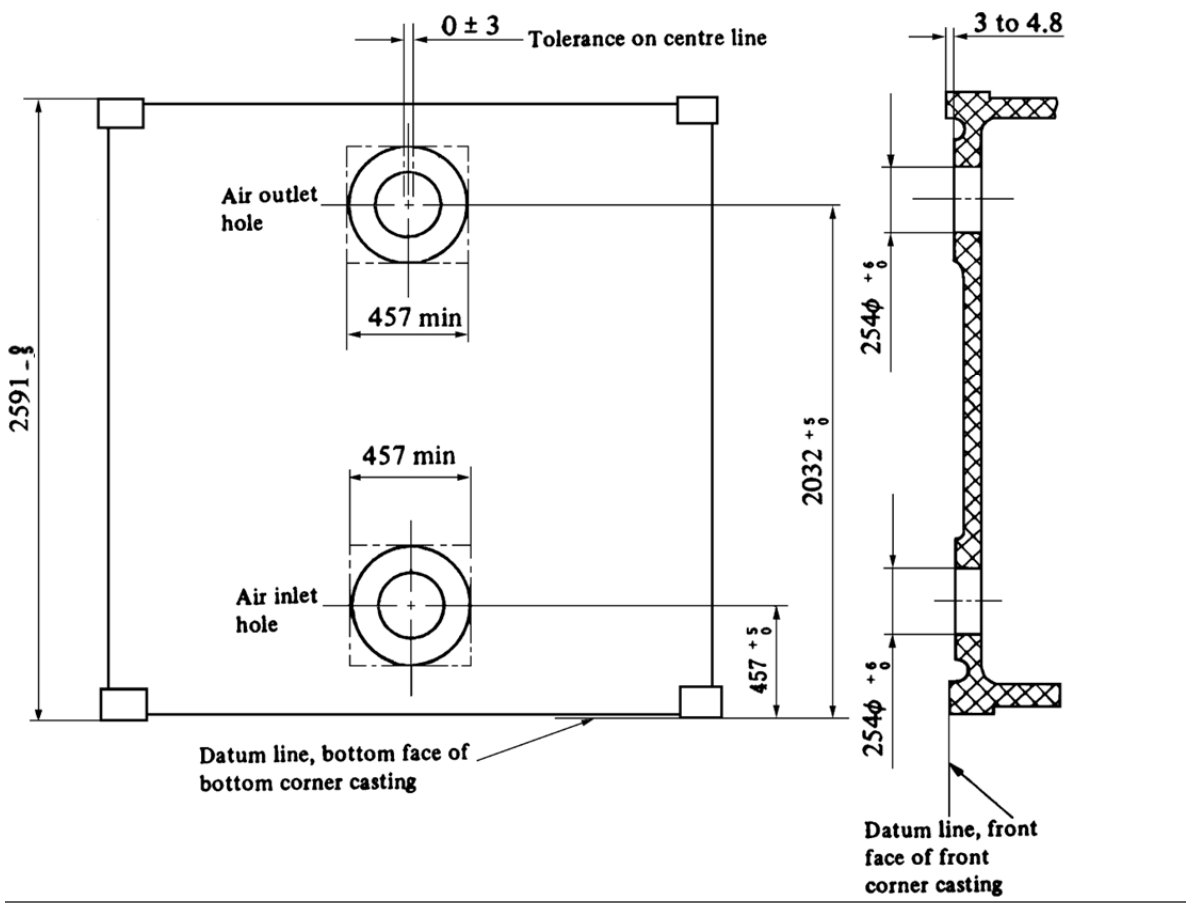


Notes: (1) Left hand fitting of fore end and right hand fitting of aft end are shown, Others are symmetrical to these. (2) Phantom lines (----) show optional walls which may be used to develop a boxed shaped fitting. (3) Where dimensions are not specified for inner and outer edges of apertures, these edges are to be given a radius of $3^{0}_{-1.5} mm$. (4) Scantlings indicated by ※are not to be more than the thickness of the adjacent part surrounding a hole at the side or end. (5) In case of corner fittings having the minimum dimension of 149 *mm* indicated by *, the radius indicated by ** (where provided) is not to exceed 5.5 *mm*. Where a greater radius is provided, the dimension of 149*mm* indicated by * is to be increased accordingly.	

Rules for the Construction and Certification of Freight Containers Chapter 8 Fig.8.11

Correction	Present	Note
Fig. 8.11 Air Apertures in End Wall of 1CC Thermal Containers Dimensions are in millimetres.  		Wording correction

Dimensions are in millimetres.



Notes:

1. Area about air circulation openings

(1) Bosses 457 *mm* diameter or square.

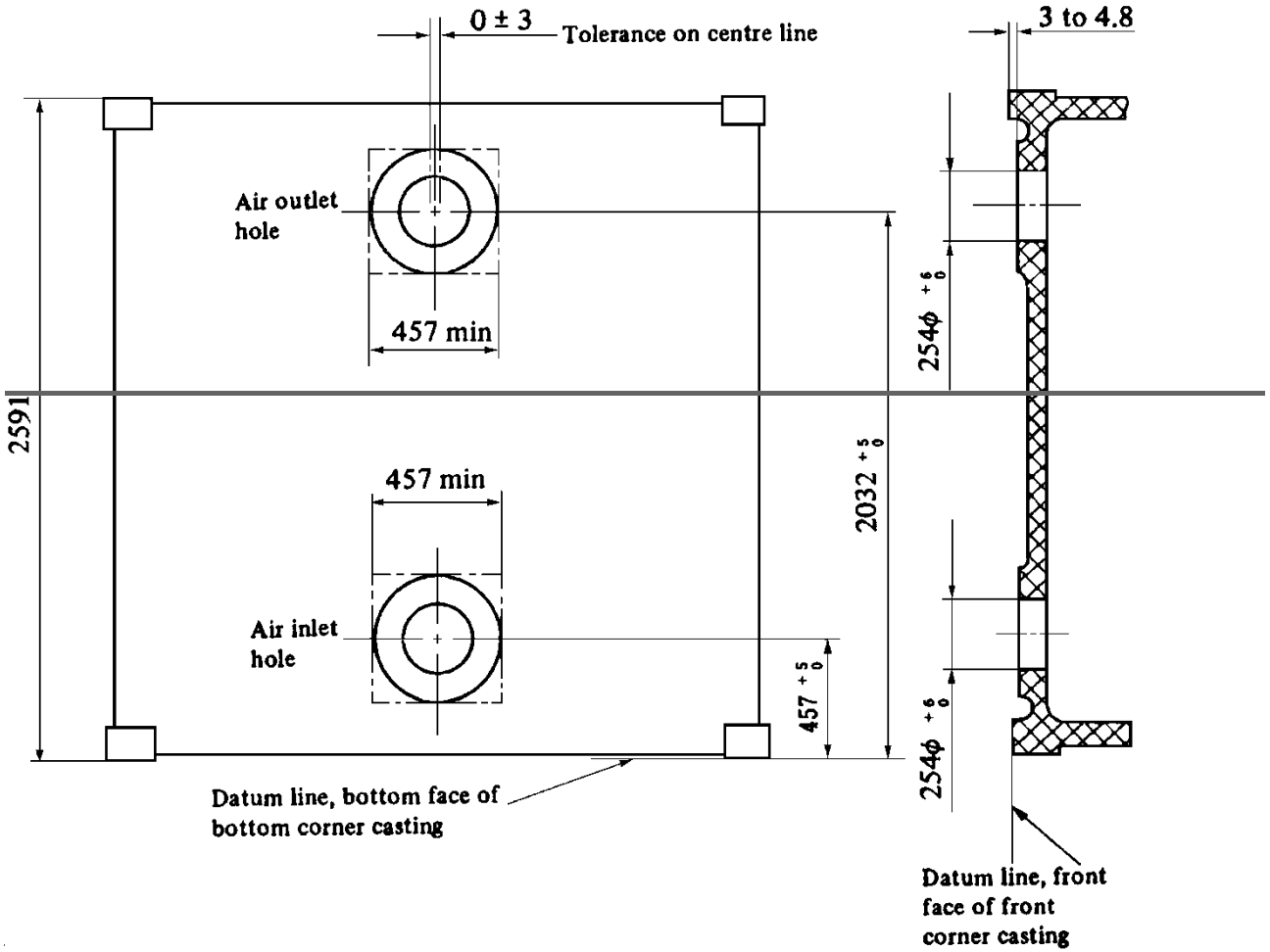
(2) Face of bosses to be plane to a tolerance of 0.25 *mm* and smooth.

(3) Faces of bosses to be parallel to a plane determined by front faces of the front corner fittings and recessed 3 to 4.8 *mm* from this plane.

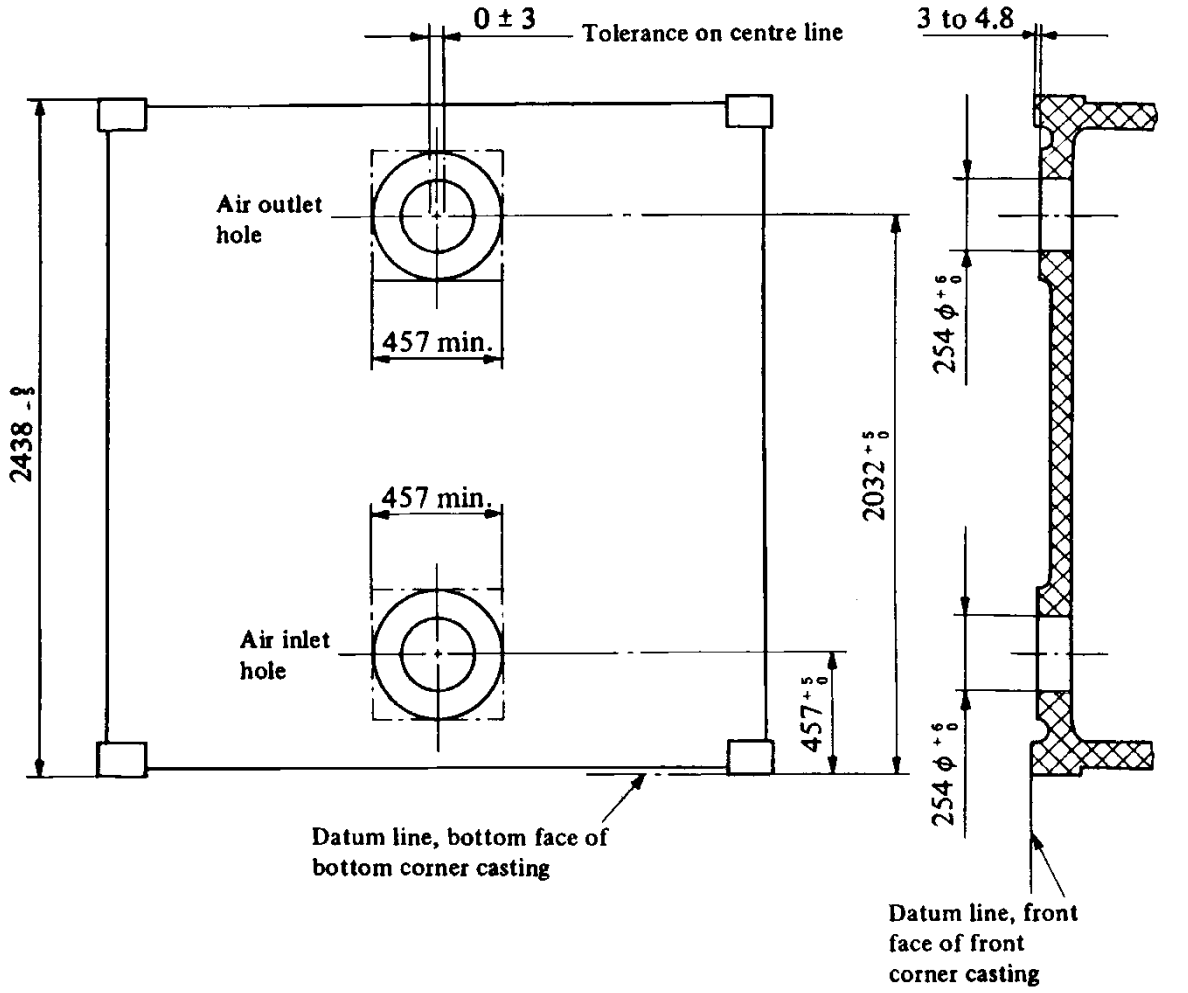
(4) Holes may have a mould dray taper but no part of the bore of the hole may have a diameter less than 254 *mm*.

2. Closures for apertures (1) Closure devices that are captive to the container should be provided for closing off the air circulation openings when the container is not connected to a cold air supply. (2) Closure devices should be capable of being scaled.	

Rules for the Construction and Certification of Freight Containers Chapter 8 Fig.8.12

Correction	Present	Note
Fig. 8.12 Air Apertures in End Wall of 1C Thermal Containers Dimensions are in millimetres.  		Wording correction

Dimensions are in millimetres.



Notes:

1. Area about air circulation openings

(1) Bosses 457 *mm* diameter or square.

(2) Face of bosses to be plane to a tolerance of 0.25 *mm* and smooth. (3) Faces of bosses to be parallel to a plane determined by front faces of the front corner fittings and recessed 3 to 4.8 *mm* from this plane. (4) Holes may have a mould draw taper but no part of the bore of the hole may have a diameter less than 254 *mm*. 2. Closure for apertures (1) Closure devices that are captive to the container should be provided for closing off the air circulation openings when the container is not connected to a cold air supply. (2) Closure devices should be capable of being sealed.	

Guidance for the survey and construction of steel ships Part B B1 B1.1.3-3

Correction	Present	Note
3 The Occasional Surveys specified in **1.1.3-3(5), Part B of the Rules** are as specified below: ((1) to (3) are omitted.) (4) Additional requirement for fittings on exposed fore deck For bulk carriers, general dry cargo ships (excluding container vessels, vehicle carriers, Ro-Ro ships and woodchip carriers), and combination carriers (e.g. OBO ships, Ore/Oil Carriers, etc.) of length (L_C) 100 *m* or more (where, L_C is the length of ship specified in **1.4.3.1-1, Part 1, Part C of the Rules**) which have been contracted for construction prior to 1 January 2004, a survey is to be carried out to verify compliance with the requirements specified in **(a)** and implementation schemes specified in **(b)**. (a) Requirements (i) ~~**20.2.10**~~**14.7.1, Part 1, Part C of the Rules** applies to hatches on the exposed deck giving access to spaces forward of the collision bulkhead that also extend aft over this line. (ii) ~~**23.6.8**~~**14.12.4.3, Part 1, Part C of the Rules** applies to ventilator pipes and their closing devices on the exposed deck serving spaces forward of the collision bulkhead that also extend aft over this line. ((iii) is omitted.) ((b) is omitted.) ((5) to (26) are omitted.) (27) Linear heat detectors and combined smoke and heat detectors For ships equipped with linear heat detectors and	**3** The Occasional Surveys specified in **1.1.3-3(5), Part B of the Rules** are as specified below: ((1) to (3) are omitted.) (4) Additional requirement for fittings on exposed fore deck For bulk carriers, general dry cargo ships (excluding container vessels, vehicle carriers, Ro-Ro ships and woodchip carriers), and combination carriers (e.g. OBO ships, Ore/Oil Carriers, etc.) of length (L_C) 100 *m* or more (where, L_C is the length of ship specified in **1.4.3.1-1, Part 1, Part C of the Rules**) which have been contracted for construction prior to 1 January 2004, a survey is to be carried out to verify compliance with the requirements specified in **(a)** and implementation schemes specified in **(b)**. (a) Requirements (i) **20.2.10, Part C of the Rules** applies to hatches on the exposed deck giving access to spaces forward of the collision bulkhead that also extend aft over this line. (ii) **23.6.8, Part C of the Rules** applies to ventilator pipes and their closing devices on the exposed deck serving spaces forward of the collision bulkhead that also extend aft over this line. ((iii) is omitted.) ((b) is omitted.) ((5) to (26) are omitted.) (27) Linear heat detectors and combined smoke and heat detectors For ships equipped with linear heat detectors and	Reference correction Reference correction

combined smoke and heat detectors which had been at the beginning stage of construction before 1 January 2026 a survey is to be carried out to verify that such detectors comply with **29.2.3-1(3)** and **(4)** and **Table R29.~~2~~1, Part R of the Rules** by 1 January 2026.	combined smoke and heat detectors which had been at the beginning stage of construction before 1 January 2026 a survey is to be carried out to verify that such detectors comply with **29.2.3-1(3)** and **(4)** and **Table R29.2** by 1 January 2026.	Reference correction

