Classification Surveys

Object of Amendment

Rules for Approval of Manufacturers and Service Suppliers
Rules for the Survey and Construction of Steel Ships Parts A, B, C, D, U, CSR-B&T, M, N, S, I and P
Rules for Marine Pollution Prevention Systems
Rules for Anti-Fouling Systems on Ships
Rules for Ballast Water Management Installations
Rules for Cargo Refrigerating Installations
Rules for Cargo Handling Appliances
Rules for Diving Systems
Rules for Automatic and Remote Control Systems
Rules for Navigation Bridge Systems
Rules for Preventive Machinery Maintenance Systems
Rules for Integrated Fire Control Systems
Rules for Hull Monitoring Systems
Rules for Centralized Cargo Monitoring and Control Systems
Rules for High Speed Craft
Rules for the Survey and Construction of Passenger Ships
Rules for the Survey and Construction of Ships of Fibreglass Reinforced Plastics
Guidance for the Survey and Construction of Steel Ships Parts B, CS, D, GF, H, N and R
Guidance for Marine Pollution Prevention Systems
Guidance for Anti-Fouling Systems on Ships
Guidance for Ballast Water Management Installations
Guidance for Cargo Handling Appliances
Guidance for Automatic and Remote Control Systems
Guidance for High Speed Craft
Guidance for the Survey and Construction of Passenger Ships
Guidance for the Survey and Construction of Ships of Fibreglass Reinforced Plastics
Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use

Reason for Amendment

Chapter 2, Part B of Rules specifies requirements related to classification surveys. The structure of this chapter, however, is somewhat complex because it contains not only the Society's independently developed requirements but also various IMO, IACS and other third-party requirements. In addition, since many requirements related to classification surveys are not specified in Chapter 2, but in other chapters of Part B of the Rules, Part B of the Guidance and other Society technical rules, it can be difficult to understand how all the requirements are related.

Given the above situation, the Society decided to review its requirements related to classification surveys and the structure of Chapter 2 to figure out whether there was a way to consolidate these requirements to make them easier to find and understand. The purpose of this amendment is simply to consolidate and reorganise requirements related to classification surveys, and no change has been made to the specific details of the requirements, examinations of plans and documents, and associated surveys.

Outline of Amendment

(1) Consolidates requirements related to classification surveys in Chapter 2, Part B of Rules as much as possible by moving relevant requirements found in other places to Chapter 2 whenever practicable.
(2) Reorgnises plans to be submitted, survey items and other matters relevant to classification surveys into a table format to make them easier to understand.
(3) Amends relevant requirements in other Society technical rules and guidance accordingly to reflect (1) above.

Effective Date and Application

(1) Part B of the Rules for the Survey and Construction of Steel Ships (2.1, 10.2, 12.2, 14.2 and 15.2), Rules for Marine Pollution Prevention Systems (2.1), Rules for Cargo Refrigerating Installations (2.2.1), Rules for Cargo Handling Appliances (2.3), Rules for Diving Systems (2.2), Rules for Automatic and Remote Control Systems (2.2), Rules for Navigation Bridge Systems (2.2), Rules for Preventive Machinery Maintenance Systems (2.2), Rules for Integrated Fire Control Systems (2.2), Rules for Hull Monitoring Systems (2.2), Rules for Centralized Cargo Monitoring and Control Systems (2.2), Rules for High Speed Craft (2.1), Rules for the Survey and Construction of Ships of Fibreglass Reinforced Plastics (2.1), Rules for the Survey and Construction of Passenger Ships (2.1) and the associated guidance for the aforementioned rules)
The draft amendment applies to ships and equipment for which the application for Classification Survey during Construction is submitted to the Society after 1 July 2025.
(2) Other than (1) above
Effective date of this draft amendment is 1 July 2025.

ID: DX24-06

Amended	Original	Remarks
RULES FOR APPROVAL OF MANUFACTURERS AND SERVICE SUPPLIERS **Part 3 REQUIREMENTS FOR APPROVAL OF SERVICE SUPPLIERS** **Chapter 14 FIRMS ENGAGED IN MEASUREMENTS OF NOISE LEVEL ONBOARD SHIPS** **14.5 Reporting to the Society** **14.5.1 Verification** Suppliers are to receive surveyor verification for each separate measurement and have the surveyor sign each report of measurement results. **14.5.2 Reporting** A noise survey report is to be made for each ship. The report is to comprise information on the noise levels in the various spaces on board. The report is to show the reading at each specified measuring point. The points are to be marked on a general arrangement plan, or on accommodation drawings attached to the report, or are to otherwise be identified. The noise survey report is to be made in accordance with **Form 1** of **Annex B2.3.1-2, Part B of the Survey and Construction of Steel Ships**.	**RULES FOR APPROVAL OF MANUFACTURERS AND SERVICE SUPPLIERS** **Part 3 REQUIREMENTS FOR APPROVAL OF SERVICE SUPPLIERS** **Chapter 14 FIRMS ENGAGED IN MEASUREMENTS OF NOISE LEVEL ONBOARD SHIPS** **14.5 Reporting to the Society** **14.5.1 Verification** Suppliers are to receive surveyor verification for each separate measurement and have the surveyor sign each report of measurement results. **14.5.2 Reporting** A noise survey report is to be made for each ship. The report is to comprise information on the noise levels in the various spaces on board. The report is to show the reading at each specified measuring point. The points are to be marked on a general arrangement plan, or on accommodation drawings attached to the report, or are to otherwise be identified. The noise survey report is to be made in accordance with **Form 1** of **Annex B2.3.1-1(11), Part B of the Guidance for the Survey and Construction of Steel Ships**.	

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025.		

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS **Part A GENERAL RULES** **1.2 Class Notations** **1.2.7 Application of Special Survey Scheme** **5** The notation "*Hull Construction Monitoring*" (abbreviated to *HCM*) is affixed to the Classification Characters of ships whose surveys for critical structural areas are carried out based upon a construction monitoring plan in accordance with the requirements in **2.1.2, Part B.** For ships subject to *SOLAS Chapter II-1 Regulation 3-10*, the additional notation of "*Goal-based Ship Construction Standards*" (abbreviated to *GBS*) is suffixed to the notation "*HCM*" (e.g. *HCM-GBS*).	**RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS** **Part A GENERAL RULES** **1.2 Class Notations** **1.2.7 Application of Special Survey Scheme** **5** The notation "*Hull Construction Monitoring*" (abbreviated to *HCM*) is affixed to the Classification Characters of ships whose surveys for critical structural areas are carried out based upon a construction monitoring plan in accordance with the requirements in **1.1.12, Part B.** For ships subject to *SOLAS Chapter II-1 Regulation 3-10*, the additional notation of "*Goal-based Ship Construction Standards*" (abbreviated to *GBS*) is suffixed to the notation "*HCM*" (e.g. *HCM-GBS*).	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025.		

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS **Part B CLASS SURVEYS** **Chapter 1 GENERAL** **1.1 Surveys** (Deleted)	**RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS** **Part B CLASS SURVEYS** **Chapter 1 GENERAL** **1.1 Surveys** **1.1.12 Construction Monitoring** **1** For ships subject to *SOLAS Chapter II-1 Regulation 3-10*, which are contracted for construction on or after 1 January 2018, surveys for critical structural areas during construction are to be carried out based upon a construction monitoring plan in accordance with the "Guidelines for Hull Construction Monitoring" issued separately by the Society. **2** Notwithstanding **-1**, surveys for other ships may be carried out based upon a construction monitoring plan in accordance with the "Guidelines for Hull Construction Monitoring" upon request.	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025.		

Amended	Original	Remarks
Chapter 2 CLASSIFICATION SURVEYS	**Chapter 2 CLASSIFICATION SURVEYS**	
2.1 Classification Survey during Construction	(Newly added)	・The provision related to asbestos is moved to Amended 2.1.7-1(9) as survey requirement. ・Establish the provisions related to the examination for quality control system including patrol survey.
2.1.1 General*		
1 When it is intended to build a ship for classification by the Society, the hull and equipment, machinery, fire protection and detection, means of escape, fire extinction, electrical installation, stability and load lines are to be ascertained that they meet the relevant requirements in the Rules.		
2 When it is intended to build a ship for classification by the Society, a ship is to be constructed under quality control system in order to ascertain appropriate quality. For the purpose, the Society examine the situation for facility, technology and quality control related to construction of ships.		
2.1.2 Construction Monitoring	(Newly added)	Moved the provisions specified in Original 1.1.12 Part B to Amended 2.1.2.
1 For ships subject to *SOLAS* Chapter II-1 Regulation 3-10, the critical structural areas during construction are to be based upon a construction monitoring plan in accordance with the "Guidelines for Hull Construction Monitoring" issued separately by the Society.		
2 Notwithstanding **-1** above, other ships may be based upon a construction monitoring plan in accordance with the "Guidelines for Hull Construction Monitoring" upon request.		
2.1.3 Submission of Plans and Documents*	(Newly added)	・The provisions related to plans and documents specified in Original "2.1.2 Submission of Plans and Documents
1 When it is intended to build a ship for classification by the Society, the applicable plans and documents specified		

Amended	Original	Remarks
in **(1)** to **(6)** below are to be submitted. The plans and documents to be approved by the Society are "Plans and Documents for Approval", the plans and documents including all alternation during the work are "Finished Plans", the plans and documents except "Plans and Documents for Approval" and "Finished Plans" are "Other Plans and Documents" (hereinafter same in this chapter). Plans and Documents for Approval and Other Plans and Documents are to be submitted to the Society before the work is commenced and Finished Plans are to be submitted to the Society at the completion of a classification survey. (1) Plans and Documents for Approval, Other Plans and Documents and Finished Plans(Submission) releated to hull specified in **Table B2.1**. (2) Plans and Documents for Approval, Other Plans and Documents and Finished Plans(Submission) releated to machinery specified in **Table B2.2**. (3) For ships subject to **Part N**, Plans and Documents for Approval, Other Plans and Documents and Finished Plans (Submission) related to ships carrying liquefied gases in bulk specified in **Table B2.3** in addition to **(1)** and **(2)** above. (4) For ships subject to **Part S**, Plans and Documents for Approval, Other Plans and Documents and Finished Plans (Submission) related to ships carrying dangerous chemicals in bulk specified in **Table B2.4** in addition to **(1)** and **(2)** above. (5) For ships subject to **Part GF**, Plans and Documents for Approval, Other Plans and Documents and Finished Plans (Submission) related to ships using		for Approval", "2.1.3 Submission of Other Plans and Documents" and "2.1.7 Finished Plans" are integrated and specify the provisions to Amended "2.1.3 Submission of Plans and Documents". ・The description and necessity of submission for each plans and documents are specified in Amended Table B2.1 to B2.5.

Amended	Original	Remarks
low-flashpoint fuels specified in **Table B2.5** in addition to **(1)** and **(2)** above. (6) Plans and documents other than **(1)** to **(5)** above when deemed necessary by the Society. **2** Plans and documents specified in **1** above are to be in accordance with **(1)** to **(5)** below. (1) Hull structural plans are to include scantling details, material details, location of butts and seams, cross section details as necessary, details of welding such as sizes and proportions applicable to the ship, and other necessary information unless specified otherwise. (2) For hull structures subject to **An3.6, Annex 1.1, Part 2-2, Part C**, renewal thicknesses are to be indicated in the relevant plans. (3) For structural members of ships subject to *SOLAS Chapter II-1 Regulation 3-10*, net (renewal) scantlings, as built scantlings and voluntary addition thickness are to be indicated. (4) Related plans and documents are to indicate in detail the quality of materials used, scantlings and arrangements of structural members, their attachments, clearance between the bottom of boilers and the top of floors, and other particulars necessary for examination of proposed constructions. (5) For plans and documents specified in **1** above, where the information is included in plans and documents, the submission of the other plans and documents related to the information may be dispensed with. **3** The applicant specified in **2.3, Chapter 2,**		

Amended	Original	Remarks
Regulations for the Classification and Registry of Ships is to submit the plans and documents specified in **1** above to the Society in accordace with **(1)** to **(3)** below. (1) Where the submission of plans and documents by paper, 2 sets for the Society and necessary sets for returning to the applicant are to be submitted. (2) Where the submission of plans and documents electrically, the plans and documents are to be submitted using the systems prepared by the Society. (3) Where the submission of plans and documents by means other than **(1)** and **(2)** above, the plans and documents are to be submitted by the means deemed appropriate by the Society. **4** Where the applicant specified in **2.3, Chapter 2 Regulations for the Classification and Registry of Ships** intends to obtain approval of plans and documents in advance due to the preparation of work, an application for prior approval of plans and documents is to be submitted to the Society. When an application for classification survey is submitted, an application for prior approval of plans and documents is automatically are transferred to the application for classification survey. **2.1.4 Plans and Documents to be Maintained On Board*** **1** At the completion of a classification survey, the plans and documents specified in **(1)** to **(7)** below are to be are on board. Duplicate plans and documents are not required. (1) Finished Plans(On Board) specified in **Table B2.1** and **Table B2.2**. (2) For ships subject to **Part N**, Finished Plans(On	(Newly added)	The description and necessity of storage on board for each plan and document are specified in Amended Table B2.1 to B2.6.