Guidance for the survey and construction of steel ships Part B B1 B1.1.10

Correction	Present	Note
With respect to the provisions of **1.1.10**, **Part B of the Rules**, surveys for self-unloading ships are to be carried out in accordance with the requirements for bulk carriers except for the requirements specified in **~~2.3.1, Part B of the Rules~~**, **~~B1.1.3-9(5),~~ B1.3.1-3**, **B1.4.2-12**, **B2.3.1**, **B3.2.3-5** and **B3.2.3-6**.	With respect to the provisions of **1.1.10**, **Part B of the Rules**, surveys for self-unloading ships are to be carried out in accordance with the requirements for bulk carriers except for the requirements specified in **2.3.1, Part B of the Rules**, **B1.1.3-9(5)**, **B1.3.1-3**, **B1.4.2-12**, **B3.2.3-5** and **B3.2.3-6**.	Reference correction

Guidance for the survey and construction of steel ships Part B B2 B2.1.7-1

Correction	Present	Note
1 In principle, the presence of the surveyor may be decreased as specified in **2.1.7-~~7~~(1(5), Part B of the Rules** provided that the place of manufacture has been surveyed and approved in accordance with the **Rules for Approval of Manufacturers and Service Suppliers**. Notwithstanding the principle, the presence of the surveyor may be decreased in cases where the Society deems it appropriate.	**1** In principle, the presence of the surveyor may be decreased as specified in **2.1.7-7(1), Part B of the Rules** provided that the place of manufacture has been surveyed and approved in accordance with the **Rules for Approval of Manufacturers and Service Suppliers**. Notwithstanding the principle, the presence of the surveyor may be decreased in cases where the Society deems it appropriate.	Reference correction

Guidance for the survey and construction of steel ships Part B B2 B2.1.7-4

Correction	Present	Note
4 Among the particulars of stability stated in **2.1.7-~~7~~8(1), Part B of the Rules**, the rolling period is to be determined by the oscillation test. However, upon special approval by the Society, the oscillation test may be dispensed with and the rolling period may be determined by an approximate calculation.	**4** Among the particulars of stability stated in **2.1.7-7(1), Part B of the Rules**, the rolling period is to be determined by the oscillation test. However, upon special approval by the Society, the oscillation test may be dispensed with and the rolling period may be determined by an approximate calculation.	Reference correction

Guidance for the survey and construction of steel ships Part B B11 B11.2.3

Correction	Present	Note
The wording “items specified otherwise by the Society” in **11.2.3, Part B of the Rules** means surveys of the tests specified in **11.2.3(1)** and **(7), Part B of the Rules** as well as **7.2.1** and **7.2.2, Part T of the Rules**, and the wording “the Society may approve other survey methods which it considers to be appropriate” means to be in accordance with ~~**B2.1.4-1(2)**.~~item 1(3), **Table B2.7, Part B of the Rules**.	The wording “items specified otherwise by the Society” in **11.2.3, Part B of the Rules** means surveys of the tests specified in **11.2.3(1)** and **(7), Part B of the Rules** as well as **7.2.1** and **7.2.2, Part T of the Rules**, and the wording “the Society may approve other survey methods which it considers to be appropriate” means to be in accordance with **B2.1.4-1(2)**.	Reference correction

Guidance for the survey and construction of steel ships Part B B12 B12.2.3

Correction	Present	Note
B12.2.3 ~~Presence of Surveyor~~Survey	**B12.2.3 Presence of Surveyor**	Wording correction

Guidance for the survey and construction of steel ships Part B B14 B14.2.3

Correction	Present	Note
B14.2.3 ~~Presence of Surveyors~~Survey	**B14.2.3 Presence of Surveyors**	Wording correction

Guidance for the survey and construction of steel ships Part C Part 1 C14 C14.3.1.1

Correction	Present	Note
C14.3.1.1 General The "special consideration" referred to in **14.3.1.1-3, Part C of the Rules** means the evaluation of the design effectiveness of anchors, chain cables and windlasses. For ships for which L_2 defined in **14.5.1.1-1~~(3),~~ Part C of the Rules** is not less than 135 *m*, the following **(1)** to **(4)** may be used for the design or to assess the adequacy of the anchoring equipment. However, the application of these requirements is limited to anchoring operations in water of depths up to 120 *m*, currents up to 1.54 *m/s*, winds up to 14 *m/s* and waves with significant heights up to 3 *m*. Furthermore, the scope of chain cables, being the ratio between the paid-out length of the chain and water depth, is limited to between 3 and 4. (1) Anchors and chain cables are to be in accordance with **Table C14.3.1-1** and based on the Equipment number EN_1 obtained from the following formula: $$EN_1 = 0.628\left[a\left(\frac{EN}{0.628}\right)^{1/2.3} + b(1-a)\right]^{2.3}$$ a: As obtained from the following formula: $$a = 1.83\times10^{-9}L_2^3 + 2.09\times10^{-6}L_2^2 - 6.21\times10^{-4}L_2 + 0.0866$$ b: As obtained from the following formula: $$b = 0.156L_2 + 8.372$$ L_2: as defined in **14.5.1.1-1~~(3),~~ Part C of the Rules** EN: Equipment number specified in **14.5, Part C of the Rules** ((2) to (4) are omitted.)	**C14.3.1.1 General** The "special consideration" referred to in **14.3.1.1-3, Part C of the Rules** means the evaluation of the design effectiveness of anchors, chain cables and windlasses. For ships for which L_2 defined in **14.5.1.1-1(3), Part C of the Rules** is not less than 135 *m*, the following **(1)** to **(4)** may be used for the design or to assess the adequacy of the anchoring equipment. However, the application of these requirements is limited to anchoring operations in water of depths up to 120 *m*, currents up to 1.54 *m/s*, winds up to 14 *m/s* and waves with significant heights up to 3 *m*. Furthermore, the scope of chain cables, being the ratio between the paid-out length of the chain and water depth, is limited to between 3 and 4. (1) Anchors and chain cables are to be in accordance with **Table C14.3.1-1** and based on the Equipment number EN_1 obtained from the following formula: $$EN_1 = 0.628\left[a\left(\frac{EN}{0.628}\right)^{1/2.3} + b(1-a)\right]^{2.3}$$ a: As obtained from the following formula: $$a = 1.83\times10^{-9}L_2^3 + 2.09\times10^{-6}L_2^2 - 6.21\times10^{-4}L_2 + 0.0866$$ b: As obtained from the following formula: $$b = 0.156L_2 + 8.372$$ L_2: as defined in **14.5.1.1-1(3), Part C of the Rules** EN: Equipment number specified in **14.5, Part C of the Rules** ((2) to (4) are omitted.)	Reference correction Reference correction

Guidance for the survey and construction of steel ships Part U U1 U1.2.2-1

Correction	Present	Note
1 The computer for stability calculation and the operation manual specified in **1.2.2, Part U of the Rules** is to be prepared in accordance with **Annex U1.2.~~1~~2 "GUIDANCE FOR STABILITY ~~INFORMATION FOR MASTER~~COMPUTER"**. Software for the stability calculation is to be determined corresponding to the stability requirements applied to the ship and, in general, according with the followings. (1) For ships other than those specified in **(2)** or **(3)** (*e.g.*, dry cargo ships of less than 80*m* in subdivision length (L_S) defined in **2.3.1.2(6), Part 1, Part C of the Rules**, ships assigned to *B*-60 or *B*-100 freeboard in accordance with the provisions of **Part V of the Rules**), software is to be able to calculate intact stability for each loading condition (Type 1). (2) For ships subject to the subdivision requirements specified in **2.3, Part 1, Part C** or **Chapter 4, Part CS**, as applicable, but excluding bulk carriers as specified in **(3)**, software is to be able to calculate intact stability as specified in **(1)** and checking damage stability by showing a limit G_0M curve or previously approved loading conditions (Type 2). (3) For tankers, ships carrying liquefied gases in bulk and ships carrying dangerous chemicals in bulk, and ships bulk carriers subject to the requirements of **An2., Annex 1.1, Part 2-2, Part C of the Rules** and the compliance with the requirements of **An2.1.1-2, Annex 1.1, Part 2-2, Part C of the Rules** has been done for all conditions loaded to the summer load line, software is to be able to calculate intact stability and damage stability by direct application of pre-programmed damage cases for each loading condition	**1** The computer for stability calculation and the operation manual specified in **1.2.2, Part U of the Rules** is to be prepared in accordance with **Annex U1.2.1 "GUIDANCE FOR STABILITY INFORMATION FOR MASTER"**. Software for the stability calculation is to be determined corresponding to the stability requirements applied to the ship and, in general, according with the followings. (1) For ships other than those specified in **(2)** or **(3)** (*e.g.*, dry cargo ships of less than 80*m* in subdivision length (L_S) defined in **2.3.1.2(6), Part 1, Part C of the Rules**, ships assigned to *B*-60 or *B*-100 freeboard in accordance with the provisions of **Part V of the Rules**), software is to be able to calculate intact stability for each loading condition (Type 1). (2) For ships subject to the subdivision requirements specified in **2.3, Part 1, Part C** or **Chapter 4, Part CS**, as applicable, but excluding bulk carriers as specified in **(3)**, software is to be able to calculate intact stability as specified in **(1)** and checking damage stability by showing a limit G_0M curve or previously approved loading conditions (Type 2). (3) For tankers, ships carrying liquefied gases in bulk and ships carrying dangerous chemicals in bulk, and ships bulk carriers subject to the requirements of **An2., Annex 1.1, Part 2-2, Part C of the Rules** and the compliance with the requirements of **An2.1.1-2, Annex 1.1, Part 2-2, Part C of the Rules** has been done for all conditions loaded to the summer load line, software is to be able to calculate intact stability and damage stability by direct application of pre-programmed damage cases for each loading condition	Reference correction

(Type 3).	(Type 3).	

Guidance for the survey and construction of steel ships Part U U2 U2.2.1-1

Correction	Present	Note
1 For ships applying **2.~~1~~2.1-2, Chapter 2, Part U of the Rules**, stability may be calculated under following conditions, provided that the requirements in Regulation 44, *ILLC* are complied with and timber cargoes are stowed in full breadth of ships. However, when the ship has a rounded gunnel, allowance not exceeding 4 per cent of the breadth of ships for loading may be given. (1) 75% of the volume occupied by timber may be added to buoyancy. (2) In arrival condition, timber weight is to be considered a 10% increase over departure condition due to absorption of water. However, attention is to be paid to the rate of increase determined by the flag state which ships are flying.	**1** For ships applying **2.1.1-2, Chapter 2, Part U of the Rules**, stability may be calculated under following conditions, provided that the requirements in Regulation 44, *ILLC* are complied with and timber cargoes are stowed in full breadth of ships. However, when the ship has a rounded gunnel, allowance not exceeding 4 per cent of the breadth of ships for loading may be given. (1) 75% of the volume occupied by timber may be added to buoyancy. (2) In arrival condition, timber weight is to be considered a 10% increase over departure condition due to absorption of water. However, attention is to be paid to the rate of increase determined by the flag state which ships are flying.	Reference correction

Guidance for the survey and construction of steel ships Part U Annex U1.2.1 1.1

Correction	Present	Note
((1) to (4) are omitted.) (5) Attention is to be paid to the ~~tact~~fact that a certain government of flag states may impose additional requirements. ((6) and (7) are omitted.)	((1) to (4) are omitted.) (5) Attention is to be paid to the tact that a certain government of flag states may impose additional requirements. ((6) and (7) are omitted.)	Wording correction

Guidance for the survey and construction of steel ships Part U Annex U1.2.1 1.3.2-6

Correction	Present	Note
6 Where the ships are loaded with timber deck cargoes and are applied to the requirements of **2.2.1-2** and **2.3.1-2, Part U of the Rules** ~~and U2.3.1-3 of the Guidance~~, the condition that such cargo is stowed in accordance with the provisions of Chapter 3 of the *CODE OF SAFE PRACTICE*	**6** Where the ships are loaded with timber deck cargoes and are applied to the requirements of **2.2.1-2, Part U of the Rules** and **U2.3.1-3 of the Guidance**, the condition that such cargo is stowed in accordance with the provisions of Chapter 3 of the *CODE OF SAFE PRACTICE FOR SHIPS*	Reference correction

FOR SHIPS CARRYING TIMBER DECK CARGOES, 1991 (resolution *A*.715(17)) are to be described.	*CARRYING TIMBER DECK CARGOES, 1991* (resolution *A*.715(17)) are to be described.	

Guidance for the survey and construction of steel ships Part D D2 D2.6.1-3

Correction	Present	Note
3 In cases where the manufacturer has a quality system deemed appropriate by the Society, dynamic balancing tests specified in **2.6.1-~~6~~4, Part D of the Rules** for category *B* turbochargers may be substituted by manufacturer tests. In such cases, the submission or presentation of test records may be required by the Society.	**3** In cases where the manufacturer has a quality system deemed appropriate by the Society, dynamic balancing tests specified in **2.6.1-6, Part D of the Rules** for category *B* turbochargers may be substituted by manufacturer tests. In such cases, the submission or presentation of test records may be required by the Society.	Reference correction

Guidance for the survey and construction of steel ships Part D D2 D2.6.1-4

Correction	Present	Note
4 In cases where the manufacturer has a quality system deemed appropriate by the Society, the overspeed tests specified in **2.6.1-~~7~~5, Part D of the Rules** for categories *B* turbochargers may be substituted for by manufacturer tests. In such cases, the submission or presentation of test records may be required by the Society.	**4** In cases where the manufacturer has a quality system deemed appropriate by the Society, the overspeed tests specified in **2.6.1-7, Part D of the Rules** for categories *B* turbochargers may be substituted for by manufacturer tests. In such cases, the submission or presentation of test records may be required by the Society.	Reference correction

Guidance for the survey and construction of steel ships Part D D7 D7.2.1-3

Correction	Present	Note
3 When applying **7.2.1-4, Part D of the Rules**, the standard method of detailed calculation of a propeller blade thickness is shown as follows: (1) The hydraulic forces on a propeller blade during a propeller rotation are calculated by the lifting-surface theory, and the stresses on the propeller blade are calculated by structural analysis using the hydraulic forces. The wake distribution used for the calculation of the hydraulic forces is to be experimental data taken from a sister vessel or a model ship (data is to be corrected appropriately to the actual ship's scale). In cases where such data is not known, the data shown in **Fig. D7.2.1-~~2~~1** or **Table D7.2.1-~~3~~1** may be used for high speed craft ($C_b \leq 0.6$), excluding those with	**3** When applying **7.2.1-4, Part D of the Rules**, the standard method of detailed calculation of a propeller blade thickness is shown as follows: (1) The hydraulic forces on a propeller blade during a propeller rotation are calculated by the lifting-surface theory, and the stresses on the propeller blade are calculated by structural analysis using the hydraulic forces. The wake distribution used for the calculation of the hydraulic forces is to be experimental data taken from a sister vessel or a model ship (data is to be corrected appropriately to the actual ship's scale). In cases where such data is not known, the data shown in **Fig. D7.2.1-2** or **Table D7.2.1-3** may be used for high speed craft ($C_b \leq 0.6$), excluding those with	Reference correction

unconventional stern constructions (such as multi-shafting arrangements), instead. ((2) to (6) are omitted.)	unconventional stern constructions (such as multi-shafting arrangements), instead. ((2) to (6) are omitted.)	

Guidance for the survey and construction of steel ships Part D D9 D9.3.7

Correction	Present	Note
The "consideration" specified in **9.3.47, Part D of the Rules** means (but is not limited to) arrangements for soot cleaning such as the soot blowers with cleaning holes.	The "consideration" specified in **9.3.4, Part D of the Rules** means (but is not limited to) arrangements for soot cleaning such as the soot blowers with cleaning holes.	Reference correction

Guidance for the survey and construction of steel ships Part D D16 D16.2.3-1

Correction	Present	Note
1 "Standards recognized by the Society" referred to in **16.2.3-1(1)**, **-2(2)** and **-2(4)(~~b~~a), Part D of the Rules** means national or international standard such as *JIS* or *ISO*.	**1** "Standards recognized by the Society" referred to in **16.2.3-1(1)**, **-2(2)** and **-2(4)(b), Part D of the Rules** means national or international standard such as *JIS* or *ISO*.	Reference correction

Guidance for the survey and construction of steel ships Part GF GF6 GF6.4.4-3

Correction	Present	Note
3 In ~~principal~~principle, openings such as manholes are not to be provided in secondary barriers.	**3** In principal, openings such as manholes are not to be provided in secondary barriers.	Wording correction

Guidance for the survey and construction of steel ships Part GF GF8 GF8.4.1-3

Correction	Present	Note
3 Requirements 4.42.2 and 8.4.1 to 8.4.3, Part GF of the Rules may be applied before 1 January 2026 at the discretion of the Administration.	**3 Requirements 4.4.2 and 8.4.1 to 8.4.3, Part GF of the Rules** may be applied before 1 January 2026 at the discretion of the Administration.	Reference correction

Guidance for the survey and construction of steel ships Part K K3 K3.6.10-1

Correction	Present	Note
1 The wording "harmful defects" specified in **3.6.10-1** to **-3, Part K of the Rules** means the depth of the defect in the surface exceeds 1% of the nominal diameter of the bar material. In cases where the depth of the defect in the surface does not exceed 1% of the nominal diameter of the bar material, the defect may be removed by the grinding or another suitable method. In such cases, the bar material is to be repaired smoothly in the longitudinal direction and the dimension tolerance for the bar material is also to comply with the requirements in **3.6.10-~~7~~9, Part K of the Rules** after completion of the repair work.	**1** The wording "harmful defects" specified in **3.6.10-1** to **-3, Part K of the Rules** means the depth of the defect in the surface exceeds 1% of the nominal diameter of the bar material. In cases where the depth of the defect in the surface does not exceed 1% of the nominal diameter of the bar material, the defect may be removed by the grinding or another suitable method. In such cases, the bar material is to be repaired smoothly in the longitudinal direction and the dimension tolerance for the bar material is also to comply with the requirements in **3.6.10-7, Part K of the Rules** after completion of the repair work.	Reference correction

Guidance for the survey and construction of steel ships Part K K5 K5.6.6

Correction	Present	Note
Where test samples cast integral with the casting are used in accordance with the requirements in **Note (1)** of **Table K5.~~9~~10, Part K of the Rules**, the mechanical properties are given in the **Table K5.5.6**.	Where test samples cast integral with the casting are used in accordance with the requirements in **Note (1)** of **Table K5.9, Part K of the Rules**, the mechanical properties are given in the **Table K5.5.6**.	Reference correction

Guidance for the survey and construction of steel ships Part K Annex K1.1.1-1 Table3

Correction

Table 3 Mechanical Properties

Grade	Yield point or proof stress (N/mm^2)	Tensile strength (N/mm^2)	Elongation (%)($L = 5.65\sqrt{A}$)
*KPS*42*B*	225 min.	410～490	24 min.
*KPS*46*B*	245 min.	450～540	22 min.

Note:
The required value of yield point for the steel bars exceeding 100 *mm* in diameter may be taken as 205 N/mm^2 for *KPS*42 and 225 N/mm^2 for *KPS*46*B* regardless of the above requirements.

Present

Table 3 Mechanical Properties

Grade	Yield point (N/mm^2)	Tensile strength (N/mm^2)	Elongation (%)($L = 5.65\sqrt{A}$)
*KPS*42*B*	225 min.	410～490	24 min.
*KPS*46*B*	245 min.	450～540	22 min.

Note:
The required value of yield point for the steel bars exceeding 100 *mm* in diameter may be taken as 205 N/mm^2 for *KPS*42 and 225 N/mm^2 for *KPS*46*B* regardless of the above requirements.

Note: Wording correction

Guidance for the survey and construction of steel ships Part K K6 Annex K6.1.10(1) 1.2

Correction	Present	Note
The ultrasonic testing is to be carried out at such time when the whole area of steel forgings is ready for testing after the final heat treatment to obtain the specified mechanical properties. For turbine rotor shafts, positions where taper grinding is to be done are, in ~~principal~~principle, to be step milled (to a rectangular shape) first and then flaw detected. When the ultrasonic testing is not available after the final heat treatment due to product shape processed by such as machining of grooves between disks, etc. before the final heat treatment, the testing is to be carried out before the process and also after completing the heat treatment on the whole area as far as practicable.	The ultrasonic testing is to be carried out at such time when the whole area of steel forgings is ready for testing after the final heat treatment to obtain the specified mechanical properties. For turbine rotor shafts, positions where taper grinding is to be done are, in principal, to be step milled (to a rectangular shape) first and then flaw detected. When the ultrasonic testing is not available after the final heat treatment due to product shape processed by such as machining of grooves between disks, etc. before the final heat treatment, the testing is to be carried out before the process and also after completing the heat treatment on the whole area as far as practicable.	Wording correction

Guidance for the survey and construction of steel ships Part L L3 L3.2.14-4

Correction	Present	Note
4 The wording "standards deemed appropriate by the Society" specified in **3.2.14-2(3~~(2)~~), Part L of the Rules** is conform to *ASTM E*587 or the equivalent thereto using single probe, angle-beam shear waves in the range from 45 to 70 degrees. A tandem technique, TOFD or phased array may be used in cases where deemed necessary by the Society.	**4** The wording "standards deemed appropriate by the Society" specified in **3.2.14-3(2), Part L of the Rules** is conform to *ASTM E*587 or the equivalent thereto using single probe, angle-beam shear waves in the range from 45 to 70 degrees. A tandem technique, TOFD or phased array may be used in cases where deemed necessary by the Society.	Reference correction

Guidance for the survey and construction of steel ships Part L L3 L3.2.14-5

Correction	Present	Note
5 The wording "standards deemed appropriate by the Society" specified in **3.2.14-3(2), Part L of the Rules** means the following standards or the equivalent thereto. (1) Castings: (a) Magnetic particle test: the wet continuous magnetization techniques specified in *ASTM E*709 (b) Ultrasonic test: *ASTM A*609 or *ISO* 13588 (2) Forgings: (a) Magnetic particle test: the wet continuous magnetization techniques specified in *ASTM ~~E709~~A275* or *EN* 10228-1 or equivalent standards such as *ISO* 4986 or *IACS Rec.* 69 (b) Ultrasonic test: *ASTM ~~A609~~A388*, *EN* 10228-3 or *~~IS~~ISO* 13588	**5** The wording "standards deemed appropriate by the Society" specified in **3.2.14-3(2), Part L of the Rules** means the following standards or the equivalent thereto. (1) Castings: (a) Magnetic particle test: the wet continuous magnetization techniques specified in *ASTM E*709 (b) Ultrasonic test: *ASTM A*609 or *ISO* 13588 (2) Forgings: (a) Magnetic particle test: the wet continuous magnetization techniques specified in *ASTM E*709 or *EN* 10228-1 or equivalent standards such as *ISO* 4986 or *IACS Rec.* 69 (b) Ultrasonic test: *ASTM A*609, *EN* 10228-3 or *IS* 13588	Wording correction Wording correction

Guidance for the survey and construction of steel ships Part L L3 L3.2.18-1

Correction	Present	Note
1 Records of manufacturing processes such as heating of bar materials, flush butt welding, heat treatment are to include the followings. (1) Process of heating of bar materials (a) For electric resistance heating or induction	**1** Records of manufacturing processes such as heating of bar materials, flush butt welding, heat treatment are to include the followings. (1) Process of heating of bar materials (a) For electric resistance heating or induction	

heating The heating phase is to be controlled by an optical heat sensor. The controller is to be checked at least once every 8 *hours* and records made. (b) For furnace heating The heat is to be controlled and temperature continuously recorded using thermocouples in close proximity to the bars. The controls are to be checked at least once every 8 *hours* and records made. (2) Process of flash butt welding The welding parameters of the following **(a)** to **(c)** are to be controlled during welding of each link, and the controls are to be checked at least once every 4 *hours* and records made. (a) Platen motion (b) Current as a function of time (c) Hydraulic pressure (3) Process of heat treatment Temperature and time ~~of~~for temperature and offshore chains speed are to be controlled and continuously recorded.	heating The heating phase is to be controlled by an optical heat sensor. The controller is to be checked at least once every 8 *hours* and records made. (b) For furnace heating The heat is to be controlled and temperature continuously recorded using thermocouples in close proximity to the bars. The controls are to be checked at least once every 8 *hours* and records made. (2) Process of flash butt welding The welding parameters of the following **(a)** to **(c)** are to be controlled during welding of each link, and the controls are to be checked at least once every 4 *hours* and records made. (a) Platen motion (b) Current as a function of time (c) Hydraulic pressure (3) Process of heat treatment Temperature and time of temperature and offshore chains speed are to be controlled and continuously recorded.	Wording correction

Guidance for the survey and construction of steel ships Part N N4 N4.6.2-3

Correction	Present	Note
3 In ~~principal~~principle, Openings such as manholes are not to be provided in secondary barriers.	**3** In principal, Openings such as manholes are not to be provided in secondary barriers.	Wording correction

Guidance for the survey and construction of steel ships Part O O6 O6.2.1

Correction	Present	Note
Fire fighting vessels are to comply with following requirements in addition to the requirements given in **2.2.1**, **Part U of the Rules.** (1) Stability curves are to comply with the following **(a)** and **(b)**: (a) The residual area between a righting lever curve and a heeling lever curve of monitors for fire fighting and propulsion machinery such as thrusters for ship positioning is not to be less than 0.09*m-rad*. The area is to be determined between the first intercept of the two curves and the angle up to an angle of heel of 40 *degrees* beyond the angle of the first intercept or the downflooding angle, whichever is less. (b) The residual area between a righting lever curve and a heeling lever curve of monitors for fire fighting and propulsion machinery such as thrusters for ship positioning is not to be less than 0.~~09*m*~~03*m-rad*. The area is to be determined between the first intercept of the two curves and the downflooding angle or the immersing angle of the deck edge, whichever is less. In such cases, the immersing angle of the deck edge is to be according to **U2.3.1-1(~~2~~5)**.	Fire fighting vessels are to comply with following requirements in addition to the requirements given in **2.2.1**, **Part U of the Rules.** (1) Stability curves are to comply with the following **(a)** and **(b)**: (a) The residual area between a righting lever curve and a heeling lever curve of monitors for fire fighting and propulsion machinery such as thrusters for ship positioning is not to be less than 0.09*m-rad*. The area is to be determined between the first intercept of the two curves and the angle up to an angle of heel of 40 *degrees* beyond the angle of the first intercept or the downflooding angle, whichever is less. (b) The residual area between a righting lever curve and a heeling lever curve of monitors for fire fighting and propulsion machinery such as thrusters for ship positioning is not to be less than 0.09*m-rad*. The area is to be determined between the first intercept of the two curves and the downflooding angle or the immersing angle of the deck edge, whichever is less. In such cases, the immersing angle of the deck edge is to be according to **U2.3.1-1(2)**.	Wording correction Reference correction

Guidance for the survey and construction of steel ships Part P P1 P1.1.6

Correction	Present	Note
2 The notations specified in **1.1.~~1~~6-2, Part P of the Rules** are as follows: (1) Anchor mooring system defined in **10.2.2(1), Part P of the Rules**: *AM* (2) Tension mooring system defined in **10.2.2(2), Part P of the Rules**: *TM* (3) Single point mooring system defined in **10.2.2(3), Part P of the Rules**: *SPM* (4) Dolphin mooring system defined in **10.2.2(4), Part P of the Rules**: *DM* (5) Other mooring system defined in **10.2.2(5), Part P of the Rules**: *OM* (6) Class 1 DPS defined in **10.2.3-1(1), Part P of the Rules**: *DPS 1* (7) Class 2 DPS defined in **10.2.3-1(2), Part P of the Rules**: *DPS 2* (8) Class 3 DPS defined in **10.2.3-1(3), Part P of the Rules**: *DPS 3*	**2** The notations specified in **1.1.1-2, Part P of the Rules** are as follows: (1) Anchor mooring system defined in **10.2.2(1), Part P of the Rules**: *AM* (2) Tension mooring system defined in **10.2.2(2), Part P of the Rules**: *TM* (3) Single point mooring system defined in **10.2.2(3), Part P of the Rules**: *SPM* (4) Dolphin mooring system defined in **10.2.2(4), Part P of the Rules**: *DM* (5) Other mooring system defined in **10.2.2(5), Part P of the Rules**: *OM* (6) Class 1 DPS defined in **10.2.3-1(1), Part P of the Rules**: *DPS 1* (7) Class 2 DPS defined in **10.2.3-1(2), Part P of the Rules**: *DPS 2* (8) Class 3 DPS defined in **10.2.3-1(3), Part P of the Rules**: *DPS 3*	Reference correction

Guidance for the survey and construction of steel ships Part Q Q13 Q13.6.2

Correction	Present	Note
2 Carlings (100×10 FB as standard) are to be fitted in a longitudinal direction at the carling spaces which satisfy the following formula to the side plating of a transverse system when the strength deck and bottom plating is of a transverse system, and the strength deck plating of a transverse system in the midship part; except where approved otherwise by the Society. $16.6\left(\frac{t}{10S}\right)^2\left(1+\frac{S^2}{C^2}\right)^2 \geq \alpha\gamma$ t: Thickness (mm) of deck or shell plating C: Spacing (m) of carling S: Spacing (m) of transverse beams α: As given by the following ~~$\frac{-(M_{S.min}+M_W(-))}{Z_D}$~~ $\frac{-(M_{S.min}+M_W(-))}{Z_D}$ $\times 10^3$ (N/mm^2) for strength deck ~~$\frac{(M_{S.max}+M_W(+))}{Z_B}$~~ $\frac{(M_{S.max}+M_W(+))}{Z_B}$ $\times 10^3$ (N/mm^2) for bottom shell $M_{S.min}$ and $M_{S.max}$: Min. and Max. values respectively, of longitudinal bending moment (kN-m) in still water as required in **12.1.1-2, Part Q of the Rules** $M_W(-)$ and $M_W(+)$: As specified in **4.3.2.3, Part 1, Part C of the Rules** Z_D and Z_B: Actual section moduli (cm^3) of transverse section of hull whose values are determined	**2** Carlings (100×10 FB as standard) are to be fitted in a longitudinal direction at the carling spaces which satisfy the following formula to the side plating of a transverse system when the strength deck and bottom plating is of a transverse system, and the strength deck plating of a transverse system in the midship part; except where approved otherwise by the Society. $16.6\left(\frac{t}{10S}\right)^2\left(1+\frac{S^2}{C^2}\right)^2 \geq \alpha\gamma$ t: Thickness (mm) of deck or shell plating C: Spacing (m) of carling S: Spacing (m) of transverse beams α: As given by the following $\frac{-(M_{S.min}+M_W(-))}{Z_D} \times 10^3$ (N/mm^2) for strength deck $\frac{(M_{S.max}+M_W(+))}{Z_B} \times 10^3$ (N/mm^2) for bottom shell $M_{S.min}$ and $M_{S.max}$: Min. and Max. values respectively, of longitudinal bending moment (kN-m) in still water as required in **12.1.1-2, Part Q of the Rules** $M_W(-)$ and $M_W(+)$: As specified in **4.3.2.3, Part 1, Part C of the Rules** Z_D and Z_B: Actual section moduli (cm^3) of transverse section of hull whose values are determined	Wording correction

against the strength deck and ship bottom according to the requirements in **12.1.2, Part Q of the Rules** γ: 1.0 for strength deck plating and bottom shell plating, and the value given by the following for side shell plating: y_1/y_D for members located above the neutral axis of athwartship considered y_2/y_B for members located below the neutral axis of athwartship considered y_D: Vertical distance (m) from neutral axis to deck y_B: Vertical distance (m) from base line to neutral axis y_1: Vertical distance (m) from neutral axis to upper edge of each strake, but it does not need to be greater than y_D y_2: Vertical distance (m) from neutral axis to lower edge of each strake, but it does not need to be greater than y_B	against the strength deck and ship bottom according to the requirements in **12.1.2, Part Q of the Rules** γ: 1.0 for strength deck plating and bottom shell plating, and the value given by the following for side shell plating: y_1/y_D for members located above the neutral axis of athwartship considered y_2/y_B for members located below the neutral axis of athwartship considered y_D: Vertical distance (m) from neutral axis to deck y_B: Vertical distance (m) from base line to neutral axis y_1: Vertical distance (m) from neutral axis to upper edge of each strake, but it does not need to be greater than y_D y_2: Vertical distance (m) from neutral axis to lower edge of each strake, but it does not need to be greater than y_B	

Guidance for the survey and construction of steel ships Part Q Appendix 1 Table Q

Correction

Appendix 1 APPLICATION OF PART CS OF THE GUIDANCE

The **Part CS** of the Guidance is to be correspondingly applied as the Guidance for the prescriptions in **Part Q of the Rules**, as shown in the **Table Q** correspondence Table of Guidance.