Amended	Original	Remarks
Board) specified in **Table B2.3** in addition to **(1)** above. (3) For ships subject to **Part S**, Finished Plans(On Board) specified in **Table B2.4** in addition to **(1)** above. (4) For ships subject to **Part GF**, Finished Plans(On Board) specified in **Table B2.5** in addition to **(1)** above. (5) For ships engaged on international voyages, the Ship Construction File specified in **Table B2.1** in addition to **(1)** above. (6) Notwithstanding **(5)** above, for ships complying with *SOLAS* Chapter II-1 Regulation 3-10, the Ship Construction File specified in **Table B2.1** in addition to **(1)** above. The construction file is to be included the information specified in **Table B2.6**. (7) Plans and documents other than **(1)** to **(6)** above when deemed necessary by the Society. **2.1.5 Storage of Ship Construction Files** **1** Plans and documents to be included in the Ship Construction Files for ships engaged on international voyages and subject to *SOLAS Chapter II-1 Regulation 3-10* do not need to be actually in the file nor stored at the same location, provided that the location, status and other necessary information of such documents are addressed in the file. **2** Ship Construction Files for ships subject to *SOLAS* Chapter II-1 Regulation 3-10 are to be maintained in accordance with **(1)** to **(4)** below. (1) Some parts of Ship Construction Files may be	(Newly added)	The provisions specified in Original B2.1.6-2 Part B Guidance are moved to Amended 2.1.5 “Storage of Ship Construction Files”.

Amended	Original	Remarks
subject to various degrees of or otherwise restricted access and such documentation may be appropriately kept in an onshore archive deemed appropriate by the Society. In such cases, procedures to access the information kept in said archive are to be specified in Ship Construction Files kept on board the ship. Finally, all intellectual property provisions within the Ship Construction File are to be duly complied with. (2) Ship Construction Files are to be available to the Society and flag states throughout the ship's life. (3) Plans and documents included in Ship Construction Files for which the normal storage location is specified as an onshore archive in **Table B2.6** are to be available on board. (4) Ship Construction Files are to be appropriately updated for major events, including but not limited to substantial repairs and corrosion, or modifications to the ship structure. Documented procedures for updating Ship Construction Files are to be included within safety management systems.		The provisions specified in Original B2.1.2-7 Part B Guidance are moved to Amended 2.1.6 "Coating and Corrosion Resistant Steel Technical Files".
2.1.6 Coating and Corrosion Resistant Steel Technical Files **1** Coating Technical Files For the coatings of internal spaces, the coating technical files are to include at least **(1)** to **(7)** below. (1) A copy of the statement of compliance or type approval certificate. (2) A copy of the technical data sheet that includes **(a)** to **(f)** below. (a) Product name and identification mark and/or	(Newly added)	

Amended	Original	Remarks
number (b) Materials, components and composition of the coating system, colours (c) Minimum and maximum dry film thickness (d) Application methods, tools and/or machines (e) Condition of surface to be coated (de-rusting grade, cleanness, profile, etc.) (f) Environmental limitations (temperature, humidity, etc.); (3) Shipyard work records of coating application that includes **(a)** to **(e)** below. (a) Applied actual space and area (in *square metres*) of each compartment (b) Applied coating system (c) Time of coating, thickness, number of layers, etc. (d) Ambient condition during coating (e) Method of surface preparation (4) Procedures for inspection and repair of coating system during ship construction; (5) Coating log issued by the coating inspector, stating that the coating was applied in accordance with the specifications to the satisfaction of the coating supplier representative and specifying deviations from the specifications, see *IMO* Resolution *MSC.*215(82) **Annex 2** or *MSC.*288(87) **Annex 2** for an example of the daily log and non-conformity report; (6) Shipyard's verified inspection report that includes **(a)** to **(d)** below.		

Amended	Original	Remarks
(a) Completion date of inspection (b) Result of inspection (c) Remarks (if given) (d) Coating inspector's signature (7) Procedures for in-service maintenance and repair of coating system. **2** Corrosion Resistant Steel Technical Files Corrosion resistant steel technical files are to include at least **(1)** to **(3)** below. (1) Copy of Type Approval Certificate. (2) Technical data that includes **(a)** and **(b)** below. (a) Approved welding methods and welding consumables (b) Repairing methods recommended by the manufacturer (if any) (3) Records of the application that includes **(a)** and **(b)** below (**(a)** and **(b)** may be substituted for by hull related approved drawings in cases where the required information is given in the plans): (a) Applied actual space and area of each compartment. (b) Applied product and its thickness. **2.1.7 Survey** **1** General (1) For Classification surveys during Construction, the survey items specified in **2.1.7** is to be implemented. (2) For the surveys, the applicant is to prepare test plans for review by the Society prior to survey. Test and measurement records are to be submitted to the Society, as required.	(Newly added)	・The provisions related to survey specified in Original "2.1.4 Presence of Surveyor", "2.1.5 Hydrostatic Tests, Watertight Tests, and Relevant Test", "2.1.8 Verification of Coating Application", "2.3.1 Sea Trials", "2.3.2 Stability Experiments" and "2.4 Loading Tests" are integrated and specify the provisions to Amended "2.1.7 Survey". ・The description for each survey requirements is specified in Amended Table B2.7 to B2.13.

Amended	Original	Remarks
(3) Surveys may be carried out at manufacturing sites in cases where said surveys may be difficult to carry out at shipyards. (4) For the ships subject to alternative design and arrangement in accordance with the Rules, the assessment and approval are to be implemented in accordance with the Rules. (5) The presence of surveyors may be increased or decreased based on the actual status of facilities, technical abilities and quality control at the place of manufacture, except in the case of sea trials. (6) In addition to the items specified in this **2.1.7**, other surveys may be required in cases where deemed necessary by the Society. (7) To ascertain the common understanding of applicable Rules, survey items during construction and the details of means and so on, a kick-off meeting between the Society and the survey applicant is to take place prior to the commencement of the survey. (8) In order to have a common understanding of the applicable requirements and recognised fabrication standards (RFS), and the details of each survey item during construction and their survey methods, etc., the Society is to hold kick-off meetings with applicants of registration surveys during construction prior to the commencement of such surveys. The quality standards to be applied are to be in accordance with **(a)** and **(b)** below. (a) Shipbuilding quality standards for the hull		

Amended	Original	Remarks
structure during new construction are to be reviewed and agreed during the kick-off meeting. Structural fabrication is to be in accordance with *IACS* Recommendation 47 "Shipbuilding and Repair Quality Standard" (*IACS* Rec.47), or a RFS which has been accepted by the Society prior to the commencement of fabrication or construction. (b) Where an RFS other than *IACS* Rec.47 is applied, the shipyard is to create a summary document referencing the RFS to be used in construction, highlighting any limitations to usage of the selected RFS, a comparison of the tolerance and fabrication standards of the selected RFS with those of *IACS* Rec.47, etc. This summary document is to be included with the "record of kick-off meeting" for the ship. For ships subject to *SOLAS* Chapter II-1 Regulation 3-10, the summary document is also to be included in the Ship Construction File. (9) Materials which contain asbestos are not being used. **2** Hull and equipment For hull and equipment, relevant items in **Table B2.7** are to be implemented. **3** Machinery and Electrical Equipment For machinery and electrical equipment, relevant items in **Table B2.8** are to be implemented. **4** Fire Protection, Means of Escape and Fire Fighting Equipment For fire protection, means of escape and fire fighting		

Amended	Original	Remarks
equipment, relevant items in **Table B2.9** are to be implemented. **5** Ship Construction File The survey for Ship Construction Files specified in **2.1.4(6)** are to be implemented in accordance with **(1)** to **(4)** below. (1) Ship Construction Files stored on board and in onshore archives are to contain **(a)** and **(b)** below. (a) Plans and documents required by **Table B2.1** and **Table B2.6**. (b) Additional drawings or documents provided by shipyards in accordance with the Ship Construction File's list of plans and documents. (2) Storage locations of plans and documents are to be specified as either "on board" or "onshore archive". For the plans and documents for which the normal storage location is specified as onshore archive in **Table B2.6**, that storage location of such plans and documents are to be stored on board. **6** Verification of Coating Application For the coatings of internal spaces subject to **3.3.5.3** and **3.3.5.4, Part 1, Part C of the Rules**, and **22.4.2** or **22.4.3, Part CS of the Rules**, the items specified in **Table B2.10** are to be implemented prior to reviewing the coating technical files for dedicated seawater ballast tanks, etc. and cargo oil tanks. **7** Sea Trials In the classification survey of all ships, the tests specified in **Table B2.11** and **Table B2.12** are to be implemented in the full load condition, in the calmest		

Amended	Original	Remarks
possible sea and weather condition, and in the sufficiently deep unrestricted water. However, where sea trials cannot be implemented in the full load condition, sea trials may be implemented in another loaded condition deemed appropriate. The noise measurements specified in **Table B2.11** are to be carried out at either the full load condition or the ballast condition. **8** Stability Experiments (1) In the classification survey, stability experiments(inclining tests and oscillation tests) are to be implemented upon completion of the ship. The lightship displacement and the longitudinal, transverse and vertical position of its centre of gravity are to be determined. A stability information booklet, which is to be prepared on the basis of the particulars of stability determined by the results of stability experiments. (2) For inclining tests, **Annex 2.3.2 "Guidance for Inclining Test"** gives the standard method. (3) The stability experiments of an individual ship may be dispensed with, provided that reliable stability data is obtained from the stability experiments of a sister ship or other adequate means and a special approval is given by the Society. (4) Where a stability instrument is fitted on board the ship, an operation manual for the instrument is to be provided on board. A functional test for the stability instrument is to be implemented. **9** Loading Tests For the registration of ships carrying liquefied gases		

Amended	Original	Remarks
in bulk intended to load the cargoes which are required the test under actual loading condition, loading tests are to be implemented. However, the test may be implemented at the first loading after completion of the classification survey in case that the ship cannot be loaded with its intended cargoes.		
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025. **2.** Notwithstanding the amendments to the Rules, the current requirements apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date. **3.** Notwithstanding the provision of preceding **2.**, the amendments to the Rules may apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date.		
Chapter 2 CLASSIFICATION SURVEYS **2.2 Classification Survey of Ships Not Built under Survey** **2.2.1 General*** **1** In Classification Surveys of Ships Not Built under Survey, examinations of the hull and equipment, machinery, fire protection and detection, means of escape, fire fighting system, electrical installations, stability and load lines are	**Chapter 2 CLASSIFICATION SURVEYS** **2.2 Classification Survey of Ships Not Built under Survey** **2.2.1 General*** **1** In the Classification Survey of ships not built under the Society's survey, the actual scantlings of main parts of the ship are to be measured in addition to such examination of the hull and equipment, machinery, fire protection and	The provisions specified in Original "B2.2.1 General" except B2.2.1-1.(1) and (2) are moved to Amended "2.2.1 General".

Amended	Original	Remarks
required for the Special Survey corresponding to the ship's age in order to ascertain they meet relevant requirements in the Rules. In addition, the actual scantlings of the main parts of ships are to be measured.	detection, means of escape, fire fighting system, electrical installations, stability and load lines as required for the Special Survey corresponding to the ship's age in order to ascertain that they meet the relevant requirements in the Rules.	
2 For ships subject to **1** above intending to implement a Classification Survey of Ships Not Built under Survey, necessary plans and documents are to be submitted to the Society in accordance with **2.1.3**.	(Newly added)	
3 For ships, subject to **1** above intending to implement a Classification Survey of Ships Not Built under Survey, the documents specified in **(1)** to **(6)** below are to be submitted to the Society in addition to the plans and documents specified in **2** above. (1) Ship inspection records or copies of survey reports (2) Record of official sea trial (where no records of official sea trials are available, a sea trial is to be carried out) (3) Stability information (where no stability information is available, inclining tests are to be carried out in accordance with **2.1.7-8)** (4) For ships carrying liquefied gases in bulk, test reports for loading test (Where no test reports or enough service records, loading tests are to be carried out in accordance with **2.1.7-9**) (5) Copies of classification certificate, statutory certificate and certificate of registry (6) Other documents showing the ship's history and particulars (as much as possible)	(Newly added)	
4 Where examination of the plans and documents	(Newly added)	

Amended	Original	Remarks
specified in **1** and **2** above is made by the Society, the results will be notified to the applicant. Where sufficient examination cannot be done on the submitted plans and documents due to lack of information, the Society may require an on-board inspection.		
5 For ships, subject to **1** above intending to implement a Classification Survey of Ships Not Built under Survey, the plans and documents required to be kept on board re to be in accordance with **2.1.4**.	(Newly added)	
6 For ships which appear to have some drawback regarding classification with the Society, a preliminary investigation may be made by the Society.	(Newly added)	
7 Modification of Survey Requirements	(Newly added)	
(1) Where the owner wishes to postpone a part of the survey and the Society deems it appropriate, postponement may be approved based on examinations of the present condition and seaworthiness of the ship. The postponed examinations are to be completed within one year.		
(2) Depending on the situation, special consideration may be given to the requirements for Classification Surveys of Ships Built under Government Survey provided that a year has not passed since the ship was completed and the next Special Survey is made to coincide with the due date of the next government Special Survey.		
8 Where the applicant specified in **2.3, Chapter 2 Regulations for the Classification and Registry of Ships** intends to obtain approval of plans and documents in advance due to the preparation of work, an application for prior	(Newly added)	

Amended	Original	Remarks
approval of plans and documents is to be submitted to the Society. When an application for classification survey is submitted, an application for prior approval of plans and documents is automatically transferred to the application for classification survey.		
9 Notwithstanding **1** and **2** above and **2.2.2** below, Classification Surveys of Ships Not Built under Survey may be implemented by other equivalent survey methods in cases where deemed appropriate by the Society.	(Newly added)	
2.2.2 Hydrostatic Tests, Watertight Tests and Relevant Tests	**2.2.2 Hydrostatic Tests, Watertight Tests, and Relevant Tests**	
In the classification survey specified in **2.2.1**, sea trials are to be carried out after the following items have been completed: hydrostatic tests and watertight tests in accordance with **(1)** and **(2)** below; maintenance of machinery and determination of the working pressure of the boilers; and adjustment of safety valves and accumulation tests of the boilers. Tests and trials may be dispensed with at the discretion of the Society with the exception of hydrostatic tests of boilers and pressure vessels of which important parts have been newly repaired, main steam pipes, and air tanks of which the interior cannot be inspected; and tests for gas leakage of refrigerating machinery on board.	In the Classification Survey prescribed in **2.2.1**, sea trials are to be carried out after the following items have been completed: hydrostatic tests and watertight tests in accordance with the requirements shown below in **(1)** and **(2)**; maintenance of machinery and determination of the working pressure of the boilers; and adjustment of safety valves and accumulation tests of the boilers. Tests and trials may be dispensed with at the discretion of the Society with the exception of hydrostatic tests of boilers and pressure vessels of which important parts have been newly repaired, main steam pipes, and air tanks of which the interior can not be inspected; and tests for gas leakage of refrigerating machinery on board.	The provisions specified in Original "B2.5.1 Examination of Altered Parts" (except B2.5.1-2) are moved to Amended "2.3.1 Examination of Altered Parts".
(1) Double bottoms, both peaks, tanks, cofferdams and chain lockers, watertight bulkheads and shaft tunnels are to be tested as specified in **item 10(1), Table B2.7**.	(1) Double bottoms, both peaks, tanks, cofferdams and chain lockers, watertight bulkheads and shaft tunnels are to be tested as specified in **2.1.5(1)**.	
(2) Hydrostatic, leakage or airtight tests are to be carried out on machinery and its parts at the pressures	(2) Hydrostatic, leakage or airtight tests are to be carried out on machinery and its parts at the pressures	

Amended	Original	Remarks
specified in the relevant chapters of **Part D**.	specified in the relevant chapters of **Part D**.	
2.3 Alterations	**(Newly added)**	
2.3.1 Examinations of Altered Parts*		
1 In cases where ships classified by the Society undergo repairs, alternations, modifications and related outfitting related to thereto(hereinafter referred to as "modifications, etc.") for hull and equipment, machinery, fire protection and detection, means of escape, fire fighting system, electrical installations, stability and load lines, such ships are to continue to at least comply with any previously applicable requirements.		
2 If ships constructed before the date on which any relevant amendments enter into force, are, as a rule, to comply with any requirements for ships constructed on or after that date to at least the same extent as they did before undergoing such modifications, etc.		
3 In cases where ships undergo modifications, etc. which affect main particulars (hereinafter referred to as "major conver- sion"), the concerned ship is to comply with requirements in force at the time of such modifications, etc. In cases where the Society agrees that it is difficult to apply new requirements, such requirements may be waived subject to Administration agreement. A major conversion, for example, refers to (but is not limited to) **(1)** to **(3)** below.		
(1) Alteration of the dimensions of a ship; for example, the lengthening of a ship by adding a new midbody. The hull structure, machinery and equipment are to comply with all requirements in force at time of		

Amended	Original	Remarks
alteration. For example, in the case of the lengthening of a ship, the new midbody is to comply with all relevant requirements (for example, longitudinal strength and equipment numbers.) which are affected by such alteration. (2) Change of ship type; for example, the conversion from tanker to bulk carrier. (3) Modification of construction which affects necessary requirements related to ship subdivisions. For ships not falling under any of **(a)** to **(c)** below, with respect to Required Subdivision Index (*R*) and Attained Subdivision Index (*A*) that are specified in **2.3.2, Part 1, Part C**, it is demonstrated that the *A/R* ratio calculated for the ship after such a modification is not less than the *A/R* ratio calculated for the ship before the modification. However, in cases where the ship's *A/R* ratio before modification is equal to or greater than 1, it is necessary that the ship's *A/R* ratio after modification be equal to or greater than 1. (a) Ships for which the building contract is placed on or after 1 January 2020. (b) In the absence of a building contract, the keel of ships is laid or which are at a similar stage of construction on or after 1 July 2020. (c) The delivery of ships is on or after 1 January 2024. **4** "Requirements in force at the time of alteration" are those requirements, unless otherwise specified, for a conversion constructed after either of the dates specified in **(1)** and **(2)** below.		

Amended	Original	Remarks
(1) The date on which the contract is placed for the conversion. (2) In the absence of a contract, the date on which the work identifiable with the specific conversion begins. **5** The necessity for re-inclining tests and amending stability information for ships subject to major conversions is to be in accordance with **(1)** to **(3)** below. In this sub-paragraph, "Stability information" includes any document (whether on paper or electronic) or electronic means of calculation of stability which includes lightship properties. This may include, but is not limited to, approved stability books, computer software for onboard calculations of stability, approved strength books and loading instruments. (1) The determination of the necesiity for re-inclining tests and amending stability information is to be in accordance with **Table B2.13**. (2) Where the stability information has been amended in accordance with **(1)** above to reflect the lightship properties derived from the lightweight calculation, it is to be approved by the Society and provided to the ship's master with instructions that it is now to be used for all stability calculations. (3) Where it is judged in accordance with **(1)** above that re-inclining tests and amending stability information are not necessary, ships are to be in accordance with **(a)** and **(b)** below. In this context, "lightship properties" means the weight and the centre of gravity of ships.		

Amended	Original	Remarks
(a) A copy of the lightweight calculation report endorsed by the Society is to be provided on board for future reference with no further amendments required to the stability information. "Lightweight calculation" means a detailed calculation of weights added to, removed from, and relocated on a ship, resulting from all alterations to the ship since the date of the last approved inclining test to determine the adjusted lightship properties. The documented weights and their centres of gravity are to be verified on board or on site by the attending Society surveyor. (b) Deviations of lightship properties are, however, still to be noted in the stability information on board for reference and applied to all future references and stability/loading calculations. **6** The tightness of such boundaries is to be verified by the tests specified in **Annex 2.1.5 "Testing Procedures of Watertight Compartments"** in cases where modifications or repairs that affect the tightness of such boundaries have been carried out. **7** The astern response characteristics of ships considered by the Society to have undergone significant repairs which impact the response characteristics of their propulsion systems are to be verified in accordance with **Table B2.11** after such repairs are carried out. Tests are to demonstrate the satisfactory operation of the equipment or system under realistic service conditions at least over the manoeuvring range of the propulsion plant in both the ahead		

Amended	Original	Remarks
and astern directions. Depending on the actual extent of the repairs, the Society may accept a reduction of the test plan. **8** For ships where selective catalytic reduction systems, exhaust gas cleaning systems or exhaust gas recirculation systems are newly installed, applicable surveys for the relevant systems are to be carried out in accordance with relevant requirements in this chapter. **9** Where the applicant specified in **2.3, Chapter 2 Regulations for the Classification and Registry of Ships** intends to obtain approval of plans and documents in advance due to the preparation of work, an application for prior approval of plans and documents is to be submitted to the Society. When an application for classification survey is submitted, an application for prior approval of plans and documents is automatically transferred to the application for classification survey.		
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025.		

Amended	Original	Remarks
Chapter 2 CLASSIFICATION SURVEYS		
Table B2.1 Plans and Documents – Hull (General) Refer to attached table.	(Newly added)	
Table B2.2 Plans and Documents – Machinery Refer to attached table.	(Newly added)	
Table B2.3 Plans and Documents – Ships Carrying Liquefied Gases in Bulk Refer to attached table.	(Newly added)	
Table B2.4 Plans and Documents – Ships Carrying Dangerous Chemicals in Bulk Refer to attached table.	(Newly added)	
Table B2.5 Plans and Documents – Ships Using Low-flashpoint Fuels Refer to attached table.	(Newly added)	
Table B2.6 List of Information to be Included in the Ship Construction File (SCF) (Ships subject to *SOLAS Chapter II-1 Regulation 3-10*) Refer to attached table.	Table B2.1 List of Information to be Included in the Ship Construction File (SCF)	Amended Table B2.6 is not changed from Original Table B2.1 except for the table title and number.
Table B2.7 Survey - Hull and Equipment Refer to attached table.	(Newly added)	
Table B2.8 Survey - Machinery and Electrical Installations Refer to attached table.	(Newly added)	

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
Table B2.9 Survey - Fire Protection, Means of Escape, Fire Detection and Extinction Refer to attached table. Table B2.10 Survey – Coating Application Refer to attached table. Table B2.11 Survey – Sea Trials Refer to attached table. Table B2.12 Survey – Sea Trials of Reciprocating Internal Combustion Engines Refer to attached table. Table B2.13 Necessity for Re-inclining Tests and Amending Stability Information Refer to attached table.	(Newly added) (Newly added) (Newly added) Table B2.3.1-4 Sea Trials of Reciprocating Internal Combustion Engines Table B2.5.1-1 The need for re-inclining tests and amending stability information	Amended Table B2.12 is not change from Original Table B2.3.1-4 except for the table number. Amended Table B2.13 is not change from Original Table B2.5.1-1 except for the table number.
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025. **2.** Notwithstanding the amendments to the Rules, the current requirements apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date. **3.** Notwithstanding the provision of preceding **2.**, the amendments to the Rules may apply to the ships and equipment for which the application for Classification		

Amended	Original	Remarks
Survey during Construction submitted to the Society before the effective date.		
Chapter 3 ANNUAL SURVEYS **3.2 Annual Surveys for Hull, Equipment, Fire Extinction and Fittings** **3.2.1 Examination of Plans and Documents*** (Omitted) **2** For ships subject to *SOLAS Chapter II-1 Regulation 3-10*, the Ship Construction File in **2.1.5-2** are to be examined in accordance with **(1)** to **(5)** below: (1) For a Ship Construction File stored on board a ship, the Surveyor is to examine the information included in it on board the ship. (2) For a Ship Construction File stored in an onshore archive, the Surveyor is to examine the list of information included in it stored in the onshore archive. (3) The Surveyor is to confirm upon completion of the survey that the Ship Construction File has been updated whenever any modification of the documentation included in it has taken place. (4) The Surveyor is to confirm upon completion of the survey that any addition and/or renewal of materials used for the construction of the hull structure are documented within the list of materials specified in	**Chapter 3 ANNUAL SURVEYS** **3.2 Annual Surveys for Hull, Equipment, Fire Extinction and Fittings** **3.2.1 Examination of Plans and Documents*** (Omitted) **2** For ships subject to *SOLAS Chapter II-1 Regulation 3-10*, the Ship Construction File in **2.1.6-3** are to be examined in accordance with **(1)** to **(5)** below: (1) For a Ship Construction File stored on board a ship, the Surveyor is to examine the information included in it on board the ship. (2) For a Ship Construction File stored in an onshore archive, the Surveyor is to examine the list of information included in it stored in the onshore archive. (3) The Surveyor is to confirm upon completion of the survey that the Ship Construction File has been updated whenever any modification of the documentation included in it has taken place. (4) The Surveyor is to confirm upon completion of the survey that any addition and/or renewal of materials used for the construction of the hull structure are documented within the list of materials specified in	

Amended	Original	Remarks
item 85, Table B2.1. (5) The Surveyor is to confirm that the Ship Construction File is available to the Society and the flag state throughout the ship's life.	**2.1.6-3(19)**. (5) The Surveyor is to confirm that the Ship Construction File is available to the Society and the flag state throughout the ship's life.	
Chapter 4 INTERMEDIATE SURVEYS **4.2 Intermediate Surveys for Hull, Equipment, Fire Extinction and Fittings** **4.2.1 Examination of Plans and Documents*** (Omitted) **2** For ships subject to *SOLAS Chapter II-1 Regulation 3-10*, the Ship Construction File in **2.1.5-2** are to be examined in accordance with **(1)** to **(5)** below: (1) For a Ship Construction File stored on board a ship, the Surveyor is to examine the information included in it on board the ship. (2) For a Ship Construction File stored in an onshore archive, the Surveyor is to examine the list of information included in it stored in the onshore archive. (3) The Surveyor is to confirm upon completion of the survey that the Ship Construction File has been updated whenever any modification of the documentation included in it has taken place. (4) The Surveyor is to confirm upon completion of the survey that any addition and/or renewal of materials used for the construction of the hull structure are documented within the list of materials specified in	**Chapter 4 INTERMEDIATE SURVEYS** **4.2 Intermediate Surveys for Hull, Equipment, Fire Extinction and Fittings** **4.2.1 Examination of Plans and Documents*** (Omitted) **2** For ships subject to *SOLAS Chapter II-1 Regulation 3-10*, the Ship Construction File in **2.1.6-3** are to be examined in accordance with **(1)** to **(5)** below: (1) For a Ship Construction File stored on board a ship, the Surveyor is to examine the information included in it on board the ship. (2) For a Ship Construction File stored in an onshore archive, the Surveyor is to examine the list of information included in it stored in the onshore archive. (3) The Surveyor is to confirm upon completion of the survey that the Ship Construction File has been updated whenever any modification of the documentation included in it has taken place. (4) The Surveyor is to confirm upon completion of the survey that any addition and/or renewal of materials used for the construction of the hull structure are documented within the list of materials specified in	