Table Q Correspondence Table of Guidance

Part Q	Part CS	Part Q	Part CS	Part Q	Part CS
1.1.1	**CS1.1.3**	9.1.4	**CS12.1.4**	14.1.1-1	**CS17.1.1**[1)]
1.16	**CS26.1**	9.2.1	**CS12.2.1**	14.2.1	**CS17.2.1**
2.1.2	**CS1.3.1**	10.2.3	**CS13.2.3**	14.2.3	**CS17.2.4**
7.1.2	**CS10.1.2**	11.1.3	**CS14.1.3**	14.3.2	**CS17.3.2**
7.3.2	**CS10.3.2**	11.2.2	**CS14.2.3**	14.4.1	**CS17.4.1**
8.1.1	**CS11.1.2**	12.1.1	**CS15.2.1**	15.3.1	**CS18.3.1**
8.2.1	**CS11.2.1**	12.1.2	**CS15.2.3**	19.1.1	**CS23.1.1**
9.1.3	**CS12.1.3**	13.3.3	**CS16.3.3**	19.1.3	**CS23.1.2**

Remark

1) In **CS17.1.1**, "**17.1.1-1, Part CS of the Rules**" is to be construed as "**14.1.1-1~~(2),~~ Part Q of the Rules**".

Present

Appendix 1 APPLICATION OF PART CS OF THE GUIDANCE

The **Part CS** of the Guidance is to be correspondingly applied as the Guidance for the prescriptions in **Part Q of the Rules**, as shown in the **Table Q** correspondence Table of Guidance.

Table Q Correspondence Table of Guidance

Part Q	Part CS	Part Q	Part CS	Part Q	Part CS
1.1.1	**CS1.1.3**	9.1.4	**CS12.1.4**	14.1.1-1	**CS17.1.1**[1)]
1.16	**CS26.1**	9.2.1	**CS12.2.1**	14.2.1	**CS17.2.1**
2.1.2	**CS1.3.1**	10.2.3	**CS13.2.3**	14.2.3	**CS17.2.4**
7.1.2	**CS10.1.2**	11.1.3	**CS14.1.3**	14.3.2	**CS17.3.2**
7.3.2	**CS10.3.2**	11.2.2	**CS14.2.3**	14.4.1	**CS17.4.1**
8.1.1	**CS11.1.2**	12.1.1	**CS15.2.1**	15.3.1	**CS18.3.1**
8.2.1	**CS11.2.1**	12.1.2	**CS15.2.3**	19.1.1	**CS23.1.1**
9.1.3	**CS12.1.3**	13.3.3	**CS16.3.3**	19.1.3	**CS23.1.2**

Remark

1) In **CS17.1.1**, "**17.1.1-1, Part CS of the Rules**" is to be construed as "**14.1.1-1(2), Part Q of the Rules**".

Note

Reference correction

Guidance for the survey and construction of steel ships Part R R16 R16.3.3

Correction	Present	Note
2 With respect to the requirements specified in **16.3.3-2** and **-3, Part R of the Rules**, in case a product containing an oxygen dependent inhibitor is carried, *MSC.1*/*Circ.*~~10~~1501, as amended, is to be applied.	**2** With respect to the requirements specified in **16.3.3-2** and **-3, Part R of the Rules**, in case a product containing an oxygen dependent inhibitor is carried, *MSC.1*/*Circ.*10, as amended, is to be applied.	Wording correction

Guidance for Marine Pollution Prevention Systems Part 2 Chapter 1 1.1.3

Correction	Present	Note
Occasional surveys specified in **1.1.3-5(3), Part 2 of the Rules** are to be in accordance with the following: (1) STS operations Plan For oil tankers delivered before 1 January 2011 that are engaged in the transfer of oil cargo between oil tankers at sea, it is to be confirmed that a STS operations Plan which complies with **1.2.4, Part 3 of the Rules** is provided on board no later than the first Annual, Intermediate or Special Survey conducted on or after 1 January 2011. (2) Approved Method For diesel Engines subject to **2.1.1-3, Part 8 of the Rules,** NOx emissions are to be verified no later than the first Special Survey conducted 12 or more months after the date that the Approved Method is certified by the Administration. However, in cases where the Administration deems that the Approved Method was not commercially available despite best efforts to obtain it, said Approved Method is to be installed on the ship and is to be confirmed no later than the next annual survey of said ship which falls after the Approved Method is commercially available. (3) Ship Energy Efficiency Management Plan (SEEMP) (a) For ships to which **Chapter 3, Part 8 of the Rules** applies, which are existing ships as specified in **3.1.~~2~~(~~2~~4(12) Part 8 of the Rules,** a survey is to be carried out no later than the first Intermediate or Special Survey conducted, whichever is first, on or after 1 January 2013 to confirm that a Ship Energy Efficiency Management Plan (SEEMP) which complies with **3.6, Part 8 of the Rules** is maintained on	Occasional surveys specified in **1.1.3-5(3), Part 2 of the Rules** are to be in accordance with the following: (1) STS operations Plan For oil tankers delivered before 1 January 2011 that are engaged in the transfer of oil cargo between oil tankers at sea, it is to be confirmed that a STS operations Plan which complies with **1.2.4, Part 3 of the Rules** is provided on board no later than the first Annual, Intermediate or Special Survey conducted on or after 1 January 2011. (2) Approved Method For diesel Engines subject to **2.1.1-3, Part 8 of the Rules,** NOx emissions are to be verified no later than the first Special Survey conducted 12 or more months after the date that the Approved Method is certified by the Administration. However, in cases where the Administration deems that the Approved Method was not commercially available despite best efforts to obtain it, said Approved Method is to be installed on the ship and is to be confirmed no later than the next annual survey of said ship which falls after the Approved Method is commercially available. (3) Ship Energy Efficiency Management Plan (SEEMP) (a) For ships to which **Chapter 3, Part 8 of the Rules** applies, which are existing ships as specified in **3.1.2(2) Part 8 of the Rules,** a survey is to be carried out no later than the first Intermediate or Special Survey conducted, whichever is first, on or after 1 January 2013 to confirm that a Ship Energy Efficiency Management Plan (SEEMP) which complies with **3.6, Part 8 of the Rules** is maintained on	Reference correction

board. (b) For ships to which **3.6-2, Part 8 of the Rules** applies which are delivered before 1 March 2018, a survey is to be carried out on or before 31 December 2018 to confirm that the Ship Energy Efficiency Management Plan (SEEMP) includes the description of the methodology and processes specified in **3.6-2, Part 8 of the Rules**. (c) For ships to which **3.6-4, Part 8 of the Rules** applies which are delivered before 1 November 2022, a survey is to be carried out on or before 1 January 2023 to confirm that the Ship Energy Efficiency Management Plan (SEEMP) includes the description of the methodology and processes specified in **3.6-4(1), Part 8 of the Rules**. (4) Stability Instruments For oil tankers subject to **3.2.2-8** to **-11, Part 3 of the Rules**, which had been at the beginning stage of construction before 1 January 2016, a survey is to be carried out to verify compliance with the requirements of **3.2.2-8** to **-11, Part 3 of the Rules** by the first Special Survey on or after 1 January 2016 but not later than 1 January 2021. (5) Oil Residues (Sludge) Tank Piping For ships subject to **2.2.2, Part 3 of the Rules** which were at the beginning stage of construction before 1 January 2017, a survey is to be carried out to verify compliance with the requirements of **3.2.2-1, Part 3 of the Rules** by the first Special Survey carried out on or after 1 January 2017. (6) Equipment for the Prevention of Pollution by Sewage For existing passenger ships subject to **Part 7 of the Rules** which operate in the special areas referred to **1.1.2, Part 7 of the Rules** on or after the date	board. (b) For ships to which **3.6-2, Part 8 of the Rules** applies which are delivered before 1 March 2018, a survey is to be carried out on or before 31 December 2018 to confirm that the Ship Energy Efficiency Management Plan (SEEMP) includes the description of the methodology and processes specified in **3.6-2, Part 8 of the Rules**. (c) For ships to which **3.6-4, Part 8 of the Rules** applies which are delivered before 1 November 2022, a survey is to be carried out on or before 1 January 2023 to confirm that the Ship Energy Efficiency Management Plan (SEEMP) includes the description of the methodology and processes specified in **3.6-4(1), Part 8 of the Rules**. (4) Stability Instruments For oil tankers subject to **3.2.2-8** to **-11, Part 3 of the Rules**, which had been at the beginning stage of construction before 1 January 2016, a survey is to be carried out to verify compliance with the requirements of **3.2.2-8** to **-11, Part 3 of the Rules** by the first Special Survey on or after 1 January 2016 but not later than 1 January 2021. (5) Oil Residues (Sludge) Tank Piping For ships subject to **2.2.2, Part 3 of the Rules** which were at the beginning stage of construction before 1 January 2017, a survey is to be carried out to verify compliance with the requirements of **3.2.2-1, Part 3 of the Rules** by the first Special Survey carried out on or after 1 January 2017. (6) Equipment for the Prevention of Pollution by Sewage For existing passenger ships subject to **Part 7 of the Rules** which operate in the special areas referred to **1.1.2, Part 7 of the Rules** on or after the date	

specified in **2.2.1(1)(b), Part 7 of the Rules**, a survey is to be carried out to verify compliance with the requirements of **2.2.1(1)(b), Part 7 of the Rules** before such operations.	specified in **2.2.1(1)(b), Part 7 of the Rules**, a survey is to be carried out to verify compliance with the requirements of **2.2.1(1)(b), Part 7 of the Rules** before such operations.	
(7) Exhaust Gas Recirculation System For ships equipped with the exhaust gas recirculation system specified in **2.1.1-5, Part 8 of the Rules** which were delivered before 1 July 2020, a survey is to be carried out to verify compliance with the requirements of *IMO* resolution *MEPC.307(73)* or a standard deemed appropriate by the Administration taking into account this resolution by the first Periodical Survey carried out on or after 1 July 2020.	(7) Exhaust Gas Recirculation System For ships equipped with the exhaust gas recirculation system specified in **2.1.1-5, Part 8 of the Rules** which were delivered before 1 July 2020, a survey is to be carried out to verify compliance with the requirements of *IMO* resolution *MEPC.307(73)* or a standard deemed appropriate by the Administration taking into account this resolution by the first Periodical Survey carried out on or after 1 July 2020.	
(8) Ozone Depleting Substances For ships where "electronic recording system" referred to in *IMO* resolution MEPC.176(58) are provided, a survey is to be carried out to verify compliance with the requirements of **1.2.1-6, Part 8 of the Rules** by the first Special Survey carried out on or after 1 October 2020, but not later than 1 October 2025.	(8) Ozone Depleting Substances For ships where "electronic recording system" referred to in *IMO* resolution MEPC.176(58) are provided, a survey is to be carried out to verify compliance with the requirements of **1.2.1-6, Part 8 of the Rules** by the first Special Survey carried out on or after 1 October 2020, but not later than 1 October 2025.	
(9) Sampling points for representative sample (in-use samples) of fuel oil For ships subject to **2.2.2, Part 8 of the Rules** and which were at the beginning stage of their construction on or before 1 April 2022, a survey is to be carried out to verify compliance with the fitting or designating of sampling points specified in **2.2.2-1, Part 8 of the Rules** by the first Special Survey carried out on or after 1 April 2023.	(9) Sampling points for representative sample (in-use samples) of fuel oil For ships subject to **2.2.2, Part 8 of the Rules** and which were at the beginning stage of their construction on or before 1 April 2022, a survey is to be carried out to verify compliance with the fitting or designating of sampling points specified in **2.2.2-1, Part 8 of the Rules** by the first Special Survey carried out on or after 1 April 2023.	
(10) Energy Efficiency Existing Ship Index (EEXI) (a) For ships to which **Chapter 3, Part 8 of the Rules** applies, a survey is to be carried out no later than the first Annual, Intermediate, Special	(10) Energy Efficiency Existing Ship Index (EEXI) (a) For ships to which **Chapter 3, Part 8 of the Rules** applies, a survey is to be carried out no later than the first Annual, Intermediate, Special	

Survey or the initial survey specified in *Regulation 5.4.1 and 5.4.3 of Annex VI* conducted, whichever is first, on or after 1 January 2023 to confirm that the attained Energy Efficiency Existing Ship Index (attained EEXI) specified in **3.1.4(4), Part 8 of the Rules** complies with **3.3 and 3.5, Part 8 of the Rules**. (b) Notwithstanding **(a)**, for ships to which **3.3, Part 8 of the Rules** applies, that have undergone a major conversion specified in **3.1.4(16) Part 8 of the Rules,** a general or partial survey, according to the circumstances, is to be carried out to confirm that the attained Energy Efficiency Existing Ship Index (attained EEXI) is recalculated as necessary and complies with **3.5, Part 8 of the Rules**.	Survey or the initial survey specified in *Regulation 5.4.1 and 5.4.3 of Annex VI* conducted, whichever is first, on or after 1 January 2023 to confirm that the attained Energy Efficiency Existing Ship Index (attained EEXI) specified in **3.1.4(4), Part 8 of the Rules** complies with **3.3 and 3.5, Part 8 of the Rules**. (b) Notwithstanding **(a)**, for ships to which **3.3, Part 8 of the Rules** applies, that have undergone a major conversion specified in **3.1.4(16) Part 8 of the Rules,** a general or partial survey, according to the circumstances, is to be carried out to confirm that the attained Energy Efficiency Existing Ship Index (attained EEXI) is recalculated as necessary and complies with **3.5, Part 8 of the Rules**.	