Amended	Original	Remarks
item 85, Table B2.1. (5) The Surveyor is to confirm that the Ship Construction File is available to the Society and the flag state throughout the ship's life.	**2.1.6-3(19)**. (5) The Surveyor is to confirm that the Ship Construction File is available to the Society and the flag state throughout the ship's life.	
Chapter 5 SPECIAL SURVEYS **5.2 Special Surveys for Hull, Equipment, Fire Extinction and Fittings** **5.2.1 Examination of Plans and Documents*** (Omitted) **2** For ships subject to *SOLAS Chapter II-1 Regulation 3-10*, the Ship Construction File in **2.1.5-2** are to be examined in accordance with **(1)** to **(5)** below: (1) For a Ship Construction File stored on board a ship, the Surveyor is to examine the information included in it on board the ship. (2) For a Ship Construction File stored in an onshore archive, the Surveyor is to examine the list of information included in it stored in the onshore archive. (3) The Surveyor is to confirm upon completion of the survey that the Ship Construction File has been updated whenever any modification of the documentation included in it has taken place. (4) The Surveyor is to confirm upon completion of the survey that any addition and/or renewal of materials used for the construction of the hull structure are documented within the list of materials specified in	**Chapter 5 SPECIAL SURVEYS** **5.2 Special Surveys for Hull, Equipment, Fire Extinction and Fittings** **5.2.1 Examination of Plans and Documents*** (Omitted) **2** For ships subject to *SOLAS Chapter II-1 Regulation 3-10*, the Ship Construction File in **2.1.6-3** are to be examined in accordance with **(1)** to **(5)** below: (1) For a Ship Construction File stored on board a ship, the Surveyor is to examine the information included in it on board the ship. (2) For a Ship Construction File stored in an onshore archive, the Surveyor is to examine the list of information included in it stored in the onshore archive. (3) The Surveyor is to confirm upon completion of the survey that the Ship Construction File has been updated whenever any modification of the documentation included in it has taken place. (4) The Surveyor is to confirm upon completion of the survey that any addition and/or renewal of materials used for the construction of the hull structure are documented within the list of materials specified in	

Amended	Original	Remarks
item 85, Table B2.1. (5) The Surveyor is to confirm that the Ship Construction File is available to the Society and the flag state throughout the ship's life.	**2.1.6-3(19)**. (5) The Surveyor is to confirm that the Ship Construction File is available to the Society and the flag state throughout the ship's life.	

Table B5.26 Additional Requirements at Special Surveys

Items	Examinations
1 Speed governors, generator circuit breakers and associated relays	(1) Performance tests are to be carried out with all generators operating under loaded condition, either separately or in parallel, as far as practicable.
2 Condensers, evaporators, and receivers	(1) For those that use NH_3 (R717) as the refrigerant, the parts exposed to the primary refrigerant are to be tested at a pressure of 90% of the design pressure (the pressure may be reduced down to 90% of the setting pressure of the relief valves). However, the pressure test may be replaced by other means as deemed appropriate by the Society.
3 All other piped machinery and parts not specified in -2 above	(1) Pressure tests are to be handled in accordance with the requirements of ~~**2.2.2(2)**~~**item 2**, **Table B2.8** where deemed necessary by the Surveyor.
4 Lighting systems, communication and signalling systems, ventilating systems, and other electrical equipment	(1) Performance tests (including operation tests) of interlocking devices used to ensure safe operation are to be carried out where deemed necessary by the Surveyor.
5 Electric generator sets, etc.	(1) Performance tests of electric generator sets and important auxiliaries are to be carried out.

Table B8.2 Surveys of Water Lubricated Shafts – Shafts Kind 1*A* and Kind 2 (Continued)

Items	Examinations	Ordinary Surveys	Partial Survey	Extension Survey	
				1Year	3Month
4 Propeller	(1) Verification that the propeller is free of damages which may cause the propeller to be out of balance. ~~(For extension survey, the information is confirmed by the record etc.)~~ (2) For ordinary surveys, checking propeller fitting condition to shaft. When the propeller shaft with keyless connection is force fitted to the shaft, it is to be ascertained that the pull-up length is within the upper and lower limits given in **7.3.1-1, Part D**.	○	○	○	○

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
8.3 Surveys of Oil Lubricated Shafts **8.3.1 Surveys of Shaft Kind 1*B* and Kind 1*C*** (Omitted) **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)**. (Omitted) (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. (Omitted) **8.3.2 Surveys of Shaft of the ships affixed with the notation *PSCM*** (Omitted) **5** The survey due date may be extended in cases where a survey is carried out in accordance with the following **(1)** to **(5)**. (Omitted) (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. (Omitted)	**8.3 Surveys of Oil Lubricated Shafts** **8.3.1 Surveys of Shaft Kind 1*B* and Kind 1*C*** (Omitted) **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)**. (Omitted) (4) The period of extension counts from the survey due date in cases where the extension survey is carried out within 1 *month* within the survey due date. (Omitted) **8.3.2 Surveys of Shaft of the ships affixed with the notation *PSCM*** (Omitted) **5** The survey due date may be extended in cases where a survey is carried out in accordance with the following **(1)** to **(5)**. (Omitted) (4) The period of extension counts from the survey due date in cases where the extension survey is carried out within 1 *month* within the survey due date. (Omitted)	

Table B8.3 Surveys of Oil Lubricated Shafts – Shafts Kind 1*B*, 1*C* or Shafts of Ships Affixed with Notation *PSCM*

Items	Examinations	Ordinary Survey	Partial Survey	Simplified Partial Survey	Extension Survey		
					2.5Year	1Year	3Month
4 Propeller	(1) Verification that the propeller is free of damages which may cause the propeller to be out of balance. (For extension survey, the information is to be confirmed by records etc.) (2) For ordinary surveys, checking propeller fitting condition to shaft. When the propeller shaft with keyless connection is force fitted to the shaft, it is to be ascertained that the pull-up length is within the upper and lower limits given in **7.3.1-1, Part D**.	○	○	○	○	○	

Amended	Original	Remarks
8.4 Surveys of Fresh Water Lubricated Shafts	**8.4 Surveys of Fresh Water Lubricated Shafts**	
8.4.1 Surveys of Shafts Kind 1*W*	**8.4.1 Surveys of Shafts Kind 1*W***	
(Omitted)	(Omitted)	
2 Notwithstanding **-1** above, for shafts which are subject to the fresh water sample test specified in **8.1.1(19)**, Partial Survey specified in **Table B8.4** may be carried out instead of an Ordinary Survey. In cases where the results of the Partial Survey are not satisfactory, the Ordinary Survey specified in **Table B8.4** is to be carried out.	**2** Notwithstanding **-1** above, for shafts which are subject to the lubricating oil analysis specified in **8.1.1(19)**, Partial Survey specified in **Table B8.4** may be carried out instead of an Ordinary Survey. In cases where the results of the Partial Survey are not satisfactory, the Ordinary Survey specified in **Table B8.4** is to be carried out.	
3 Notwithstanding **-1** and **-2** above, for shafts with keyless or flanged connections and which are subject to the fresh water sample test specified in **8.1.1(19)**, the Simplified Partial Survey specified in **Table B8.4** may be carried out instead of an Ordinary Survey or Partial Survey. In cases where the results of the Simplified Partial Survey are not satisfactory, the Ordinary Survey specified in **Table B8.4** is to be carried out.	**3** Notwithstanding **-1** and **-2** above, for shafts with keyless or flanged connections and which are subject to the lubricating oil analysis specified in **8.1.1(19)**, the Simplified Partial Survey specified in **Table B8.4** may be carried out instead of an Ordinary Survey or Partial Survey. In cases where the results of the Simplified Partial Survey are not satisfactory, the Ordinary Survey specified in **Table B8.4** is to be carried out.	
(Omitted)	(Omitted)	
6 For shafts which are carried out lubricating fresh	**6** For shafts which are carried out lubricating fresh	

<table>
<tr><th>Amended</th><th>Original</th><th>Remarks</th></tr>
<tr><td>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).
(Omitted)
(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.
(Omitted)</td><td>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).
(Omitted)
(4) The period of extension counts from the survey due date in cases where the extension survey is carried out within 1 month within the survey due date.
(Omitted)</td><td></td></tr>
<tr><td colspan="3">Table B8.4 Surveys of Fresh Water Lubricated Shafts – Shafts Kind 1W
<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">Simplified Partial Survey</th><th colspan="3">Extension Survey</th></tr>
<tr><th>2.5Year</th><th>1Year</th><th>3Month</th></tr>
<tr><td>4 Propeller</td><td>(1) Verification that the propeller is free of damages which may cause the propeller to be out of balance. <s>(For extension surveys, the information is to be confirmed by records etc.)</s>
(2) For ordinary surveys, checking propeller fitting condition to shaft. When the propeller shaft with keyless connection is force fitted to the shaft, it is to be ascertained that the pull-up length is within the upper and lower limits given in 7.3.1-1, Part D.</td><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td><td></td></tr>
</table></td></tr>
<tr><td>EFFECTIVE DATE AND APPLICATION

1. The effective date of the amendments is 1 July 2025.</td><td></td><td></td></tr>
<tr><td>Chapter 10 SURVEYS FOR STEEL BARGES

10.2.2 Submission of Plans and Documents
1 For barges subjected to Classification Survey during Construction, the plans and documents listed in 2.1.3 which are related to the hull structure and equipment of the barge are to be submitted to the Society as plans and documents for</td><td>Chapter 10 SURVEYS FOR STEEL BARGES

10.2.2 Submission of Plans and Documents
1 Submission of plans and documents for approval
For barges subjected to Classification Survey during Construction, the plans and documents listed in 2.1.2-1, -2, -3, -5, -7, -8, -9 which are related to the hull structure and</td><td></td></tr>
</table>

Amended	Original	Remarks
approval.	equipment of the barge as well as the following plans and documents are to be submitted to the Society for approval. (1) Skeg construction (2) Construction of the joint between push boat and barge (3) For barges required to have a loading manual in accordance with the requirements of **12.1.3 of Part Q**: the loading manual including the conditions for loading and other necessary information	
2 In addition to plans and documents specified in **-1** above, the following plans and documents, **(1)** to **(3)** as plans and documents for approval and **(4)** to **(6)** as other plans and documents, are to be submitted to the Society. (1) Skeg construction (2) Construction of the joint between push boat and barge (3) For barges required to have a loading manual in accordance with the requirements of **12.1.3 of Part Q**: the loading manual including the conditions for loading and other necessary information (4) Manuals for towing or pusher (5) Calculation sheets of torsional vibration for generation shafting with a capacity not less than 30 *kw* (6) Calculation sheets of battery capacity for navigation light (Omitted)	**2** Submission of plans and documents for reference For barges subjected to Classification Survey during Construction, the following plans and documents are to be submitted to the Society for reference in addition to the plans and documents for approval specified in **-1**. (1) Plans and documents listed in **2.1.3** which are related to the hull structure and equipment of the barge (2) Manuals for towing or pusher (3) Calculation sheets of torsional vibration for generation shafting with a capacity not less than 30 *kw* (4) Calculation sheets of battery capacity for navigation light (Omitted)	
10.2.3 Survey* **1** For barge hull construction and equipment, relevant items in **2.1.7** and **20.16, Part Q** are to be implemted.	**10.2.3 Presence of Surveyors*** **1** For barge hull construction and equipment, the presence of the Surveyor is required at relevant stages of the	

Amended	Original	Remarks
2 Notwithstanding **-1** above, sea traials specified in **2.1.7-6** may may be dispensed with. For barges with unusual construction or navigation system may be required to carry out sea trials by the Society.	work in relation to the materials, structure and equipment as specified in **2.1.4-1**. **2** For barge machinery, the presence of the Surveyor is required at the following stages of work notwithstanding the requirements in **2.1.4-2**. Submission of the test data specified in **20.16.1-2, -4** and **-5 of Part Q** may be required where deemed necessary by the Surveyor. 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) When the tests prescribed in **20.16.1-1 of Part Q** for boilers and pressure vessels belonging to Group I or Group II are carried out. (2) When the tests prescribed in **20.16.1-3 of Part Q** for the valves, cocks and distance pieces attached to shell plating are carried out. (3) When the tests prescribed in **20.16.1-7 of Part Q** for the explosion-proof type electrical equipment are carried out. (4) When machinery is installed on the barge. (5) When the tests and trials prescribed in **20.16.2 of Part Q** are carried out. (6) When the tests prescribed in **20.16.3 of Part Q** are carried out. (7) When the tests for special machinery are carried out.	
3 Submission of the test data specified in **20.16.1-2, -4** and **-5, Part Q** may be required where deemed necessary by the Surveyor.	(Newly added)	
4 To implement surveys of items specified specified in	(Newly added)	

Amended	Original	Remarks
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.		
(Deleted)	**10.2.4 Hydrostatic Tests, Watertight Tests, and Relevant Tests** In the Classification Survey during Construction, hydrostatic tests, watertight tests, and other relevant tests are to be conducted in accordance with the requirements specified in **2.1.5**.	
(Deleted)	**10.2.5 Sea Trials, Stability Experiments and Function Tests** **1** In the Classification Survey during Construction, sea trials specified in **2.3.1** may be omitted. However, for barges having unconventional construction or a special navigation system, sea trials may be required where deemed necessary by the Society. **2** Stability experiments are to be carried out in accordance with the requirements specified in **2.3.2**. **3** Loading tests are to be carried out in accordance with the requirements specified in **2.4.1**.	
(Deleted)	**10.2.6 Finished Plans** At the completion of a Classification Survey during Construction, the applicant is to prepare finished plans regarding the following drawings, and submit them to the Society. (1) General arrangement (2) Midship section, scantling plans (construction profile), deck plans, shell expansion, transverse	

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
	bulkheads, plans for rudder and rudder stock, and plans for cargo hatch covers (3) Bilge, ballast and cargo piping diagrams	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025. **2.** Notwithstanding the amendments to the Rules, the current requirements apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date. **3.** Notwithstanding the provision of preceding **2.**, the amendments to the Rules may apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date.		
10.2.4 Alteration of Registration Items Alterations to registration items are to be surveyed in accordance with the requirements specified in **2.3.1**.	**10.2.7 Alteration of Registration Items** Alterations to registration items are to be surveyed in accordance with the requirements specified in **2.5.1.**	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025.		