Guidance for Marine Pollution Prevention Systems Part 2 Chapter 1 1.3.2-4

Correction	Present	Note
4 With respect to the "EGCS Record Book" specified in **1.3.2-1(3)(~~k)~~il), Part 2 of the Rules** it is to be confirmed that said book has been maintained for a minimum period of 3 *years*. In addition, in the case of exhaust gas cleaning systems which use electronic data recordings devices for record keeping purposes, displayed or printed versions of recorded content are to be checked.	**4** With respect to the "EGCS Record Book" specified in **1.3.2-1(3)(k)i), Part 2 of the Rules** it is to be confirmed that said book has been maintained for a minimum period of 3 *years*. In addition, in the case of exhaust gas cleaning systems which use electronic data recordings devices for record keeping purposes, displayed or printed versions of recorded content are to be checked.	Reference correction

Guidance for Marine Pollution Prevention Systems Part 2 Chapter 1 1.3.2-5

Correction	Present	Note
5 With respect to the "records of parameters" specified in **1.3.2-1(3)(~~k)~~il), Part 2 of the Rules**, all relevant parameters as set out in the SOx Emissions Compliance Plan, EGC system Technical Manual and Onboard Monitoring Manual are recorded and presented in the form or a report.	**5** With respect to the "records of parameters" specified in **1.3.2-1(3)(k)i), Part 2 of the Rules**, all relevant parameters as set out in the SOx Emissions Compliance Plan, EGC system Technical Manual and Onboard Monitoring Manual are recorded and presented in the form or a report.	Reference correction

Guidance for Marine Pollution Prevention Systems Part 2 Chapter 2 2.1.2-4

Correction	Present	Note
4 Details of the documents related to ship energy efficiency referred to in **2.1.2-3 in Part 2 of the Rules** are as follows: (1) The Energy Efficiency Design Index (EEDI) Technical File is a document which contains basic information related to the EEDI calculation conditions. It is to contain the following: (a) Basic data such as either information of the following **i)** to **iii)**, the maximum continuous rating (MCR) of main and auxiliary engines, estimated ship speed and the specific fuel consumption of main and auxiliary engines (Data for each is to be provided. Copies, etc. which indicate the specific fuel consumption of main and auxiliary engines are to be attached.) i) *Gross tonnage* and deadweight (DWT) for ro-ro cargo ships (vehicle carriers); ii) *Gross tonnage* for passenger ships and cruise passenger ships which have non-conventional propulsion; or iii) Deadweight (DWT) for ships other than those mentioned in the preceding **i)** and **ii)**. (b) Power curve(s) (kW – knot) estimated at design stage under the conditions for EEDI calculation as well as power curves estimated under sea trial speed test conditions (Each power curve is to be represented graphically.) (c) Principal particulars as well as overviews of propulsion systems and electricity supply systems (Schematic diagrams, etc. are to be provided.) (d) Power curve estimation process (explanation	**4** Details of the documents related to ship energy efficiency referred to in **2.1.2-3 in Part 2 of the Rules** are as follows: (1) The Energy Efficiency Design Index (EEDI) Technical File is a document which contains basic information related to the EEDI calculation conditions. It is to contain the following: (a) Basic data such as either information of the following **i)** to **iii)**, the maximum continuous rating (MCR) of main and auxiliary engines, estimated ship speed and the specific fuel consumption of main and auxiliary engines (Data for each is to be provided. Copies, etc. which indicate the specific fuel consumption of main and auxiliary engines are to be attached.) i) *Gross tonnage* and deadweight (DWT) for ro-ro cargo ships (vehicle carriers); ii) *Gross tonnage* for passenger ships and cruise passenger ships which have non-conventional propulsion; or iii) Deadweight (DWT) for ships other than those mentioned in the preceding **i)** and **ii)**. (b) Power curve(s) (kW – knot) estimated at design stage under the conditions for EEDI calculation as well as power curves estimated under sea trial speed test conditions (Each power curve is to be represented graphically.) (c) Principal particulars as well as overviews of propulsion systems and electricity supply systems (Schematic diagrams, etc. are to be provided.) (d) Power curve estimation process (explanation	

using process diagrams, etc. of the methodology followed from tank tests to power curve estimation at design stage) (e) Overview of energy saving equipment (f) Attained EEDI calculated values (including the relevant calculation outline) (g) If attained $EEDI_{weather}$ (a value which considers the effects of decreases in speed caused by wind and waves) is calculated, said value as well as the value for f_w (the speed reduction coefficient) used in the calculations are to be provided. (h) For LNG carriers, information specified in the following **i)** to **v)**: i) Type and outline of propulsion systems (such as direct drive diesel, diesel electric, steam turbine); ii) LNG cargo tank capacity in m^3 and the design rate of boil-off gas of entire ship per *day*, which is specified in the specification of the building contract; iii) Shaft power of the propeller shaft after transmission gear at 100% of the rated output of motor and the electrical efficiency for diesel electric; iv) For steam turbines, maximum continuous rated power; and v) For steam turbines, certified specific fuel consumption of the steam turbines measured in *g/kWh*. (i) Other documents deemed necessary by the Society. (2) Additional Information (documentation other than that specified in **(1)** above which is needed by the Society to verify the attained EEDI) is, in	using process diagrams, etc. of the methodology followed from tank tests to power curve estimation at design stage) (e) Overview of energy saving equipment (f) Attained EEDI calculated values (including the relevant calculation outline) (g) If attained $EEDI_{weather}$ (a value which considers the effects of decreases in speed caused by wind and waves) is calculated, said value as well as the value for f_w (the speed reduction coefficient) used in the calculations are to be provided. (h) For LNG carriers, information specified in the following **i)** to **v)**: i) Type and outline of propulsion systems (such as direct drive diesel, diesel electric, steam turbine); ii) LNG cargo tank capacity in m^3 and the design rate of boil-off gas of entire ship per *day*, which is specified in the specification of the building contract; iii) Shaft power of the propeller shaft after transmission gear at 100% of the rated output of motor and the electrical efficiency for diesel electric; iv) For steam turbines, maximum continuous rated power; and v) For steam turbines, certified specific fuel consumption of the steam turbines measured in *g/kWh*. (i) Other documents deemed necessary by the Society. (2) Additional Information (documentation other than that specified in **(1)** above which is needed by the Society to verify the attained EEDI) is, in principal, to	

~~principal~~principle, to contain the following: (a) Descriptions of the relevant tank test facility (supporting materials to confirm the reliability of tank tests). This is to include the name of the facility, the particulars of the tanks and towing equipment, and the records of calibration for each piece of monitoring equipment used. (b) Model ship lines and actual ship lines in order to verify the appropriateness of the tank test (Documentation to confirm that the relevant lines are detailed enough to demonstrate the similarity between the model ship and the actual ship) (c) Ship lightweight and displacement table (Documents for deadweight verification) (d) Detailed reports on both tank test results and power curve(s) estimated calculations (Documentation to confirm that the ship speed estimated under EEDI calculation conditions and the ship speed estimated under sea trial speed test conditions were attained using the same calculation process) (e) Reasons for omitting tank tests, if applicable (Documentation which provides appropriate technical justification for omitting tank tests. Such documentation is to include the lines and tank test results of relevant ships of the same type.) (f) For LNG carriers, detailed calculation process of the following **i)** and **ii)**: i) The required auxiliary engine power to supply normal maximum sea load in the condition of the ship engaged in voyage at the specified speed; and ii) For steam turbines, the specific fuel	contain the following: (a) Descriptions of the relevant tank test facility (supporting materials to confirm the reliability of tank tests). This is to include the name of the facility, the particulars of the tanks and towing equipment, and the records of calibration for each piece of monitoring equipment used. (b) Model ship lines and actual ship lines in order to verify the appropriateness of the tank test (Documentation to confirm that the relevant lines are detailed enough to demonstrate the similarity between the model ship and the actual ship) (c) Ship lightweight and displacement table (Documents for deadweight verification) (d) Detailed reports on both tank test results and power curve(s) estimated calculations (Documentation to confirm that the ship speed estimated under EEDI calculation conditions and the ship speed estimated under sea trial speed test conditions were attained using the same calculation process) (e) Reasons for omitting tank tests, if applicable (Documentation which provides appropriate technical justification for omitting tank tests. Such documentation is to include the lines and tank test results of relevant ships of the same type.) (f) For LNG carriers, detailed calculation process of the following **i)** and **ii)**: i) The required auxiliary engine power to supply normal maximum sea load in the condition of the ship engaged in voyage at the specified speed; and ii) For steam turbines, the specific fuel	Wording correction

consumption of the steam turbines. (g) Other documents deemed necessary by the Society.	consumption of the steam turbines. (g) Other documents deemed necessary by the Society.	

Guidance for Marine Pollution Prevention Systems Part 3 Chapter 2 2.3.2-3

Correction	Present	Note
3 The wording "provisions specified elsewhere" for the piping arrangements for the oil filtering system specified in **2.3.2-2 in Part 3 of the Rules** means those in the following **(1)** through **(~~8~~9)**: (1) The Oil filtering system is to be suitable for shipboard use and to be such that maintenance can be carried out easily. (2) A sampling point is to be provided in a vertical section of the water effluent piping as close as is practicable to the 15*ppm* bilge separator outlet. (3) The arrangement on board ship for extraction of samples from 15*ppm* bilge separator discharge line to the 15*ppm* bilge alarm is to give a truly representative sample of the effluent with an adequate pressure and flow. (4) The capacity of the supply pump is not to exceed 110% of the rated capacity of the 15*ppm* bilge separator with size of pump and motor. (5) The layout of the installation is to be arranged so that the overall response time (including the response time of the 15*ppm* bilge alarm) between an effluent discharge from the 15*ppm* bilge separator exceeding 15*ppm* and the operation of the automatic stopping device preventing overboard discharge is to be as short as possible and in any case not more than 20 *seconds*. (6) The 15*ppm* bilge separator is to be fitted with a permanently attached plate giving any operational or	**3** The wording "provisions specified elsewhere" for the piping arrangements for the oil filtering system specified in **2.3.2-2 in Part 3 of the Rules** means those in the following **(1)** through **(8)**: (1) The Oil filtering system is to be suitable for shipboard use and to be such that maintenance can be carried out easily. (2) A sampling point is to be provided in a vertical section of the water effluent piping as close as is practicable to the 15*ppm* bilge separator outlet. (3) The arrangement on board ship for extraction of samples from 15*ppm* bilge separator discharge line to the 15*ppm* bilge alarm is to give a truly representative sample of the effluent with an adequate pressure and flow. (4) The capacity of the supply pump is not to exceed 110% of the rated capacity of the 15*ppm* bilge separator with size of pump and motor. (5) The layout of the installation is to be arranged so that the overall response time (including the response time of the 15*ppm* bilge alarm) between an effluent discharge from the 15*ppm* bilge separator exceeding 15*ppm* and the operation of the automatic stopping device preventing overboard discharge is to be as short as possible and in any case not more than 20 *seconds*. (6) The 15*ppm* bilge separator is to be fitted with a permanently attached plate giving any operational or	Reference correction

installation limits. (7) The automatic stopping device specified in **2.3.2-1(3), in Part 3 of the Rules** is to consist of a valve arrangement installed in the effluent outlet line of the 15*ppm* bilge separator which automatically diverts the effluent mixture from being discharged overboard back to oily bilge water holding tanks when the oil content of the effluent exceeds 15*ppm*. (8) Re-circulating facilities are to be provided, after and adjacent to the overboard outlet of the stopping device to enable the 15*ppm* bilge separator system, including the 15*ppm* bilge alarm and the automatic stopping device, to be tested with the overboard discharge closed (see **Fig.3.2.2-1**). (9) The fail-safe arrangements to avoid any discharge in case of malfunction of the bilge separator are to be provided.	installation limits. (7) The automatic stopping device specified in **2.3.2-1(3), in Part 3 of the Rules** is to consist of a valve arrangement installed in the effluent outlet line of the 15*ppm* bilge separator which automatically diverts the effluent mixture from being discharged overboard back to oily bilge water holding tanks when the oil content of the effluent exceeds 15*ppm*. (8) Re-circulating facilities are to be provided, after and adjacent to the overboard outlet of the stopping device to enable the 15*ppm* bilge separator system, including the 15*ppm* bilge alarm and the automatic stopping device, to be tested with the overboard discharge closed (see **Fig.3.2.2-1**). (9) The fail-safe arrangements to avoid any discharge in case of malfunction of the bilge separator are to be provided.	

Guidance for Marine Pollution Prevention Systems Part 3 Chapter 4 4.1.2-1

Correction	Present	Note
1 "Major conversion" defined in **4.1.2 in Part 3 of the Rules** means the following **(1)** through **(45)**: (1) Changes in *DWT* due to reassignment of Load Lines Unless structural changes are involved, such is not regarded as a major conversion. However, when the increase in *DWT* of a ship causes the application of new requirements in connection with the applicable group of *DWT*, the ship is to comply with the requirements on the basis of the date of construction of the ship. Example 1) When *DWT* of an *EN* ship is changed from 68,000 to 70,000 *tonnes* due to reassignment of the Load Lines, the requirement of segregated ballast tanks	**1** "Major conversion" defined in **4.1.2 in Part 3 of the Rules** means the following **(1)** through **(4)**: (1) Changes in *DWT* due to reassignment of Load Lines Unless structural changes are involved, such is not regarded as a major conversion. However, when the increase in *DWT* of a ship causes the application of new requirements in connection with the applicable group of *DWT*, the ship is to comply with the requirements on the basis of the date of construction of the ship. Example 1) When *DWT* of an *EN* ship is changed from 68,000 to 70,000 *tonnes* due to reassignment of the Load Lines, the requirement of segregated ballast tanks	Reference correction

becomes necessary. Example 2) When *DWT* of an *EE* ship is changed from 39,000 to 40,000 *tonnes*, operation with a *COW* system becomes necessary. Example 3) When *DWT* of an *EN* ship or an *EE* ship is changed from 40,000 to 39,000 *tonnes*, the requirements applicable to oil tankers with a *DWT* tonnage of 40,000 *tonnes* and over will no longer apply. Example 4) Even if *DWT* of an *EN* ship is changed from 19,000 to 20,000 *tonnes*, the requirements of **3.2.3 in Part 3 of the Rules** do not apply. (2) Changes in ship type (a) The change from an oil tanker to combination carrier is considered to be the change in ship type. (b) The change from an *LPG* carrier to a combination carrier of *naphtha*/*LPG* is, as a rule, considered to be the change in ship type. (c) The change from a crude oil carrier to a product carrier or vice versa is not considered to be the change in ship type. (3) Renewals of cargo tanks An extensive renewal of cargo tanks is considered to be a major conversion. (4) Extension of hull (a) An extensive extension is a major conversion. (b) A minor extension without involving changes in the principal dimensions of a ship is to be judged for an increase in *DWT* case by case. (c) When a new transverse section assembly is inserted to comply with the *SBT* requirements, such is not considered to be a major conversion,	becomes necessary. Example 2) When *DWT* of an *EE* ship is changed from 39,000 to 40,000 *tonnes*, operation with a *COW* system becomes necessary. Example 3) When *DWT* of an *EN* ship or an *EE* ship is changed from 40,000 to 39,000 *tonnes*, the requirements applicable to oil tankers with a *DWT* tonnage of 40,000 *tonnes* and over will no longer apply. Example 4) Even if *DWT* of an *EN* ship is changed from 19,000 to 20,000 *tonnes*, the requirements of **3.2.3 in Part 3 of the Rules** do not apply. (2) Changes in ship type (a) The change from an oil tanker to combination carrier is considered to be the change in ship type. (b) The change from an *LPG* carrier to a combination carrier of *naphtha*/*LPG* is, as a rule, considered to be the change in ship type. (c) The change from a crude oil carrier to a product carrier or vice versa is not considered to be the change in ship type. (3) Renewals of cargo tanks An extensive renewal of cargo tanks is considered to be a major conversion. (4) Extension of hull (a) An extensive extension is a major conversion. (b) A minor extension without involving changes in the principal dimensions of a ship is to be judged for an increase in *DWT* case by case. (c) When a new transverse section assembly is inserted to comply with the *SBT* requirements, such is not considered to be a major conversion,	

unless the cargo carrying capacity increases. (5) Hull downsizing When a hull is downsized by partially removing cargo oil tanks, such is considered to be a major conversion including the conversion into an *SBT* tanker.	unless the cargo carrying capacity increases. (5) Hull downsizing When a hull is downsized by partially removing cargo oil tanks, such is considered to be a major conversion including the conversion into an *SBT* tanker.	

Guidance for High Speed Craft Part 2 Chapter 2 2.1.4-3

Correction	Present	Note
3 The wording "the Society may approve other survey methods which it considers to be appropriate" in **2.1.4-3, Part 2 of the Rules** means to be in accordance with **-1(2)**.	**3** The wording "the Society may approve other survey methods which it considers to be appropriate" means to be in accordance with **-1(2)**.	Reference correction

Guidance for High Speed Craft Part 3 Chapter 4 4.1.1

Correction	Present	Note
With regard to welding of aluminium alloys, it is recommended that reference may be made to the following standards. (1) *JIS Z* 3604 "Recommended Practice for Inert Gas Shielded Arc Welding of Aluminium Alloy" (2) The Standards of Japan Light Metal Welding And Construction Association (a) *LWS Q* 8101 "Aluminium Ship's Quality Standard" (b) *LWS W* 8101 "Aluminium Shipbuilding Practice Standard" (3) *AWS Structural Welding Code-~~Aluminium~~Aluminum*	With regard to welding of aluminium alloys, it is recommended that reference may be made to the following standards. (1) *JIS Z* 3604 "Recommended Practice for Inert Gas Shielded Arc Welding of Aluminium Alloy" (2) The Standards of Japan Light Metal Welding And Construction Association (a) *LWS Q* 8101 "Aluminium Ship's Quality Standard" (b) *LWS W* 8101 "Aluminium Shipbuilding Practice Standard" (3) *AWS Structural Welding Code-Aluminium*	Wording correction

Guidance for High Speed Craft Part 9 Chapter 5 5.3.4

Correction	Present	Note
The wording "deemed appropriate by the Society" specified in **5.3.4-2, Part 9 of the Rules for High Speed Craft** means to be in accordance with the following. In the case of a single waterjet propulsion system fitted onboard the ship, however, the system is to be subject to special consideration by the Society: (1) The minimum diameter of the main shaft is to be not less than the value determined in **6.2, Part D of the Rules for the Survey and Construction of Steel Ships** or, in case of driven by high speed engines, the value determined by the following formula:	The wording "deemed appropriate by the Society" specified in **5.3.4-2, Part 9 of the Rules for High Speed Craft** means to be in accordance with the following. In the case of a single waterjet propulsion system fitted onboard the ship, however, the system is to be subject to special consideration by the Society: (1) The minimum diameter of the main shaft is to be not less than the value determined in **6.2, Part D of the Rules for the Survey and Construction of Steel Ships** or, in case of driven by high speed engines, the value determined by the following formula:	

$d_s = k\sqrt[3]{\frac{H}{N}}$ where: d_s : Required diameter of main shaft (*mm*) H : Maximum continuous output of main engine (*kW*) N : Number of revolutions of main shaft at the maximum continuous output (*rpm*) k : Values shown in **Table 9.5.3.~~2~~4-1**	$d_s = k\sqrt[3]{\frac{H}{N}}$ where: d_s : Required diameter of main shaft (*mm*) H : Maximum continuous output of main engine (*kW*) N : Number of revolutions of main shaft at the maximum continuous output (*rpm*) k : Values shown in **Table 9.5.3.2-1**	Reference correction
((2) to (5) are omitted.)	((2) to (5) are omitted.)	
(6) For the torsional vibration of the main shafting systems, the requirements specified in **5.4, Part 9 of the Rules** are to be complied with. In case where the requirements, specified in **(1)** above is applied, the following requirements **(a)** and **(b)** are to be complied with. (a) The torsional vibration stresses produced when the revolutions of the engine are within the range exceeding 80% and not exceeding 105% of maximum continuous revolutions are not to exceed that given in the following: $\tau_1 = A - B\lambda^2$ $(\lambda \leq 0.9)$ $\tau_1 = C$ $(0.9 < \lambda)$ where: τ_1 : Allowable limit of torsional vibration stresses for the range of $0.8 < \lambda \leq 1.05$ (N/mm^2) λ : Ratio of the number of revolutions to the number of maximum continuous revolutions A, B and C : Values shown in **Table 9.5.3.~~2~~4-2**	(6) For the torsional vibration of the main shafting systems, the requirements specified in **5.4, Part 9 of the Rules** are to be complied with. In case where the requirements, specified in **(1)** above is applied, the following requirements **(a)** and **(b)** are to be complied with. (a) The torsional vibration stresses produced when the revolutions of the engine are within the range exceeding 80% and not exceeding 105% of maximum continuous revolutions are not to exceed that given in the following: $\tau_1 = A - B\lambda^2$ $(\lambda \leq 0.9)$ $\tau_1 = C$ $(0.9 < \lambda)$ where: τ_1 : Allowable limit of torsional vibration stresses for the range of $0.8 < \lambda \leq 1.05$ (N/mm^2) λ : Ratio of the number of revolutions to the number of maximum continuous revolutions A, B and C : Values shown in **Table 9.5.3.2-2**	Reference correction
((7) to (10) are omitted.)	((7) to (10) are omitted.)	
(11) The hydraulic system driving the deflector and the reverser is to be duplicated or to be provided with an	(11) The hydraulic system driving the deflector and the reverser is to be duplicated or to be provided with an	

emergency hydraulic power source, in the case where it is not equipped for each shafting independently.	emergency hydraulic power source, in the case where it is not equipped for each shafting independently.	

Guidance for High Speed Craft Part 9 Chapter 5 Table 9.5.3.2-1

Correction	Present	Note
Table 9.5.3.~~24~~-1 Values of k according to Fitting Method	Table 9.5.3.~~24~~-1 Values of k according to Fitting Method	Reference correction

Position / Fitting Method / Shaft Material		Fitting part of shaft with impeller and shaft coupling				Other Positions
		key	spline	flange coupling	force fitting	
Carbon steel or low alloy steel	Shaft Kind 2	105	108	102	102	105
	Shaft Kind 1	$a_1 = 100$, $a_2 = 80$ in Note	$a_1 = 102$, $a_2 = 82$ in Note	$a_1 = 98$, $a_2 = 78$ in Note		$a_1 = 100$, $a_2 = 80$ in Note
Austentic inless steel						
Martensite precipitation hardened type stainless steel		80	82	78	78	80

Note:

$200 \leq \sigma_y \leq 400 : k = a_1 - 0.1(\sigma_y - 200)$

$\sigma_y > 400 \quad : k = a_2$

σ_y : yield point or 0.2% proof strength of main shaft material (N/mm^2)

Guidance for High Speed Craft Part 9 Chapter 5 Table 9.5.3.2-2

Correction	Present	Note
Table 9.5.3.~~24~~-2 Values of A, B and C	Table 9.5.3.~~24~~-2 Values of A, B and C	Reference correction

	Carbon steel or low alloy steel		Austentic stainless steel	Martensite precipitation hardened type stainless steel
	Shaft Kind 1	Shaft Kind 2		
A	24.3	9.0	26.4	39.6
B	24.1	6.2	26.4	37.1
C	4.8	4.0	5.0	9.6

Guidance for High Speed Craft Part 9 Chapter 7 7.5

Correction	Present	Note
~~The wording "deemed~~"Deemed appropriate by the Society" stated in **7.5, Part 9 of the Rules** means following values corresponding to the material: (1) for stainless steel 2.5 *mm* (2) for aluminium alloy 4.5 *mm* (3) other than above the value specially approved by the Society	The wording "deemed appropriate by the Society" means following values corresponding to the material: (1) for stainless steel 2.5 *mm* (2) for aluminium alloy 4.5 *mm* (3) other than above the value specially approved by the Society	Wording correction Reference correction

Guidance for High Speed Craft Part 10 Chapter 2 2.3.5-2

Correction	Present	Note
2 In the case where preference tripping devices are provided in generator circuits of two or more generators operated in parallel, the adjusting value and time delay characteristics are to be as selected such that the overcurrent tripping device of generators would not come into simultaneous action with the preference tripping device when the ~~latter~~preference tripping device activates. Further, where this device is expected to operate by rush current motors for essential service, an inter-lock device may be so arranged that this device does not operate under starting condition of the motors.	**2** In the case where preference tripping devices are provided in generator circuits of two or more generators operated in parallel, the adjusting value and time delay characteristics are to be as selected such that the overcurrent tripping device of generators would not come into simultaneous action with the preference tripping device when the latter activates. Further, where this device is expected to operate by rush current motors for essential service, an inter-lock device may be so arranged that this device does not operate under starting condition of the motors.	Wording correction

Guidance for High Speed Craft Part 10 Chapter 4 4.1.1-2

Correction	Present	Note
2 The electrical equipment so enclosed and protected as to prevent the escape of sparks specified in **4.1.1-3, Part 10** is to be of the following **(1)** or **(2)**. (1) The electrical equipment with a protection degree of at least IP55 as defined in **H2.1.3-4**, **Part H of the Guidance for the Survey and Construction of Steel Ships.** (2) The electrical equipment suitable for use in Zone 2	**2** The electrical equipment so enclosed and protected as to prevent the escape of sparks specified in **4.1.1-3, Part 10** is to be of the following **(1)** or **(2)**. (1) The electrical equipment with a protection degree of at least IP55 as defined in **H2.1.3-4**, **Part H of the Guidance for the Survey and Construction of Steel Ships.** (2) The electrical equipment suitable for use in Zone 2	

and with a temperature class of at least *T*3 as defined in *IEC* 60079-14:2013.	and with a temperature class of at least *T*3 as defined in *IEC* 60079.	Reference correction

Guidance for the Survey and Construction of Passenger Ships Part 2 Chapter 2 2.1.3-1

Correction	Present	Note
1 The documents of qualitative failure analysis referred to in **2.1.3(5)**, **Part 2 of the Rules** are to comply with the requirements in the following **(1)** to **(4)**: (1) The qualitative failure analysis is to include the following information: (a) For ships having a length of 120 *m* or more or having three or more main vertical zones, plans of action to ensure the availability of propulsion and steering upon the failure of relevant equipment and systems due to fire and flooding. (b) For ships other than those specified above, possible solutions for enhancing the availability of propulsion and steering upon the failures of relevant equipment and systems due to fire and flooding. (2) The qualitative failure analysis is to be performed on the following equipment or systems which might affect the propulsion and steering of ships: (a) Main propulsion systems (b) Power transmission systems (c) Steering gear and communication equipment (d) Propeller, azimuthing thrusters or water jet (e) Main power supply systems (f) Essential auxiliary systems (compressed air, fuel oil, lubricating oil, and cooling water) (g) Control and monitoring systems (h) Other systems which might impair the propulsion and steering of ships (e.g., lighting, ventilation) (3) The fault conditions which are to be considered are to comply with the following: (a) In ~~principal~~principle, the qualitative failure analysis is to be based on single failure criteria.	**1** The documents of qualitative failure analysis referred to in **2.1.3(5)**, **Part 2 of the Rules** are to comply with the requirements in the following **(1)** to **(4)**: (1) The qualitative failure analysis is to include the following information: (a) For ships having a length of 120 *m* or more or having three or more main vertical zones, plans of action to ensure the availability of propulsion and steering upon the failure of relevant equipment and systems due to fire and flooding. (b) For ships other than those specified above, possible solutions for enhancing the availability of propulsion and steering upon the failures of relevant equipment and systems due to fire and flooding. (2) The qualitative failure analysis is to be performed on the following equipment or systems which might affect the propulsion and steering of ships: (a) Main propulsion systems (b) Power transmission systems (c) Steering gear and communication equipment (d) Propeller, azimuthing thrusters or water jet (e) Main power supply systems (f) Essential auxiliary systems (compressed air, fuel oil, lubricating oil, and cooling water) (g) Control and monitoring systems (h) Other systems which might impair the propulsion and steering of ships (e.g., lighting, ventilation) (3) The fault conditions which are to be considered are to comply with the following: (a) In principal, the qualitative failure analysis is to be based on single failure criteria.	Wording correction

(b) In cases where a single failure cause results in the failure of more than one component in a system, all the resulting failures are to be considered. (c) In cases where the occurrence of a failure leads directly to further failures, all those failures are to be considered together. (d) In cases where considering the effects of fire and flooding in a single compartment, the analysis is to address the location and layout of all equipment and systems. (4) The following information is to be specified: (a) Standards used for analysis of the design (b) Objectives of the analysis (c) Any assumptions made in the analysis (d) Operation modes of the equipment, systems or sub-systems. (e) Identification of the probable modes and acceptable deviations from the intended or required function (f) Evaluation of the local effects and the effects on the system as whole of each failure mode as applicable (g) Trials and testing which justify a conclusion	(b) In cases where a single failure cause results in the failure of more than one component in a system, all the resulting failures are to be considered. (c) In cases where the occurrence of a failure leads directly to further failures, all those failures are to be considered together. (d) In cases where considering the effects of fire and flooding in a single compartment, the analysis is to address the location and layout of all equipment and systems. (4) The following information is to be specified: (a) Standards used for analysis of the design (b) Objectives of the analysis (c) Any assumptions made in the analysis (d) Operation modes of the equipment, systems or sub-systems. (e) Identification of the probable modes and acceptable deviations from the intended or required function (f) Evaluation of the local effects and the effects on the system as whole of each failure mode as applicable (g) Trials and testing which justify a conclusion	

Guidance for the Survey and Construction of Passenger Ships Part 2 Chapter 2 2.1.4-2

Correction	Present	Note
2 The wording "items specified otherwise by the Society" and the wording "survey methods which it considers to be appropriate" in **2.1.~~5~~4-2, Part 2 of the Rules** mean to be in accordance with the following **(1)** and **(2)** respectively: (1) The wording "items specified otherwise by the Society" means surveys of the tests specified in item 1, **Table B2.7, Part B of the Rules for the Survey and Construction of Steel Ships**.	**2** The wording "items specified otherwise by the Society" and the wording "survey methods which it considers to be appropriate" in **2.1.5-2, Part 2 of the Rules** mean to be in accordance with the following **(1)** and **(2)** respectively: (1) The wording "items specified otherwise by the Society" means surveys of the tests specified in item 1, **Table B2.7, Part B of the Rules for the Survey and Construction of Steel Ships**.	Wording correction

(2) The wording "the Society may approve other survey methods which it considers to be appropriate" means survey methods which it considers to be able to obtain information equivalent to that obtained through traditional ordinary surveys where the Surveyor is in attendance.	(2) The wording "the Society may approve other survey methods which it considers to be appropriate" means survey methods which it considers to be able to obtain information equivalent to that obtained through traditional ordinary surveys where the Surveyor is in attendance.	

Guidance for the Survey and Construction of Passenger Ships Part 7 Chapter 4 4.1.1-1

Correction	Present	Note
1 The fire detection and extinction for passenger ships which are not engaged on international voyages are to comply with **4.1.1**, **Part 7** of the Rules except those specified in the following. (1) For passenger ships other than those registered under their classification character affixed with "*Coasting Service*" or "*Smooth Water Service*", the following **(a)** to **(g)** may apply. (a) In passenger ships of less than 3,000 *gross tonnage*, a fixed emergency fire pump to comply with the following requirements may be accepted when provided in such a compartment that a fire in any one compartment will not render all fire pumps inoperable. In passenger ships of less than 1,000 *gross tonnage*, the emergency fire pump may not be of fixed type. (Regulation 10.2.2.3, Chapter II-2, *SOLAS* Convention) i) The emergency fire pump is to comply with Regulation 10.2.2.3.1.2, Chapter II-2, *SOLAS* Convention and its source of power and sea connection are not to be provided in machinery spaces of category *A*. ii) The emergency fire pump is to be arranged aft of the collision bulkhead. Where the	**1** The fire detection and extinction for passenger ships which are not engaged on international voyages are to comply with **4.1.1**, **Part 7** of the Rules except those specified in the following. (1) For passenger ships other than those registered under their classification character affixed with "*Coasting Service*" or "*Smooth Water Service*", the following **(a)** to **(g)** may apply. (a) In passenger ships of less than 3,000 *gross tonnage*, a fixed emergency fire pump to comply with the following requirements may be accepted when provided in such a compartment that a fire in any one compartment will not render all fire pumps inoperable. In passenger ships of less than 1,000 *gross tonnage*, the emergency fire pump may not be of fixed type. (Regulation 10.2.2.3, Chapter II-2, *SOLAS* Convention) i) The emergency fire pump is to comply with Regulation 10.2.2.3.1.2, Chapter II-2, *SOLAS* Convention and its source of power and sea connection are not to be provided in machinery spaces of category *A*. ii) The emergency fire pump is to be arranged aft of the collision bulkhead. Where the	

pump is provided in the space separated from the spaces always attended by the crew, means are to be provided to be remotely operated at the navigation bridge or the fire control station in addition to the local operation.	pump is provided in the space separated from the spaces always attended by the crew, means are to be provided to be remotely operated at the navigation bridge or the fire control station in addition to the local operation.	
(b) For passenger ships carrying not more than 36 passengers, the fire hoses may not be permanently connected with the fire hydrants. (Regulation 10.2.1.2 and 10.2.3.1.1, Chapter II-2, *SOLAS* Convention)	(b) For passenger ships carrying not more than 36 passengers, the fire hoses may not be permanently connected with the fire hydrants. (Regulation 10.2.1.2 and 10.2.3.1.1, Chapter II-2, *SOLAS* Convention)	
(c) For passenger ships carrying not more than 36 passenger, three water fog applicators may be accepted when provided in a conspicuous position in the enclosed space of the vehicle spaces. (Regulations 10.5.5 and 10.10.2.2.2, Chapter II-2, *SOLAS* Convention)	(c) For passenger ships carrying not more than 36 passenger, three water fog applicators may be accepted when provided in a conspicuous position in the enclosed space of the vehicle spaces. (Regulations 10.5.5 and 10.10.2.2.2, Chapter II-2, *SOLAS* Convention)	
(d) The number of fire-fighter's outfits may be each two sets of fire-fighter's outfits and personal equipment for every 80*m*, or part thereof, of the aggregate of the length of all passenger spaces and service spaces on the deck which carries such spaces or, if there is more than one such deck, on the deck which has the largest aggregate of such lengths. (Regulations 10.10.2.2.1 and 10.10.2.3, Part II-2, *SOLAS* Convention)	(d) The number of fire-fighter's outfits may be each two sets of fire-fighter's outfits and personal equipment for every 80*m*, or part thereof, of the aggregate of the length of all passenger spaces and service spaces on the deck which carries such spaces or, if there is more than one such deck, on the deck which has the largest aggregate of such lengths. (Regulations 10.10.2.2.1 and 10.10.2.3, Part II-2, *SOLAS* Convention)	
(e) For ro-ro passenger ships, the fire fighting appliances specified in **18.5, Part R of the Rules for the Survey and Construction of Steel Ships** are to be provided on the helicopter winching deck. (Regulation 18, Chapter II-2, *SOLAS*	(e) For ro-ro passenger ships, the fire fighting appliances specified in **18.5, Part R of the Rules for the Survey and Construction of Steel Ships** are to be provided on the helicopter winching deck. (Regulation 18, Chapter II-2, *SOLAS*	