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
Chapter 12 SURVEYS FOR MOBILE OFFSHORE DRILLING UNITS AND SPECIAL PURPOSE BARGES	**Chapter 12 SURVEYS FOR MOBILE OFFSHORE DRILLING UNITS AND SPECIAL PURPOSE BARGES**	
12.2 Classification Survey during Construction	**12.2 Classification Survey during Construction**	
12.2.2 Submission of Plans and Documents*	**12.2.2 Submission of Plans and Documents***	
1 With respect to the Classification Survey during Construction, the following plans and documents are to be submitted as plans and documents for approval before the work is commenced.	**1** Submission of Plans and Documents for Approval With respect to the Classification Survey during Construction, the following plans and documents are to be submitted to the Society for approval before the work is commenced.	
(Omitted)	(Omitted)	
2 With respect to the Classification Survey during Construction, the following plans and documents are to be submitted as other plans and documents in addition to the plans and documents specified in **-1** above.	**2** Submission of Plans and Documents for Reference With respect to the Classification Survey during Construction, the following plans and documents are to be submitted for reference in addition to the plans and documents specified in **-1**.	
(Omitted)	(Omitted)	
12.2.3 Survey*	**12.2.3 Presence of Surveyor***	
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** During the Classification Survey, the presence of the Surveyor is required at the following stages of the work in relation to hull construction, equipment, machinery and electrical installations. 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	(1) When specified by the requirements of **2.1.4-1** and	

Amended	Original	Remarks
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 compleltion of each part of drilling derricks and substructures including supporting structures of drilling derricks and installation of drilling derricks and substructures on board.	**2.1.4-2** or when conducting the tests, examinations or inspections specified in **12.2.4,** and **12.2.6** (2) For machinery and electrical installations, when the tests, examinations or inspections specified in **11.1.3** and **12.1.3, Part P** are carried out (3) For column-stabilized units, when the draught scales are fitted (4) For large storage units, when the operation test of rupture hatches is carried out at a pressure below the design operational pressure (5) For units requiring the mooring system specified in **Chapter 10, Part P**, when that system is installed on the unit (6) For units with a dynamic positioning system specified in **Chapter 10, Part P**, at the following stages. (a) When components of the dynamic positioning system are installed on the units. (b) When tests are carried out in accordance with the testing procedures. (c) For units with a Class 2 or Class 3 dynamic positioning system, when tests for Failure Modes and Effects Analysis (*FMEA*) are carried out in accordance with testing procedures of demonstration tests. (7) For mobile offshore drilling units, when each part of drilling derricks and substructures including supporting structures of drilling derricks is completed and drilling derricks and substructures are installed on board.	

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
(Omitted) **12.2.4 Hydrostatic Tests, Watertight Tests, and Relevant Tests*** **1** Hydrostatic tests, watertight tests, and other relevant tests in the Classification Survey during Construction are to be in accordance with the requirements in **item10, Table B2.7**. (Omitted) **12.2.5 Documents to be Maintained On Board** At the completion of a classification survey, the applicable documents specified in **2.1.4** and the following drawings, plans, manuals, lists, etc, are to be provided on board the unit. (Omitted) **12.2.6 Sea Trials and Stability Experiments*** **1** For units that have main propulsion machinery, the following tests corresponding to the unit type are to be carried out in addition to the sea trials required in **2.1.7-7**: (Omitted)	(Omitted) **12.2.4 Hydrostatic Tests, Watertight Tests, and Relevant Tests*** **1** Hydrostatic tests, watertight tests, and other relevant tests in the Classification Survey during Construction are to be in accordance with the requirements in **2.1.5**. (Omitted) **12.2.5 Documents to be Maintained On Board** At the completion of a classification survey, the Surveyor confirm that the applicable documents specified in **2.1.6** and the following drawings, plans, manuals, lists, etc, are provided on board the unit. (Omitted) **12.2.6 Sea Trials and Stability Experiments*** **1** For units that have main propulsion machinery, the following tests corresponding to the unit type are to be carried out in addition to the sea trials required in **2.3.1-1** and **-3**: (Omitted)	

Amended	Original	Remarks
Chapter 14 SURVEY FOR FLOATING OFFSHORE FACILITIES FOR CRUDE OIL/PETROLEUM GAS PRODUCTION, STORAGE AND OFFLOADING	**Chapter 14 SURVEY FOR FLOATING OFFSHORE FACILITIES FOR CRUDE OIL/PETROLEUM GAS PRODUCTION, STORAGE AND OFFLOADING**	
14.2 Classification Surveys	**14.2 Classification Surveys**	
14.2.2 Submission of Plans and Documents	**14.2.2 Submission of Plans and Documents for Approval**	
1 At the Classification Surveys during construction of Floating Offshore Facilities, the following plans and documents are to be submitted as plans and documents for approval before the work is commenced.	**1** At the Classification Surveys during construction of Floating Offshore Facilities, the following plans and documents are to be submitted to the Society for approval before the work is commenced.	
(Omitted)	(Omitted)	
2 In the Classification Surveys during construction of Floating Offshore Facilities, the following plans and documents are to be submitted as other plans and documents in addition to those specified in **-1** above.	**2** In the Classification Surveys during construction of Floating Offshore Facilities, the following plans and documents are to be submitted for reference in addition to those specified in **-1** above.	
(Omitted)	(Omitted)	
14.2.3 Presence of Surveyors*	**14.2.3 Presence of Surveyors***	
1 At Classification Surveys during construction, the relevant items specified in **2.1.7** and the items specified in following **14.2.4** to **14.2.8** are to be implemented. In cases where the submitted plans and documents regarding tests, examinations or inspections specified in **14.2.2** are verified by the Society. 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.	**1** At Classification Surveys during construction, the presence of a surveyor is required at all stages of the work on hull construction, equipment, machinery and electrical installations in cases where the tests, examinations or inspections specified in **2.1** and **14.2.4** to **14.2.8** are carried out and in cases where the submitted plans and documents regarding tests, examinations or inspections specified in **14.2.2** are verified by the Society. To implement surveys of items specified otherwise by the Society, in lieu of traditional ordinary surveys where a surveyor is in attendance, the	

Amended	Original	Remarks
	Society may approve other survey methods which it considers to be appropriate.	
14.2.4 Hydrostatic and Watertight Tests **1** Hydrostatic and watertight tests conducted during Classification Surveys during construction are to be in accordance with **item 10, Table B2.7** (Omitted)	**14.2.4 Hydrostatic and Watertight Tests** **1** Hydrostatic and watertight tests conducted during Classification Surveys during construction are to be in accordance with **2.1.5.** (Omitted)	
Chapter 15 SURVEYS FOR WORK-SHIPS	**Chapter 15 SURVEYS FOR WORK-SHIPS**	
15.2 Classification Surveys during Construction	**15.2 Classification Surveys during Construction**	
15.2.2 Submission of Plans and Documents*	**15.2.2 Submission of Plans and Documents***	
1 In the Classification Survey during Construction, the following plans and documents in addition to those plans and documents specified in relevant requirements in **2.1.3** are to be submitted as plans and documents for approval before the work is commenced. The plans and documents may be submitted for examination by the Society prior to making an application for the classification of the ship as stipulated otherwise by the Society. (Omitted)	**1** In the Classification Survey during Construction, the following plans and documents in addition to those plans and documents specified in relevant requirements in **2.1.2** are to be submitted to the Society for approval before the work is commenced. The plans and documents may be submitted for examination by the Society prior to making an application for the classification of the ship as stipulated otherwise by the Society. (Omitted)	
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. (Omitted)	**2** In the Classification Survey during Construction, the following plans and documents in addition to those plans and documents specified in relevant requirements in **-1** above and **2.1.3** are to be submitted for reference. (Omitted)	
15.2.3 Presence of Surveyor*	**15.2.3 Presence of Surveyor***	
1 During the Classification Surveys, the relevant items	**1** During the Classification Surveys, with respect to the	

Amended	Original	Remarks
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)** **15.2.4 Sea Trials and Stability Experiments** **1** Sea Trials For ships that have main propulsion machinery, the following tests corresponding to ship type are to be carried out in addition to the sea trials required in **2.1.7-7**: (Omitted) **2** Stability Experiments Stability experiments required in **2.1.7-8** are to be carried out. **15.2.5 Documents to be Maintained On Board** At the completion of a classification survey, the finished versions of the following in addition to all of the applicable drawings, plans, manuals, lists, etc. listed in **2.1.4**, are to be on board. (Omitted)	stages of work related to hull construction, equipment, machinery and electrical installations, the presence of a Surveyor is required at the following stages in addition to those specified in **2.1.4**. 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) When performance tests, including the tests specified in **1.5** of **Annex 4.4.2-3, Part O**, are carried out on work-related installations (2) For ships with a dynamic positioning system, as specified in **12.2.3(6)** **15.2.4 Sea Trials and Stability Experiments** **1** Sea Trials For ships that have main propulsion machinery, the following tests corresponding to ship type are to be carried out in addition to the sea trials required in **2.3.1**: (Omitted) **2** Stability Experiments Stability experiments required in **2.3.2** are to be carried out. **15.2.5 Documents to be Maintained On Board** At the completion of a classification survey, the Surveyor is to confirm that the finished versions of the following in addition to all of the applicable drawings, plans, manuals, lists, etc. listed in **2.1.6**, are on board. (Omitted)	

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025. **2.** Notwithstanding the amendments to the Rules, the current requirements apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date. **3.** Notwithstanding the provision of preceding **2.**, the amendments to the Rules may apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date.		

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS **Part C HULL CONSTRUCTION AND EQUIPMENT** **Part 1 GENERAL HULL REQUIREMENTS** **Chapter 1 GENERAL** **1.5 Plans and Documents To Be Submitted** **1.5.1 General** **1.5.1.1** **1** For ships to be built under classification survey, prior to the commencement of shipbuilding, plans and documents specified in **2.1.3, Part B** are to be submitted to the Society. (Omitted)	**RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS** **Part C HULL CONSTRUCTION AND EQUIPMENT** **Part 1 GENERAL HULL REQUIREMENTS** **Chapter 1 GENERAL** **1.5 Plans and Documents To Be Submitted** **1.5.1 General** **1.5.1.1** **1** For ships to be built under classification survey, prior to the commencement of shipbuilding, plans and documents specified in **2.1.2** and **2.1.3, Part B** are to be submitted to the Society. (Omitted)	

Amended	Original	Remarks
Chapter 3 STRUCTURAL DESIGN PRINCIPLES **3.8.3.2 Functions** (Omitted) **4** Any change made to input/output, computing procedures, etc., is to be reported to the Society. Where deemed necessary by the Society, the tests and inspections specified in **item 17(1), Table B2.7, Part B** are to be carried out according to **-2** above on the loading instrument in the installed environment with the attendance of the inspector from the Society.	**Chapter 3 STRUCTURAL DESIGN PRINCIPLES** **3.8.3.2 Functions** (Omitted) **4** Any change made to input/output, computing procedures, etc., is to be reported to the Society. Where deemed necessary by the Society, the tests and inspections specified in **2.1.4-1(10), Part B** are to be carried out according to **-2** above on the loading instrument in the installed environment with the attendance of the inspector from the Society.	
Chapter 4 LOADS **4.4 Loads to be Considered in Local Strength** **4.4.3 Testing Condition** **4.4.3.1 External Pressure** The following **(1)** and **(2)** are to be considered as external pressure acting on the hull. (1) Case 1 (P_{ST-ex1}): Hydrostatic pressure (kN/m^2) corresponding to the draught described in the test plan at Classification Surveys during Construction approved by the Society in accordance with **item10(1), Table B2.7, Part B.** (Omitted)	**Chapter 4 LOADS** **4.4 Loads to be Considered in Local Strength** **4.4.3 Testing Condition** **4.4.3.1 External Pressure** The following **(1)** and **(2)** are to be considered as external pressure acting on the hull. (1) Case 1 (P_{ST-ex1}): Hydrostatic pressure (kN/m^2) corresponding to the draught described in the test plan at Classification Surveys during Construction approved by the Society in accordance with **2.1.5, Part B**. (Omitted)	

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
4.6 Loads to be Considered in Strength Assessment by Cargo Hold Analysis **4.6.4 Testing Condition** **4.6.4.1 General** As the testing condition, a condition reproducing the hydrostatic test (structure test) according to the requirements in **item10(1), Table B2.7, Part B** is to be considered. The external and internal pressures are to be in accordance with the planned pressures or those in the hydrostatic test. **4.6.4.2 External Pressure** The external pressure P_{ST-ex} (kN/m^2) acting on the hull is to be the hydrostatic pressure corresponding to the draught described in the test plan approved by the Society according to the requirements in **2.1.7-1(2), Part B**. (Omitted)	**4.6 Loads to be Considered in Strength Assessment by Cargo Hold Analysis** **4.6.4 Testing Condition** **4.6.4.1 General** As the testing condition, a condition reproducing the hydrostatic test (structure test) according to the requirements in **2.1.5, Part B** is to be considered. The external and internal pressures are to be in accordance with the planned pressures or those in the hydrostatic test. **4.6.4.2 External Pressure** The external pressure P_{ST-ex} (kN/m^2) acting on the hull is to be the hydrostatic pressure corresponding to the draught described in the test plan approved by the Society according to the requirements in **2.1.4-5, Part B**. (Omitted)	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025.		

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS **Part U INTACT STABILITY** **Chapter 2 STABILITY REQUIREMENTS** **2.1 General** **2.1.2 Calculation on Stability*** Stability is to be calculated under the following conditions. (1) In preparing stability curves, the position centre of gravity is to be determined on the basis of the data obtained at inclining test required in **2.1.7-8, Part B**. (Omitted)	**RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS** **Part U INTACT STABILITY** **Chapter 2 STABILITY REQUIREMENTS** **2.1 General** **2.1.2 Calculation on Stability*** Stability is to be calculated under the following conditions. (1) In preparing stability curves, the position centre of gravity is to be determined on the basis of the data obtained at inclining test required in **2.3.2, Part B of the Rules**. (Omitted)	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025.		

Amended	Original	Remarks
RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS **Part CSR-B&T COMMON STRUCTURAL RULES FOR BULK CARRIERS AND OIL TANKERS** **Part 1 GENERAL HULL REQUIREMENTS** **Chapter 1 RULE GENERAL PRINCIPLES** **Section 2 RULE PRINCIPLES** **3. Design Basis** **3.8 Structural Construction and Inspection** 3.8.4 Tank strength and tightness testing are to be carried out as a part of the verification scheme according to the provisions of **item 10, Table B2.7, Part B** which incorporate *IACS UR S14*. (Omitted)	**RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS** **Part CSR-B&T COMMON STRUCTURAL RULES FOR BULK CARRIERS AND OIL TANKERS** **Part 1 GENERAL HULL REQUIREMENTS** **Chapter 1 RULE GENERAL PRINCIPLES** **Section 2 RULE PRINCIPLES** **3. Design Basis** **3.8 Structural Construction and Inspection** 3.8.4 Tank strength and tightness testing are to be carried out as a part of the verification scheme according to the provisions of **2.1.5, Part B** which incorporate *IACS UR S14*. (Omitted)	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025.		

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS **Part D MACHINERY INSTALLATIONS** **Chapter 12 PIPES, VALVES, PIPE FITTINGS AND AUXILIARIES** **12.6 Tests** **12.6.1 Shop Tests*** **10** When, for technical reasons, it is not possible to carry out complete hydrostatic testing specified in **-2** and **-3** above before assembly on board, for all sections of piping, the testing may be carried out in conjunction with the checking required by **13.17.2-3** or **14.6.2-2** provided that the test plans referred to in **2.1.7-1(2), Part B** containing the closing lengths of piping, particularly in respect to the closing seams, are submitted to the Society and approved.	**RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS** **Part D MACHINERY INSTALLATIONS** **Chapter 12 PIPES, VALVES, PIPE FITTINGS AND AUXILIARIES** **12.6 Tests** **12.6.1 Shop Tests*** **10** When, for technical reasons, it is not possible to carry out complete hydrostatic testing specified in **-2** and **-3** above before assembly on board, for all sections of piping, the testing may be carried out in conjunction with the checking required by **13.17.2-3** or **14.6.2-2** provided that the test plans referred to in **2.1.4-5, Part B** containing the closing lengths of piping, particularly in respect to the closing seams, are submitted to the Society and approved.	

Amended	Original	Remarks
Chapter 16 WINDLASSES AND MOORING WINCHES **16.2 Windlasses** **16.2.5 Tests** (Omitted) **2** Tests after installation on board Required tests in **2.1.7-7, of Part B** for windlasses are to be carried out during sea trials.	**Chapter 16 WINDLASSES AND MOORING WINCHES** **16.2 Windlasses** **16.2.5 Tests** (Omitted) **2** Tests after installation on board Required tests in **2.3.1 of Part B** for windlasses are to be carried out during sea trials.	
Chapter 21 SELECTIVE CATALYTIC REDUCTION SYSTEMS AND ASSOCIATED EQUIPMENT **21.8 Tests** **21.8.2 Tests after Installation On Board** **1** In cases where reductant agent is carried in tanks which form part of the ship's hull, the tanks are to be subjected to hydrostatic tests in accordance with **item10(1), Table B2.7, Part B**. Where the specific gravities of the liquids used for the tests are less than those of the reductant agent, an appropriate additional head is to be considered. (Omitted)	**Chapter 21 SELECTIVE CATALYTIC REDUCTION SYSTEMS AND ASSOCIATED EQUIPMENT** **21.8 Tests** **21.8.2 Tests after Installation On Board** **1** In cases where reductant agent is carried in tanks which form part of the ship's hull, the tanks are to be subjected to hydrostatic tests in accordance with **2.1.5(1), Part B**. Where the specific gravities of the liquids used for the tests are less than those of the reductant agent, an appropriate additional head is to be considered. (Omitted)	

Amended	Original	Remarks
Chapter 22 EXHAUST GAS CLEANING SYSTEMS AND ASSOCIATED EQUIPMENT **22.7 Tests** **22.7.2 Tests after Installation On Board** **1** In cases where chemical treatment fluids are carried in tanks which form part of the ship's hull, the tanks are to be subjected to hydrostatic tests in accordance with **item10(1), Table B2.7, Part B**. Where the specific gravities of the liquids used for the tests are less than those of the chemical treatment fluids, an appropriate additional head is to be considered.	**Chapter 22 EXHAUST GAS CLEANING SYSTEMS AND ASSOCIATED EQUIPMENT** **22.7 Tests** **22.7.2 Tests after Installation On Board** **1** In cases where chemical treatment fluids are carried in tanks which form part of the ship's hull, the tanks are to be subjected to hydrostatic tests in accordance with **2.1.5(1), Part B**. Where the specific gravities of the liquids used for the tests are less than those of the chemical treatment fluids, an appropriate additional head is to be considered.	
Annex 12.1.6 PLASTIC PIPES **1.7 Tests** **1.7.2 On board Tests and Inspection** After installation on board, in addition to those tests and inspections specified in **2.1.7, Part B,** the following tests and inspections are to be carried out.	**Annex 12.1.6 PLASTIC PIPES** **1.7 Tests** **1.7.2 On board Tests and Inspection** After installation on board, in addition to those tests and inspections specified in **2.1.4-1(8), Part B of the Rules**, the following tests and inspections are to be carried out.	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025.		

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS **Part M WELDING** **Chapter 1 GENERAL** **1.4 Inspection and Quality for Weld** **1.4.1 Implementation of Inspection*** **1** Inspection of weld is to be carried out in the presence of the Surveyor during or after welding works specified in **2.1.7, Part B** of the Rules.	**RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS** **Part M WELDING** **Chapter 1 GENERAL** **1.4 Inspection and Quality for Weld** **1.4.1 Implementation of Inspection*** **1** Inspection of weld is to be carried out in the presence of the Surveyor during or after welding works specified in **2.1.4, Part B** of the Rules.	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025.		

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS **Part N SHIPS CARRYING LIQUEFIED GASES IN BULK** **Chapter 2 SHIP SURVIVAL CAPABILITY AND LOCATION OF CARGO TANKS** **2.2 Freeboard and Stability** **2.2.3 Stability Information (With reference to *IGC Code* 2.2.5)*** The information booklet specified in **2.1.7-8, Part B** is to contain a summary of the ship's survival capabilities.	**RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS** **Part N SHIPS CARRYING LIQUEFIED GASES IN BULK** **Chapter 2 SHIP SURVIVAL CAPABILITY AND LOCATION OF CARGO TANKS** **2.2 Freeboard and Stability** **2.2.3 Stability Information (With reference to *IGC Code* 2.2.5)*** The information booklet specified in **2.3.2, Part B** is to contain a summary of the ship's survival capabilities.	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025.		

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS **Part S SHIPS CARRYING DANGEROUS CHEMICALS IN BULK** **Chapter 2 SHIP SURVIVAL CAPABILITY AND LOCATION OF CARGO TANKS** **2.2 Solid Ballast and Stability Information** **2.2.2 Stability Information (With reference to *IBC Code* 2.2.5)** The information booklet specified in **2.1.7-8, Part B** is to contain a summary of the ship's survival capabilities.	**RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS** **Part S SHIPS CARRYING DANGEROUS CHEMICALS IN BULK** **Chapter 2 SHIP SURVIVAL CAPABILITY AND LOCATION OF CARGO TANKS** **2.2 Solid Ballast and Stability Information** **2.2.2 Stability Information (With reference to *IBC Code* 2.2.5)** The information booklet specified in **2.3.2, Part B** is to contain a summary of the ship's survival capabilities.	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025.		

Amended	Original	Remarks
RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS **Part I SHIPS OPERATING IN POLAR WATERS, POLAR CLASS SHIPS AND ICE CLASS SHIPS** **Chapter 1 GENERAL** **1.1 General** **1.1.2 Documentation*** **1** The polar class defined in **1.2.1(20)** or the ice class defined in **1.2.2(1)** is to be indicated in the general arrangement, midship section, arrangements to resist panting in both peaks and their vicinity, shell expansion and plan of propeller specified in **Table B2.1, Part B**. **2** For polar class ships, the upper ice waterline specified in **1.2.1(23)**, the lower ice waterline specified in **1.2.1(24)** and hull area specified in **1.2.3** of **Annex 1** "**Special Requirements for the Materials, Hull Structures, Equipment and Machinery of Polar Class Ships**" are to be indicated in the shell expansion specified in **Table B2.1, Part B**. The corrosion/abrasion additions specified in **2.3** of **Annex 1** "**Special Requirements for the Materials, Hull Structures, Equipment and Machinery of Polar Class Ships**" are to be indicated in the midship section, arrangements of both peaks and shell expansion. **3** For ice class ships, the upper ice water line specified	**RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS** **Part I SHIPS OPERATING IN POLAR WATERS, POLAR CLASS SHIPS AND ICE CLASS SHIPS** **Chapter 1 GENERAL** **1.1 General** **1.1.2 Documentation*** **1** The polar class defined in **1.2.1(20)** or the ice class defined in **1.2.2(1)** is to be indicated in the general arrangement, midship section, arrangements to resist panting in both peaks and their vicinity, shell expansion and plan of propeller specified in **2.1.2, Part B**. **2** For polar class ships, the upper ice waterline specified in **1.2.1(23)**, the lower ice waterline specified in **1.2.1(24)** and hull area specified in **1.2.3** of **Annex 1** "**Special Requirements for the Materials, Hull Structures, Equipment and Machinery of Polar Class Ships**" are to be indicated in the shell expansion specified in **2.1.2, Part B.** The corrosion/abrasion additions specified in **2.3** of **Annex 1** "**Special Requirements for the Materials, Hull Structures, Equipment and Machinery of Polar Class Ships**" are to be indicated in the midship section, arrangements of both peaks and shell expansion. **3** For ice class ships, the upper ice water line specified	

Amended	Original	Remarks
in **1.2.1(23)**, the lower ice waterline specified in **1.2.1(24)**, hull area specified in **1.2.2(2)**, the engine output defined in **8.4.2**, the displacement defined in **8.1.2-6** and the dimensions necessary for the engine output calculation required in **8.4.2** are to be indicated in the shell expansion specified in **Table B2.1, Part B**.	in **1.2.1(23)**, the lower ice waterline specified in **1.2.1(24)**, hull area specified in **1.2.2(2)**, the engine output defined in **8.4.2**, the displacement defined in **8.1.2-6** and the dimensions necessary for the engine output calculation required in **8.4.2** are to be indicated in the shell expansion specified in **2.1.2, Part B**.	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025.		

Amended	Original	Remarks
RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS **Part P MOBILE OFFSHORE DRILLING UNITS AND SPECIAL PURPOSE BARGES** **Chapter 11 MACHINERY INSTALLATIONS** **11.1 General** **11.1.15 Additional Requirements for the Unit which has the Main Propulsion Machinery*** (Omitted) **2** Units are to be tested at sea trial in accordance with the following **(1)** to **(5)**. (1) No abnormalities in the operating conditions of machinery or the behaviour of ships during sea trial are to be confirmed in accordance with **2.1.7-7, Part B**. (2) Astern tests are to be carried out in accordance with **2.1.7-7, Part B**. The astern test results are to be recorded and are to be made available on board. (Omitted)	**RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS** **Part P MOBILE OFFSHORE DRILLING UNITS AND SPECIAL PURPOSE BARGES** **Chapter 11 MACHINERY INSTALLATIONS** **11.1 General** **11.1.15 Additional Requirements for the Unit which has the Main Propulsion Machinery*** (Omitted) **2** Units are to be tested at sea trial in accordance with the following **(1)** to **(5)**. (1) No abnormalities in the operating conditions of machinery or the behaviour of ships during sea trial are to be confirmed in accordance with **2.3.1, Part B**. (2) Astern tests are to be carried out in accordance with **2.3.1, Part B**. The astern test results are to be recorded and are to be made available on board. (Omitted)	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025.		