Convention) (f) A fixed high-expansion foam fire-extinguishing system may be provided as a fixed fire-extinguishing system in the special category space. (Regulations 20.6.1.2 and 20.6.1.3, Chapter II-2, *SOLAS* Convention) (g) Regulation 10.2.1.7, Chapter II-2, *SOLAS* Convention may not apply. (2) For passenger ships registered under their classification character affixed with "*Coasting Service*" or "*Smooth Water Service*", the following **(a)** to **(o)** may apply. (a) In passenger ships of less than 1,000 *gross tonnage*, one independently power driven fire pump may be accepted. The fire pumps are to be capable of delivering a quantity of water more than two thirds of quantity which bilge pumps can draw, and maintaining 0.3 *MPa* pressure at all hydrants. In passenger ships of less than 100 *gross tonnage*, 4 buckets or bailers painted in red may be accepted when widely separated for immediate use. (For passenger ships registered under their classification character affixed with "*Smooth Water Service*", the number of buckets or bailers may be reduced to 2.) (Regulation 10.2.2.4.1, Chapter II-2, *SOLAS* Convention) (b) Except special category spaces, the number and position of hydrants may be such that at least one jet of water may reach any part of the ship normally accessible to the passenger or crew while the ship is being navigated and any part of	Convention) (f) A fixed high-expansion foam fire-extinguishing system may be provided as a fixed fire-extinguishing system in the special category space. (Regulations 20.6.1.2 and 20.6.1.3, Chapter II-2, *SOLAS* Convention) (g) Regulation 10.2.1.7, Chapter II-2, *SOLAS* Convention may not apply. (2) For passenger ships registered under their classification character affixed with "*Coasting Service*" or "*Smooth Water Service*", the following **(a)** to **(o)** may apply. (a) In passenger ships of less than 1,000 *gross tonnage*, one independently power driven fire pump may be accepted. The fire pumps are to be capable of delivering a quantity of water more than two thirds of quantity which bilge pumps can draw, and maintaining 0.3 *MPa* pressure at all hydrants. In passenger ships of less than 100 *gross tonnage*, 4 buckets or bailers painted in red may be accepted when widely separated for immediate use. (For passenger ships registered under their classification character affixed with "*Smooth Water Service*", the number of buckets or bailers may be reduced to 2.) (Regulation 10.2.2.4.1, Chapter II-2, *SOLAS* Convention) (b) Except special category spaces, the number and position of hydrants may be such that at least one jet of water may reach any part of the ship normally accessible to the passenger or crew while the ship is being navigated and any part of	

any cargo space (when empty). (Regulation 10.2.1.5.1, Chapter II-2, *SOLAS* Convention)	any cargo space (when empty). (Regulation 10.2.1.5.1, Chapter II-2, *SOLAS* Convention)	
(c) Fire hoses may not be permanently connected with the fire hydrants. (Regulation 10.2.1.2 and 10.2.3.1.1, Chapter II-2, *SOLAS* Convention)	(c) Fire hoses may not be permanently connected with the fire hydrants. (Regulation 10.2.1.2 and 10.2.3.1.1, Chapter II-2, *SOLAS* Convention)	
(d) For passenger ships of less than 1,000 *gross tonnage*, the number of portable liquid fire extinguisher, foam fire extinguisher or powder fire extinguisher (only the extinguisher which extinguishing medium is phosphate) may be such that no point in the accommodation space and service space is more than 15*m* walking distance from any extinguisher and that there are at least two such extinguishers in each decks. (Regulation 10.3.2.1, Chapter II-2, *SOLAS* Convention)	(d) For passenger ships of less than 1,000 *gross tonnage*, the number of portable liquid fire extinguisher, foam fire extinguisher or powder fire extinguisher (only the extinguisher which extinguishing medium is phosphate) may be such that no point in the accommodation space and service space is more than 15*m* walking distance from any extinguisher and that there are at least two such extinguishers in each decks. (Regulation 10.3.2.1, Chapter II-2, *SOLAS* Convention)	
(e) For passenger ships of less than 1,000 *gross tonnage*, a fixed fire extinguishing system may not be provided in spaces only having oil fuel units. (Regulation 10.5.1.1, Chapter II-2, *SOLAS* Convention)	(e) For passenger ships of less than 1,000 *gross tonnage*, a fixed fire extinguishing system may not be provided in spaces only having oil fuel units. (Regulation 10.5.1.1, Chapter II-2, *SOLAS* Convention)	
(f) Either foam fire extinguisher of 45*l* capacity, carbon dioxide gas fire extinguisher with a mass of 16*kg* or powder fire extinguisher with a mass of 23*kg* may be accepted in the boiler room containing oil-fired boilers. (Regulation 10.5.1.2.2, Chapter II-2, *SOLAS* Convention)	(f) Either foam fire extinguisher of 45*l* capacity, carbon dioxide gas fire extinguisher with a mass of 16*kg* or powder fire extinguisher with a mass of 23*kg* may be accepted in the boiler room containing oil-fired boilers. (Regulation 10.5.1.2.2, Chapter II-2, *SOLAS* Convention)	
(g) Either a portable foam extinguisher, carbon dioxide gas fire extinguisher or powder fire extinguisher may be accepted in each firing space	(g) Either a portable foam extinguisher, carbon dioxide gas fire extinguisher or powder fire extinguisher may be accepted in each firing	

in the boiler room and in each space in which a part of oil fuel installation is situated. (Regulation 10.5.1.2.3, Chapter II-2, *SOLAS* Convention)	space in the boiler room and in each space in which a part of oil fuel installation is situated. (Regulation 10.5.1.2.3, Chapter II-2, *SOLAS* Convention)	
(h) Either a portable foam fire extinguisher of 45*l* capacity, carbon dioxide gas fire extinguisher with a mass of 16*kg* or powder fire extinguisher with a mass of 23*kg* may be accepted in spaces containing internal combustion machinery (main engine or auxiliary which has in the aggregate a total power output of not less than 750*kW*). Additionally the number of portable foam fire extinguisher, carbon dioxide gas fire extinguisher or powder fire extinguisher may be such that no point in that spaces is more than 10*m* walking distance from any extinguisher and that there are at least two such extinguishers in that spaces. For ships having special category spaces and the main propulsion machinery which has in the aggregate a total power output of not less than 750*kW*, a fixed fire extinguishing system is to be provided. (Regulation 10.5.2, Chapter II-2, *SOLAS* Convention)	(h) Either a portable foam fire extinguisher of 45*l* capacity, carbon dioxide gas fire extinguisher with a mass of 16*kg* or powder fire extinguisher with a mass of 23*kg* may be accepted in spaces containing internal combustion machinery (main engine or auxiliary which has in the aggregate a total power output of not less than 750*kW*). Additionally the number of portable foam fire extinguisher, carbon dioxide gas fire extinguisher or powder fire extinguisher may be such that no point in that spaces is more than 10*m* walking distance from any extinguisher and that there are at least two such extinguishers in that spaces. For ships having special category spaces and the main propulsion machinery which has in the aggregate a total power output of not less than 750*kW*, a fixed fire extinguishing system is to be provided. (Regulation 10.5.2, Chapter II-2, *SOLAS* Convention)	
(i) Only each two sets of fire-fighter's outfits and personal equipment are accepted provided that they are ready for use and stored in an easily accessible and widely separated position. (Regulation 10.10.3, Chapter II-2, *SOLAS* Convention)	(i) Only each two sets of fire-fighter's outfits and personal equipment are accepted provided that they are ready for use and stored in an easily accessible and widely separated position. (Regulation 10.10.3, Chapter II-2, *SOLAS* Convention)	
(j) Either a portable foam fire extinguisher, carbon dioxide gas fire extinguisher or powder fire extinguisher may be accepted at outside the entrance of paint lockers and lump rooms.	(j) Either a portable foam fire extinguisher, carbon dioxide gas fire extinguisher or powder fire extinguisher may be accepted at outside the entrance of paint lockers and lump rooms.	

(Regulation 10.6.3, Chapter II-2, *SOLAS* Convention)	(Regulation 10.6.3, Chapter II-2, *SOLAS* Convention)	
(k) An automatic sprinkler, fire detection and fire alarm system may not be required in the space except for special category spaces and machinery spaces in ships to which the requirement in **(m)** does not apply. (Regulations 10.5.1.2 and 10.6.1.1, Chapter II-2, *SOLAS* Convention)	(k) An automatic sprinkler, fire detection and fire alarm system may not be required in the space except for special category spaces and machinery spaces in ships to which the requirement in **(m)** does not apply. (Regulations 10.5.1.2 and 10.6.1.1, Chapter II-2, *SOLAS* Convention)	
(l) A fixed high-expansion foam fire-extinguishing system may be accepted as a fixed fire-extinguishing system in special category spaces. (Regulations 20.6.1.2 and 20.6.1.3, Chapter II-2, *SOLAS* Convention)	(l) A fixed high-expansion foam fire-extinguishing system may be accepted as a fixed fire-extinguishing system in special category spaces. (Regulations 20.6.1.2 and 20.6.1.3, Chapter II-2, *SOLAS* Convention)	
(m) For passenger ships having ro-ro cargo spaces or spaces other than cargo spaces for carriage of motor vehicles with fuel for their own propulsion, whose main propulsion machinery has in the aggregate a total power output of not less than 750*kW*, *the* fixed fire detection and fire alarm systems may not be required in the machinery spaces. (Regulation 7.4.1, Chapter II-2, *SOLAS* Convention),	(m) For passenger ships having ro-ro cargo spaces or spaces other than cargo spaces for carriage of motor vehicles with fuel for their own propulsion, whose main propulsion machinery has in the aggregate a total power output of not less than 750*kW*, *the* fixed fire detection and fire alarm systems may not be required in the machinery spaces. (Regulation 7.4.1, Chapter II-2, *SOLAS* Convention),	
(n) Passenger ships registered under their classification character affixed with "*Coasting Service*" of less than 2,000 *gross tonnage* and passenger ships registered under their classification character affixed with "*Smooth Water Service*" may not be required manually operated call points in accommodation spaces, service spaces and control stations. (Regulation 7.7, Chapter II-2, *SOLAS* Convention)	(n) Passenger ships registered under their classification character affixed with "*Coasting Service*" of less than 2,000 *gross tonnage* and passenger ships registered under their classification character affixed with "*Smooth Water Service*" may not be required manually operated call points in accommodation spaces, service spaces and control stations. (Regulation 7.7, Chapter II-2, *SOLAS* Convention)	

(o) The following Regulation in Chapter II-2 of *SOLAS* Convention may not apply. i) Regulation 10, paragraphs 2.1.2.1.2, 2.1.2.2.1, 2.1.5.2.2, 2.1.7, 5.1.2, 5.4 (excluding **(h)** above), 5.5, 5.6, 10.2.2 and 10.2.3 ii) Regulation 20, paragraphs 4.3.2 and 6.~~2~~3.2	(o) The following Regulation in Chapter II-2 of *SOLAS* Convention may not apply. i) Regulation 10, paragraphs 2.1.2.1.2, 2.1.2.2.1, 2.1.5.2.2, 2.1.7, 5.1.2, 5.4 (excluding **(h)** above), 5.5, 5.6, 10.2.2 and 10.2.3 ii) Regulation 20, paragraphs 4.3.2 and 6.2.2	Wording correction

Guidance for the Survey and Construction of Inland Waterway Ships Part 2 Chapter 1 1.1.3-4

Correction	Present	Note
4 For ships navigating in the Parana River Basin and the Paraguay River Basin, etc., "***HIDROVIA Parana - Paraguay***" may be applied as the "standards deemed appropriate by the Society". Intervals of Periodical Survey may, in ~~principal~~principle, be treated as follows where such standards are applied mutatis mutandis. However, the extent and contents of Periodical Surveys and Planned Machinery Surveys are to comply with this Rules in accordance with the age of the ship. (1) Annual Surveys Annual Surveys are not required to be carried out. (2) Intermediate Surveys Intermediate Surveys are to be carried out in accordance with ship's type at the intervals specified in **(a)** through **(c)** below: (a) For Tanker Convoy Pushers, Intermediate Surveys are to be carried out within 3 *months* before or after every second anniversary date after the Classification Survey during Construction or a Special Survey; (b) For self-propelled ships which are not specified in **(a)** above and non-propelled ships carrying flammable liquid cargos, liquefied gases or dangerous chemicals in bulk, or dangerous goods, Intermediate Surveys are to be carried out within 3 *months* before or after every third anniversary date after the Classification Survey during Construction or a Special Survey; (c) For non-propelled ships which are not specified in **(b)** above, Intermediate Surveys are to be carried out within 3 *months* before or after every fourth anniversary date after the Classification	**4** For ships navigating in the Parana River Basin and the Paraguay River Basin, etc., "***HIDROVIA Parana - Paraguay***" may be applied as the "standards deemed appropriate by the Society". Intervals of Periodical Survey may, in principal, be treated as follows where such standards are applied mutatis mutandis. However, the extent and contents of Periodical Surveys and Planned Machinery Surveys are to comply with this Rules in accordance with the age of the ship. (1) Annual Surveys Annual Surveys are not required to be carried out. (2) Intermediate Surveys Intermediate Surveys are to be carried out in accordance with ship's type at the intervals specified in **(a)** through **(c)** below: (a) For Tanker Convoy Pushers, Intermediate Surveys are to be carried out within 3 *months* before or after every second anniversary date after the Classification Survey during Construction or a Special Survey; (b) For self-propelled ships which are not specified in **(a)** above and non-propelled ships carrying flammable liquid cargos, liquefied gases or dangerous chemicals in bulk, or dangerous goods, Intermediate Surveys are to be carried out within 3 *months* before or after every third anniversary date after the Classification Survey during Construction or a Special Survey; (c) For non-propelled ships which are not specified in **(b)** above, Intermediate Surveys are to be carried out within 3 *months* before or after every fourth anniversary date after the Classification	Wording correction

Survey during Construction or a Special Survey. (3) Special Surveys Special Surveys are to be carried out as specified in **(a)** through **(c)** below. (a) For self-propelled ships and manned non-propelled ships, Special Surveys are to be carried out within 3 *months* before the date not exceeding 6 *years* from the date of completion of the Classification Survey or the previous Special Survey. However, when the previous Special Survey was completed within 3 *months* before the expiry date of the previous certificate, Special Surveys are to be carried out within 3 *months* before the date not exceeding 6 *years* from the expiry date of the previous certificate. (b) For unmanned ships, Special Surveys are to be carried out within 3 *months* before the date not exceeding 8 *years* from the date of completion of the Classification Survey or the previous Special Survey. However, when the previous Special Survey was completed within 3 *months* before the expiry date of the previous certificate, Special Surveys are to be carried out within 3 *months* before the date not exceeding 8 *years* from the expiry date of the previous certificate. (c) Notwithstanding the requirement in **(b)** above, for unmanned ships other than ships carrying flammable liquid cargos, liquefied gases or dangerous chemicals in bulk, the first Special Survey is to be carried out within the following **i)** and **ii)**, whichever is later: i) 3 *months* before the date not exceeding 10 *years* from the date of completion of construction of the ship	Survey during Construction or a Special Survey. (3) Special Surveys Special Surveys are to be carried out as specified in **(a)** through **(c)** below. (a) For self-propelled ships and manned non-propelled ships, Special Surveys are to be carried out within 3 *months* before the date not exceeding 6 *years* from the date of completion of the Classification Survey or the previous Special Survey. However, when the previous Special Survey was completed within 3 *months* before the expiry date of the previous certificate, Special Surveys are to be carried out within 3 *months* before the date not exceeding 6 *years* from the expiry date of the previous certificate. (b) For unmanned ships, Special Surveys are to be carried out within 3 *months* before the date not exceeding 8 *years* from the date of completion of the Classification Survey or the previous Special Survey. However, when the previous Special Survey was completed within 3 *months* before the expiry date of the previous certificate, Special Surveys are to be carried out within 3 *months* before the date not exceeding 8 *years* from the expiry date of the previous certificate. (c) Notwithstanding the requirement in **(b)** above, for unmanned ships other than ships carrying flammable liquid cargos, liquefied gases or dangerous chemicals in bulk, the first Special Survey is to be carried out within the following **i)** and **ii)**, whichever is later: i) 3 *months* before the date not exceeding 10 *years* from the date of completion of construction of the ship	

ii) 3 *months* before the date not exceeding 8 *years* from the date of completion of the Classification Survey (4) Docking Surveys Docking Surveys are to be carried out concurrently with Special Surveys. (5) Boiler Surveys Boiler Surveys are to be carried out in accordance with **1.1.3-1(5), Part 2 of the Rules**. (6) Propeller Shaft and Stern Tube Shaft Surveys Ordinary Surveys of propeller shafts and stern tube shafts are to be carried out in accordance with **1.1.3-1(6), Part 2 of the Rules**. (7) Planned Machinery Surveys (a) For self-propelled ships and manned non-propelled ships, survey items are to be examined at intervals not exceeding 6 *years* in the Continuous Machinery Survey. (b) For unmanned ships, survey items are to be examined at intervals not exceeding the intervals between special surveys. (c) In the Planned Machinery Maintenance Scheme, survey items are to be examined according to the survey schedule table specified in **9.1.3, Part 2 of the Rules** and at the general examination (including review of maintenance records) which is to be carried out during the intermediate surveys. (d) In the Condition Based Maintenance Scheme, survey items are to be examined according to the survey schedule table specified in **9.1.4, Part 2 of the Rules** and at the Intermediate Survey.	ii) 3 *months* before the date not exceeding 8 *years* from the date of completion of the Classification Survey (4) Docking Surveys Docking Surveys are to be carried out concurrently with Special Surveys. (5) Boiler Surveys Boiler Surveys are to be carried out in accordance with **1.1.3-1(5), Part 2 of the Rules**. (6) Propeller Shaft and Stern Tube Shaft Surveys Ordinary Surveys of propeller shafts and stern tube shafts are to be carried out in accordance with **1.1.3-1(6), Part 2 of the Rules**. (7) Planned Machinery Surveys (a) For self-propelled ships and manned non-propelled ships, survey items are to be examined at intervals not exceeding 6 *years* in the Continuous Machinery Survey. (b) For unmanned ships, survey items are to be examined at intervals not exceeding the intervals between special surveys. (c) In the Planned Machinery Maintenance Scheme, survey items are to be examined according to the survey schedule table specified in **9.1.3, Part 2 of the Rules** and at the general examination (including review of maintenance records) which is to be carried out during the intermediate surveys. (d) In the Condition Based Maintenance Scheme, survey items are to be examined according to the survey schedule table specified in **9.1.4, Part 2 of the Rules** and at the Intermediate Survey.	

Guidance for the Survey and Construction of Ships of Fibreglass Reinforced Plastics Chapter 1 Table 1.1.1-2

Correction	Present	Note

Table 1.1.1-2 Sill Height of Hatchway, Access Opening, etc. (*mm*)

Location	Still		
	Small deck opening (area: 1.5m^2 or below)	Companionway	Access opening in superstructure end bulkhead
Upon upper deck and superstructure deck within fwd 0.~~25*L*~~25L_f	380	300	300
Upon superstructure deck abaft the forward ~~0.25L_f~~ 0.25L_f	230	100	100

Note: Wording correction (row 1); Wording correction (row 2)

Guidance for the Survey and Construction of Ships of Fibreglass Reinforced Plastics Chapter 4 Table 4.1.2-3

Correction	Present	Note

Table 4.1.2-3 Test Items for Sandwich Construction

Test items		Type of test					
		Test per each ships specified in **4.1.2 of the Rules**		Approval test specified in **4.2 of the Rules**			
				At time of approval and every 5 *years*		Annual test	
		Rigid cellular plastic	Bulsa	Rigid cellular plastic	Bulsa	Rigid cellular plastic	Bulsa
(1)	Specific gravity	O	O	O	O	O	O
(2)	Water absorption rate	O		O		O	
(3)	Moisture content		O		O		O
(4)	Compressive strength and modulus of compressive elasticity	O	O	O	O	O	O
(5)	Softening temperature	O		O		O	
(6)	Tensile strength and modulus of tensile elasticity*	O		O			
(7)	Bending strength and modulus of bending elasticity*	O		O			
(8)	Shear strength obtained from laminated test specimens sandwich construction	O	O	O	O		

Notes:
1) Mark O denotes that the test and inspection are to be carried out.
2) Tests asterisked are required only when the core is reckoned in strength.

Note: Wording correction

Guidance for the Survey and Construction of Ships of Fibreglass Reinforced Plastics Chapter 4 Table 4.1.2-7

<table>
<tr><th>Correction</th><th>Present</th><th>Note</th></tr>
<tr><td>
Table 4.1.2-7 Acceptance Criteria for Glassfibre Reinforcements
<table>
<tr><th colspan="2">Test item</th><th colspan="2">Acceptance criteria</th></tr>
<tr><td rowspan="4">Deviation</td><td rowspan="2">Chopped mat</td><td>1m^2.....</td><td>Not greater than 10% for each specimen</td></tr>
<tr><td>300mm×300mm.....</td><td>Not greater than 20% for each specimen</td></tr>
<tr><td rowspan="2">Roving cloth</td><td>1m^2.....</td><td>Not greater than ~~30~~3% for each specimen</td></tr>
<tr><td>300mm×300mm</td><td>Not greater than 5% for each specimen</td></tr>
<tr><td>Rovings</td><td>15g.....</td><td>Not greater than 10% for each specimen</td></tr>
<tr><td colspan="4">(Omitted)</td></tr>
</table>
</td><td></td><td>Wording correction</td></tr>
</table>

Guidance for the Survey and Construction of Ships of Fibreglass Reinforced Plastics Chapter 4 4.1.2-5

Correction	Present	Note
5 Test procedures for resins for laminating (1) Shapes and selection of test specimens ((a) and (b) are omitted.) (c) The manufacturing procedures of laminates used for tests are to be in accordance with the following **i)** and **ii)**. i) The laminating arrangements is to be of ~~shopped~~chopped mat (*EM* 450) in 3-ply and the glass content is to be 30±3% in weight. ii) For other procedures ,the requirements in **-4(1)(b)** apply correspondingly. (2) Test Procedures The procedures for the tests given in **Table 4.1.2-2** are to be in accordance with the following **(a)** through **(k)**. (a) Viscosity and thixotropy i) The test resins are to be as given in **Table 4.1.2-8**. ii) Brookfield viscometer is to be used. iii) The rotor and guard (or sleeve guard) chosen according to the predicted viscosity of the liquid sample are to be mounted on the	**5** Test procedures for resins for laminating (1) Shapes and selection of test specimens ((a) and (b) are omitted.) (c) The manufacturing procedures of laminates used for tests are to be in accordance with the following **i)** and **ii)**. i) The laminating arrangements is to be of shopped mat (*EM* 450) in 3-ply and the glass content is to be 30±3% in weight. ii) For other procedures ,the requirements in **-4(1)(b)** apply correspondingly. (2) Test Procedures The procedures for the tests given in **Table 4.1.2-2** are to be in accordance with the following **(a)** through **(k)**. (a) Viscosity and thixotropy i) The test resins are to be as given in **Table 4.1.2-8**. ii) Brookfield viscometer is to be used. iii) The rotor and guard (or sleeve guard) chosen according to the predicted viscosity of the liquid sample are to be mounted on the	Wording correction

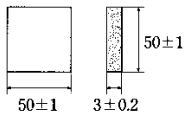
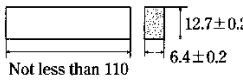
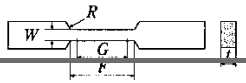
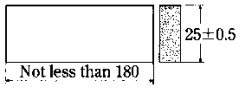
viscosmeter. iv) The test liquid resins (25±0.5℃) after being stirred well are to be filled into the ~~breaker~~beaker to a depth so that the reference mark on the rotor may be equal to the liquid level. (v) to ix) are omitted.) ((b) is omitted.) (c) Acid value i) Take 1*g* of the test resins, add it to about 10 *ml* of mixed solvent (mixture of 7 parts by mass of toluene (reagent) and 3 parts by mass of methyl alcohol (reagent)) and ~~methyl alcohol (reagent), and~~ stir the mixture well. ((d) and (e) are omitted.) (f) Tensile elongation and tensile strength of the cast test specimens. i) The test specimens are to be in accordance with **Table 4.1.2-8**. ii) The tensile speed is to be 5 *mm/min* as the standard. iii) When the test specimen failed outside the place between gauge points, the measured value of such a test specimen is to be judged unacceptable, and a new test specimen is to be taken for additional test. iv) The tensile elongation is to be obtained from the following formula. $\frac{Elongation\ of\ the\ gauge\ length\ at\ failure}{Initial\ gauge\ length} \times 100\ (\%)$ v) The tensile strength is to be obtained from the following formula.	viscosmeter. iv) The test liquid resins (25±0.5℃) after being stirred well are to be filled into the breaker to a depth so that the reference mark on the rotor may be equal to the liquid level. (v) to ix) are omitted.) ((b) is omitted.) (c) Acid value i) Take 1*g* of the test resins, add it to about 10 *ml* of mixed solvent (mixture of 7 parts by mass of toluene (reagent) and 3 parts by mass of methyl alcohol (reagent)) and methyl alcohol (reagent), and stir the mixture well. ((d) and (e) are omitted.) (f) Tensile elongation and tensile strength of the cast test specimens. i) The test specimens are to be in accordance with **Table 4.1.2-8**. ii) The tensile speed is to be 5 *mm/min* as the standard. iii) When the test specimen failed outside the place between gauge points, the measured value of such a test specimen is to be judged unacceptable, and a new test specimen is to be taken for additional test. iv) The tensile elongation is to be obtained from the following formula. $\frac{Elongation\ of\ the\ gauge\ length\ at\ failure}{Initial\ gauge\ length} \times 100\ (\%)$ v) The tensile strength is to be obtained from the following formula.	Wording correction Wording correction

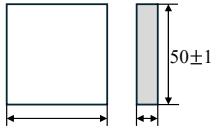
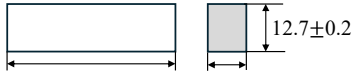
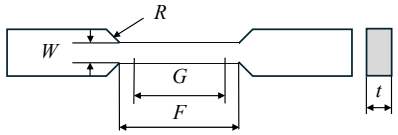
$\frac{P}{A}$ (~~kg~~N/mm^2) where: P : Breaking load (~~kg~~N) A : Sectional area of test specimen at mid point (mm^2) ((g) to (k) are omitted.) (3) Criteria The acceptance criteria for the test results are to be in accordance with **Table 4.1.2-9**.	$\frac{P}{A}$ (kg/mm^2) where: P : Breaking load (kg) A : Sectional area of test specimen at mid point (mm^2) ((g) to (k) are omitted.) (3) Criteria The acceptance criteria for the test results are to be in accordance with **Table 4.1.2-9**.	Wording correction Wording correction

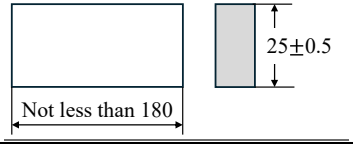
Guidance for the Survey and Construction of Ships of Fibreglass Reinforced Plastics Chapter 4 Table 4.1.2-8

Correction	Present	Note
Table 4.1.2-8 Resins for Laminating		Wording correction

(Unit: *mm*)

	Test item	Shape and size of test specimen	Quantity	Selection of test specimen, etc.
(a)	Viscocity and thixotropy	Resins	As required	When resins are sampled, the contents of vessel are to be stirred well to make them homogeneous, and take test resins into a suitable dry and clean vessel of two times the necessary volume for test and a light-proof plug is
(b)	Gel time, minimum cure time and peak exotherm temperature	Resins	50 ± 1*g* (Note 1)	
(c)	Acid value	Resins	1*g*	
(d)	Water absorption rate		5 cast test specimens	
(e) (h)	Barcol hardness	Cast test specimens Laminate test specimens		
(g)	Load deflection temperature		3 cast test specimens	
(f) (j)	Tensile strength			
		Cast test specimens *t* = 3 ± 0.2 (*mm*) *F* = 60 ± 0.5 (*mm*) *G* = 50 ± 0.5 (*mm*) *W* = 12.5 (*mm*) or more *R* = 60 (*mm*) or more Laminate test specimens *t* = original thickness *F* = 60 ± 0.5 (*mm*) *G* = 50 ± 0.5 (*mm*) *W* = 25 (*mm*) or more *R* = 60 (*mm*) or more	5 cast test specimens 5 laminate test specimens	
(i)	Bending strength obtained by laminate test specimens		5	
(k)	High temperature characteristics obtained by laminate test specimens	The same as in (h) and (i)		

	Test Item	Shape and size of test specimen	Quantity	Selection of test specimen, etc.
(a)	Viscosity and thixotropy	Resins	As required	When resins are sampled, the contents of vessel are to be stirred well to make them homogeneous, and take test resins into a suitable dry and clean vessel of two times the necessary volume for test and a light-proof plug is used.
(b)	Gel time, minimum cure time and peak exotherm temperature	Resins	50 ± 1*g* (Note 1)	
(c)	Acid value	Resins	1*g*	
(d)	Water absorption rate		5 cast test specimens	
(e) (h)	Barcol hardness	Cast test specimens Laminate test specimens		
(g)	Load deflection temperature		3 cast test specimens	
(f) (j)	Tensile strength	 Cast test specimens $t = 3 + 0.2\ (mm)$ $F = 60 + 0.5\ (mm)$ $G = 50 + 0.5\ (mm)$ $W = 12.5\ (mm)$ or more $R = 60\ (mm)$ or more Laminate test specimens $t =$ original thickness $F = 60 + 0.5\ (mm)$ $G = 50 + 0.5\ (mm)$ $W = 25\ (mm)$ or more $R = 60\ (mm)$ or more	5 cast test specimens 5 laminate test specimens	

	(i)	Bending strength obtained by laminate test specimens		5		
	(k)	High temperature characteristics obtained by laminate test specimens	The same as in (h) and (i)			

Note :
In the case of no-accelerated resins, the specified amount of accelerators is to be added and stirred according to the weight of the resins.

Guidance for Testing Machines Chapter 4 4.5.3

Correction	Present	Note
(1) The wording “the procedures deemed appropriate by the Society” specified in **4.5.3-2 of the Rules** means the procedures specified in *JIS B* ~~7731~~7727. The aforementioned standard, in principle, refers to the most recent version published. (2) The wording “reference blocks specified otherwise by the Society” specified in **4.5.3-2 of the Rules** means the reference blocks verified in accordance with *JIS B* 7731 by the Society or other firms deemed appropriate by the Society. The aforementioned standard, in principle, refers to the most recent version published.	(1) The wording “the procedures deemed appropriate by the Society” specified in **4.5.3-2 of the Rules** means the procedures specified in *JIS B* 7731. The aforementioned standard, in principle, refers to the most recent version published. (2) The wording “reference blocks specified otherwise by the Society” specified in **4.5.3-2 of the Rules** means the reference blocks verified in accordance with *JIS B* 7731 by the Society or other firms deemed appropriate by the Society. The aforementioned standard, in principle, refers to the most recent version published.	Wording correction

End of Document.