Amended	Original	Remarks
RULES FOR MARINE POLLUTION PREVENTION SYSTEMS **Part 2 SURVEYS** **Chapter 2 REGISTRATION SURVEYS** **2.1 Registration Surveys during Construction** **2.1.1 General*** At Registration Surveys during construction, the Marine Pollution Prevention Installations and their workmanship are to be examined in detail in order to ascertain that they meet the relevant requirements in each Part of the Rules. (Deleted) **2.1.2 Submission of Plans and Documents*** **1** For any ship intending to undergo Registration Surveys, the applicable plans and documents specified in (1) to (6) below are to be submitted the Society for approval. The plans and documents to be approved by the Society are "Plans and Documents for Approval" (hereinafter same in this chapter). (Omitted) **6** The plans and documents specified in 1 to 4 above are to be submitted the Society in accordace with (1) to (3)	**RULES FOR MARINE POLLUTION PREVENTION SYSTEMS** **Part 2 SURVEYS** **Chapter 2 REGISTRATION SURVEYS** **2.1 Registration Surveys during Construction** **2.1.1 General*** **1** At Registration Surveys during construction, the Marine Pollution Prevention Installations and their workmanship are to be examined in detail in order to ascertain that they meet the relevant requirements in each Part of the Rules. **2** Surveyors are to confirm that materials which contain asbestos are not being used. **2.1.2 Submission of Plans and Documents for Approval*** **1** For any ship intending to undergo Registration Surveys, the following plans and documents are to be submitted to the Society for approval: (Omitted) (Newly added)	

Amended	Original	Remarks
below. (1) Where the submission of plans and documents by paper, 2 sets for the Society and necessary sets for returning to the applicant are to be submitted. (2) Where the submission of plans and documents electrically, the plans and documents are to be submitted using the systems prepared by the Society. (3) Where the submission of plans and documents by means other than **(1)** and **(2)** above, the plans and documents are to be submitted by the means deemed appropriate by the Society. **2.1.5 Plans and Documents to be Maintained On Board*** At the completion of a classification survey, the plans and documents specified in **(1)** to **(6)** below are to be are on board. (1) The certificates and documents specified in **1.3.2**. The certificates are those such as the ones issued for each piece of equipment, device, etc., type approval certificates valid at the time of the Registration Survey, or others applicable. In addition, unless equipment or devices on board are renewed after the ship has entered service, these certificates need not be updated. (Omitted) (3) The Ship Energy Efficiency Management Plan (SEEMP) specified in **2.1.5**. (Omitted)	**2.1.5 Documents to be Maintained On Board*** At the completion of a registration survey, the Surveyor is to confirm that the following applicable certificates and documents of are maintained on board. (1) The certificates and documents specified in **1.3.2** (Omitted) (3) The Ship Energy Efficiency Management Plan (SEEMP) specified in **2.1.4**. (Omitted)	

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
2.1.4 Inspections of Construction and Equipment*	**2.1.3 Inspections of Construction and Equipment***	
1 Inspections are to be carried out on the items specified in **(1)** to **(4)** below for the installations for the prevention of pollution by oil from the machinery spaces of all ships: (Omitted)	**1** Inspections are to be carried out on the following items for the installations for the prevention of pollution by oil from the machinery spaces of all ships: (Omitted)	
2 Inspections are to be carried out on the items specified in **(1)** to **(9)** below for the equipment for the prevention of pollution by oil carried in bulk by oil tankers. (Omitted)	**2** Inspections are to be carried out on the following items for the equipment for the prevention of pollution by oil carried in bulk by oil tankers. (Omitted)	
3 Inspections on the items specified in **(1)** to **(5)** below are to be carried out for the equipment for the prevention of discharge by noxious liquid substances from ships carrying noxious liquid substances in bulk: (Omitted)	**3** Inspections on the following items are to be carried out for the equipment for the prevention of discharge by noxious liquid substances from ships carrying noxious liquid substances in bulk: (Omitted)	
4 Inspections are to be carried out on the items specified in **(1)** to **(3)** below for the equipment for the prevention of pollution by sewage from ships: (Omitted)	**4** Inspections are to be carried out on the following items for the equipment for the prevention of pollution by sewage from ships: (Omitted)	
5 Inspections are to be carried out on the items specified in **(1)** to **(6)** below for the equipment for the prevention of air pollution from every ship of 400 *tons* gross tonnage or above, every mobile offshore drilling unit and other platforms. However, the inspections required in **(2)(b)** and **(3)** excluding **(a)** are to be carried out irrespective of tonnage of the ship. (Omitted)	**5** Inspections are to be carried out on the following items for the equipment for the prevention of air pollution from every ship of 400 *tons* gross tonnage or above, every mobile offshore drilling unit and other platforms. However, the inspections required in **(2)(b)** and **(3)** excluding **(a)** are to be carried out irrespective of tonnage of the ship. (Omitted)	
6 For ships subject to **Chapter 3, Part 8,** inspections related to Energy Efficiency Design Index (EEDI) are to be carried out in accordance with **(1)** and **(2)** below.	**6** For ships subject to **Chapter 3, Part 8,** inspections related to Energy Efficiency Design Index (EEDI) are to be carried out as follows:	

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
(Omitted) **9** Materials which contain asbestos are not being used for the items specified in **(1)** to **(5)** above. **2.1.5 Inspections of Ship Energy Efficiency Management Plans (SEEMP)** (Omitted)	(Omitted) (Newly added) **2.1.4 Inspections of Ship Energy Efficiency Management Plans (SEEMP)** (Omitted)	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025. **2.** Notwithstanding the amendments to the Rules, the current requirements apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date. **3.** Notwithstanding the provision of preceding **2.**, the amendments to the Rules may apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date.		

Amended	Original	Remarks
RULES FOR MARINE POLLUTION PREVENTION SYSTEMS **Part 2 SURVEYS** **Chapter 2 REGISTRATION SURVEYS** **2.2 Registration Surveys Not Built under the Survey** **2.2.1 General** At Registration Surveys not Built under the survey, inspections are to be carried out on the Marine Pollution Prevention Installations, and it to be complied with the requirements specified in the Rules. **2.2.2 Submission of Plans and Documents** (Omitted) **2.2.3 Plans and Documents to be Maintained On Board** At the completion of a registration survey, the Surveyor confirms that certificates and documents specified in **2.1.3** are on board. **2.2.4 Inspection of Construction and Equipment** At Registration Surveys not Built under the survey, the relevant inspections mutatis mutandis the requirements specified in **2.1.4** are to be carried out. However, for ships in possession of the International Oil Pollution Prevention	**RULES FOR MARINE POLLUTION PREVENTION SYSTEMS** **Part 2 SURVEYS** **Chapter 2 REGISTRATION SURVEYS** **2.2 Registration Surveys Not Built under the Survey** **2.2.1 General** At Registration Surveys not Built under the survey, inspections are to be carried out on the Marine Pollution Prevention Installations, and it is to be ensured that comply with the requirements specified in the Rules. **2.2.2 Submission of Plans and Documents for Approval** (Omitted) **2.2.5 Documents to be Maintained On Board** At the completion of a registration survey, the Surveyor confirms that certificates and documents specified in **2.1.5** are on board. **2.2.3 Inspection of Construction and Equipment** At Registration Surveys not Built under the survey, the relevant inspections mutatis mutandis the requirements specified in **2.1.3 in Part 2** are to be carried out. However, for ships in possession of the International Oil Pollution	

Amended	Original	Remarks
Certificate, the International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in bulk (if required), the International Sewage Pollution Prevention Certificate and the International Air Pollution Prevention Certificate or equivalent Certificates, inspections corresponding to that specified in **3.3** are to be carried out. **2.2.5 Inspections of Ship Energy Efficiency Management Plans (SEEMP)** Ship Energy Efficiency Management Plan (SEEMP) is to be satisfied with **3.6, Part 8**.	Prevention Certificate, the International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in bulk (if required), the International Sewage Pollution Prevention Certificate and the International Air Pollution Prevention Certificate or equivalent Certificates, inspections corresponding to that specified in **3.3 in Part 2** are to be carried out. **2.2.4 Inspections of Ship Energy Efficiency Management Plans (SEEMP)** It is to be confirmed that the Ship Energy Efficiency Management Plan (SEEMP) is in accordance with **3.6, Part 8**.	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025.		

Amended	Original	Remarks
RULES FOR ANTI-FOULING SYSTEMS ON SHIPS **Chapter 2 SURVEYS** **2.2 Registration Surveys during Construction** **2.2.1 General** In Registration Surveys during construction, issues related to anti-fouling systems on ships are to be satisfied with the relevant requirements in the Rules. **2.2.2 Submission of Plans and Documents for Reference*** **1** At Registration Surveys during construction, the plans and documents specified in **(1)** to **(4)** below are to be submitted to the Society. Copies of them are to be maintained on board. (Omitted) **3** The plans and documents specified in **1** and **2** above are to be submitted the Society in accordace with **(1)** to **(3)** below. (1) Where the submission of plans and documents by paper, 2 sets for the Society and necessary sets for returning to the applicant are to be submitted. (2) Where the submission of plans and documents electrically, the plans and documents are to be submitted using the systems prepared by the Society. (3) Where the submission of plans and documents by	**RULES FOR ANTI-FOULING SYSTEMS ON SHIPS** **Chapter 2 SURVEYS** **2.2 Registration Surveys during Construction** **2.2.1 General** In Registration Surveys during construction, issues related to anti-fouling systems on ships are to be examined in detail in order to ascertain whether it meets the relevant requirements in the Rules. **2.2.2 Submission of Plans and Documents for Reference*** **1** At Registration Surveys during construction, the following plans and documents are to be submitted to the Society. Copies of them are to be maintained on board. (Omitted) (Newly added)	

Amended	Original	Remarks
means other than **(1)** and **(2)** above, the plans and documents are to be submitted by the means deemed appropriate by the Society. **2.2.3 Survey** The survey is in general required at the stages specified in **(1)** and **(2)** below. However, it may be modified having after showing regard to the actual status of facilities, technical abilities and quality control at the places of manufacture.	**2.2.3 Presence of Surveyor** The presence of Surveyors is in general required at the following stages of work in relation to anti-fouling systems. However, it may be modified having after showing regard to the actual status of facilities, technical abilities and quality control at the places of manufacture.	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025. **2.** Notwithstanding the amendments to the Rules, the current requirements apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date. **3.** Notwithstanding the provision of preceding **2.**, the amendments to the Rules may apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date.		

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
RULES FOR ANTI-FOULING SYSTEMS ON SHIPS **Chapter 2 SURVEYS** **2.3 Registration Surveys Not Built under the Survey** **2.3.1 General*** In the Registration Survey not built under the survey, issues related to the anti-fouling systems on ships as shown in **(1)** to **(3)** are to be stasfied with the relevant requirements of the Rules. In cases where deemed necessary by the Society, samplings of coatings such as any existing anti-fouling systems may be required to verify such compliance. (Omitted) **2.3.2 Submission of Plans and Documents*** **1** In the case of **2.3.1(1)**, the plans and documents specified in **(1)** to **(6)** below are to be submitted to the Society. Copies of them are to be maintained on board. (Omitted) **2** In the case of **2.3.1(2)**, the plans and documents specified in **(1)** and **(2)** below in addition to those listed in **-1(1)**, **(2)**, **(5)** and **(6)** above are to be submitted to the Society. Copies of them are to be maintained on board. (Omitted) **3** In the case of **2.3.1(3)**, the plans and documents specified in **(1)** to **(5)** below in addition to those listed in	**RULES FOR ANTI-FOULING SYSTEMS ON SHIPS** **Chapter 2 SURVEYS** **2.3 Registration Surveys Not Built under the Survey** **2.3.1 General*** In the Registration Survey not built under the survey, issues related to the anti-fouling systems on ships as shown in **(1)** to **(3)** are to be examined in order to ascertain that they meets the relevant requirements of the Rules. In cases where deemed necessary by the Society, samplings of coatings such as any existing anti-fouling systems may be required to verify such compliance. (Omitted) **2.3.2 Submission of Plans and Documents for Reference*** **1** In the case of **2.3.1(1)**, the following plans and documents are to be submitted to the Society. Copies of them are to be maintained on board. (Omitted) **2** In the case of **2.3.1(2)**, the following plans and documents in addition to those listed in **-1(1)**, **(2)**, **(5)** and **(6)** above are to be submitted to the Society. Copies of them are to be maintained on board. (Omitted) **3** In the case of **2.3.1(3)**, the following plans and documents in addition to those listed in **-1(1)**, **(2)**, **(3)**, **(5)** and	

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
-1(1), **(2)**, **(3)**, **(5)** and **(6)** above are to be submitted to the Society. Copies of them are to be maintained on board. (Omitted) **2.3.3 Survey*** The survey is in general required at the stages specified in **(1)** to **(3)** below. However, it may be modified paying regard to the actual status of facilities, technical abilities and quality control at such places of manufacture.	**(6)** above are to be submitted to the Society. Copies of them are to be maintained on board. (Omitted) **2.3.3 Presence of Surveyor*** The presence of Surveyors is in general required at the following stages of work in relation to anti-fouling systems. However, it may be modified paying regard to the actual status of facilities, technical abilities and quality control at such places of manufacture.	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025.		

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
RULES FOR BALLAST WATER MANAGEMENT INSTALLATIONS **Part 2 SURVEYS** **Chapter 2 REGISTRATION SURVEYS** **2.1 Registration Surveys during Construction** **2.1.1 General*** At Registration Surveys during Construction, the ballast water management installations and their workmanship are to be satisfied with the relevant requirements in each Part of the Rules. (Deleted) **2.1.2 Submission of Plans and Documents*** **1** For any ship intending to undergo a Registration Survey, the plans and documents specified in **(1)** and **(2)** are to be submitted to the Society for approval. The document specified in **(3)** is to be submitted to the Society for approval before delivery of the ship. (Omitted) **2** The plans and documents are to be submitted to the Society for reference, in addition to the approval plans and	**RULES FOR BALLAST WATER MANAGEMENT INSTALLATIONS** **Part 2 SURVEYS** **Chapter 2 REGISTRATION SURVEYS** **2.1 Registration Surveys during Construction** **2.1.1 General*** **1** At Registration Surveys during Construction, the ballast water management installations and their workmanship are to be examined in detail in order to ascertain that they meet the relevant requirements in each Part of the Rules. **2** Surveyors are to confirm that materials which contain asbestos are not being used. **2.1.2 Submission of Plans and Documents for Approval*** **1** For any ship intending to undergo a Registration Survey, three copies of each of the following plans and documents specified in **(1)** and **(2)** are to be submitted to the Society for approval. The document specified in **(3)** is to be submitted to the Society for approval before delivery of the ship: (Omitted) **2** The following documents are to be submitted to the Society for reference, in addition to the approval plans and	

Amended	Original	Remarks
documents specified in 1 above. The document specified in (2) is to be submitted before onboard testing. **3** The plans and documents specified in 1 and 2 above are to be submitted the Society in accordace with (1) to (3) below. (1) Where the submission of plans and documents by paper, 2 sets for the Society and necessary sets for returning to the applicant are to be submitted. (2) Where the submission of plans and documents electrically, the plans and documents are to be submitted using the systems prepared by the Society. (3) Where the submission of plans and documents by means other than (1) and (2) above, the plans and documents are to be submitted by the means deemed appropriate by the Society. **2.1.3 Plans and Documents to be Maintained On Board** Upon completion of a Registration Survey, the plans and documents specidied in (1) to (4) below are maintained on board. **2.1.4 Inspections of Equipment*** **1** For ships conducting the ballast water exchange specified in **Chapter 2, Part 3 of the Rules**, the ballast piping, ballast pump and air pipes and sounding pipes for ballast tanks are to be located in their proper positions based upon approved drawings, and other inspections deemed necessary by the Society are to be carried out. (Omitted)	documents specified in the preceding -1. The document specified in (2) is to be submitted before onboard testing. (Omitted) (Newly added) **2.1.5 Documents to be Maintained On Board** Upon completion of a Registration Survey, the Surveyor confirms that the following documents, etc., are maintained on board: **2.1.3 Inspections of Equipment*** **1** For ships conducting the ballast water exchange specified in **Chapter 2, Part 3 of the Rules**, it is to be confirmed that the ballast piping, ballast pump and air pipes and sounding pipes for ballast tanks are located in their proper positions based upon approved drawings, and other inspections deemed necessary by the Society are to be carried out. (Omitted)	

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
<u>2.1.5</u> Inspections of Ballast Water Management Plans (Omitted)	**<u>2.1.4</u> Inspections of Ballast Water Management Plans** (Omitted)	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025. **2.** Notwithstanding the amendments to the Rules, the current requirements apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date. **3.** Notwithstanding the provision of preceding **2.**, the amendments to the Rules may apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date.		

Amended	Original	Remarks
RULES FOR BALLAST WATER MANAGEMENT INSTALLATIONS **Part 2 SURVEYS** **Chapter 2 REGISTRATION SURVEYS** **2.2 Registration Surveys Not Built under Survey** **2.2.1 General** At Registration Surveys not Built under Survey, ballast water management installations are to be satisfied with the requirements specified in the Rules. **2.2.2 Submission of Plans and Documents** (Omitted) **2.2.5 Plans and Documents to be Maintained On Board** Upon completion of a Registration Survey, the plans documents specified in **2.1.3** are maintained on board. **2.2.4 Inspections of Equipment** **1** At Registration Surveys not Built under Survey, relevant inspections are to be carried out mutatis mutandis according to the requirements specified in **2.1.4**. However, for ships in possession of an International Ballast Water Management Certificate or an equivalent thereto, inspections	**RULES FOR BALLAST WATER MANAGEMENT INSTALLATIONS** **Part 2 SURVEYS** **Chapter 2 REGISTRATION SURVEYS** **2.2 Registration Surveys Not Built under Survey** **2.2.1 General** At Registration Surveys not Built under Survey, inspections are to be carried out on ballast water management installations, and it is to be ensured that they comply with the requirements specified in the Rules. **2.2.2 Submission of Plans and Documents for Approval** (Omitted) **2.2.5 Plans and Documents to be Maintained On Board** Upon completion of a Registration Survey, the Surveyor confirms that the documents, etc., specified in **2.1.5** are maintained on board. **2.2.3 Inspections of Equipment** **1** At Registration Surveys not Built under Survey, relevant inspections are to be carried out mutatis mutandis according to the requirements specified in **2.1.3**. However, for ships in possession of an International Ballast Water Management Certificate or an equivalent thereto, inspections	

Amended	Original	Remarks
corresponding to those specified in **3.3** are to be carried out. **2** For ships carrying out Registration Surveys described in **2.1.4** according to **1** above for which the completion date is on or after 1 June 2022, the confirmation inspection required by **2.1.4-2(10)** is to be included therein. **2.2.5 Inspections of Ballast Water Management Plans** (Omitted) **Chapter 3 REGISTRATION MAINTENANCE SURVEYS** **3.1 Annual Surveys** **3.1.2 Inspections of Equipment** (Omitted) **3** For ships undergoing any installation, change, or replacement of their *BWMS*, the surveys described in **2.1.4** are to be carried out. For ships whose completion dates for such surveys are on or after 1 June 2022, the confirmation inspection required by **2.1.4-2(10)** is to be included therein. **3.1.3 Plans and Documents to be Maintained On Board** **1** It is to be confirmed that the plans and documents specified in **2.1.3** are maintained on board.	corresponding to those specified in **3.3** are to be carried out. **2** For ships carrying out Registration Surveys described in **2.1.3** according to **-1** above for which the completion date is on or after 1 June 2022, the confirmation inspection required by **2.1.3-2(10)** is to be included therein. **2.2.4 Inspections of Ballast Water Management Plans** (Omitted) **Chapter 3 REGISTRATION MAINTENANCE SURVEYS** **3.1 Annual Surveys** **3.1.2 Inspections of Equipment** (Omitted) **3** For ships undergoing any installation, change, or replacement of their *BWMS*, the surveys described in **2.1.3** are to be carried out. For ships whose completion dates for such surveys are on or after 1 June 2022, the confirmation inspection required by **2.1.3-2(10)** is to be included therein. **3.1.3 Documents to be Maintained On Board** **1** It is to be confirmed that the documents, etc., specified in **2.1.5** are maintained on board.	

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
Chapter 4 OCCASIONAL SURVEYS **4.1 Occasional Surveys*** **4.1.1 General** (Omitted) **2** For ships undergoing any installation, change, and replacement of their *BWMS*, the Occasional Surveys described in **2.1.4** are to be carried out. **3** For ships carrying out the Occasional Surveys described in **2.1.4** according to **-2** above for which the completion date is on or after 1 June 2022, the confirmation inspection required by **2.1.4-2(10)** is to be included therein.	**Chapter 4 OCCASIONAL SURVEYS** **4.1 Occasional Surveys*** **4.1.1 General** (Omitted) **2** For ships undergoing any installation, change, and replacement of their *BWMS*, the Occasional Surveys described in **2.1.3** are to be carried out. **3** For ships carrying out the Occasional Surveys described in **2.1.3** according to **-2** above for which the completion date is on or after 1 June 2022, the confirmation inspection required by **2.1.3-2(10)** is to be included therein.	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025.		

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
RULES FOR CARGO REFRIGERATING INSTALLATIONS **Chapter 2 SURVEYS** **2.2 Registration Surveys** **2.2.1 Registration Surveys during Construction*** **1** In a Registration survey during construction, the construction, materials, scantlings and workmanship of the refrigerating installation are to be satisfied with the full requirements of each chapter concerned of the Rules. (Omitted) **3** For the refrigerating installation intended to undergo a registration survey during construction, the plans and documents specified in **(1)** to **(15)** are to be submitted to the Society before the work is commenced. (Omitted) **5** Asbestos-free declarations and supporting documents is to be submitted to the Society for reference in addition to the approval plans and documents specified in **3** above. **6** The plans and documents specified in **3** and **5** above are to be submitted the Society in accordace with **(1)** to **(3)** below. (1) Where the submission of plans and documents by paper, 2 sets for the Society and necessary sets for returning to the applicant are to be submitted.	**RULES FOR CARGO REFRIGERATING INSTALLATIONS** **Chapter 2 SURVEYS** **2.2 Registration Surveys** **2.2.1 Registration Surveys during Construction*** **1** In a Registration survey during construction, the construction, materials, scantlings and workmanship of the refrigerating installation are to be examined in detail in order to ascertain that they meet the full requirements of each chapter concerned of the Rules. (Omitted) **3** For the refrigerating installation intended to undergo a registration survey during construction, the following plans and information in triplicate are to be submitted to the Society before the work is commenced. (Omitted) **5** The following plans and documents are to be submitted to the Society for reference in addition to the approval plans and documents specified in the preceding **-3**. Asbestos-free declarations and supporting documents (Newly added)	

Amended	Original	Remarks
(2) Where the submission of plans and documents electrically, the plans and documents are to be submitted using the systems prepared by the Society. (3) Where the submission of plans and documents by means other than **(1)** and **(2)** above, the plans and documents are to be submitted by the means deemed appropriate by the Society.		
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025. **2.** Notwithstanding the amendments to the Rules, the current requirements apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date. **3.** Notwithstanding the provision of preceding **2.**, the amendments to the Rules may apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date.		

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
RULES FOR CARGO HANDLING APPLIANCES **Chapter 2 SURVEYS** **2.3 Registration Surveys** (Omitted) **5** The plans and documents specified in **2** and **3** above are to be submitted the Society in accordace with **(1)** to **(3)** below. (1) Where the submission of plans and documents by paper, 2 sets for the Society and necessary sets for returning to the applicant are to be submitted. (2) Where the submission of plans and documents electrically, the plans and documents are to be submitted using the systems prepared by the Society. (3) Where the submission of plans and documents by means other than **(1)** and **(2)** above, the plans and documents are to be submitted by the means deemed appropriate by the Society. **2.3.2 Survey***	**RULES FOR CARGO HANDLING APPLIANCES** **Chapter 2 SURVEYS** **2.3 Registration Surveys** (Omitted) (Newly added) **2.3.2 Examinations for Workmanship***	

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025. **2.** Notwithstanding the amendments to the Rules, the current requirements apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date. **3.** Notwithstanding the provision of preceding **2.**, the amendments to the Rules may apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date.		

Amended	Original	Remarks
RULES FOR DIVING SYSTEMS **Chapter 2 SURVEYS OF THE DIVING SYSTEMS** **2.2 Registration Surveys** **2.2.1 Registration Surveys*** **1** The tests and inspections specified in **2.2.3** to **2.2.9** are be implemented. To implement tests and surveys (excluding those specified in **2.2.9**), 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. (Omitted) **2.2.2 Submission of Plans and Documents** **1** For the diving systems intended to be registered, the plans and documents specified in **(1)** to **(26)** are to be submitted for approval. (Omitted) **3** The plans and documents specified in **1** and **2** above are to be submitted the Society in accordace with **(1)** to **(3)** below. (1) Where the submission of plans and documents by paper, 2 sets for the Society and necessary sets for returning to the applicant are to be submitted. (2) Where the submission of plans and documents electrically, the plans and documents are to be submitted using the systems prepared by the Society.	**RULES FOR DIVING SYSTEMS** **Chapter 2 SURVEYS OF THE DIVING SYSTEMS** **2.2 Registration Surveys** **2.2.1 Registration Surveys*** **1** The presence of the Surveyor is required when the tests and inspections specified in **2.2.3** to **2.2.9** are carried out. To implement tests and surveys (excluding those specified in **2.2.9**), 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. (Omitted) **2.2.2 Drawings and Data** **1** For the diving systems intended to be registered, three copies of the following drawings and data are to be submitted for approval by the Society. (Omitted) (Newly added)	

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
(3) Where the submission of plans and documents by means other than **(1)** and **(2)** above, the plans and documents are to be submitted by the means deemed appropriate by the Society.		
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025. **2.** Notwithstanding the amendments to the Rules, the current requirements apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date. **3.** Notwithstanding the provision of preceding **2.**, the amendments to the Rules may apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date.		

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
RULES FOR AUTOMATIC AND REMOTE CONTROL SYSTEMS **Chapter 2 SURVEYS OF AUTOMATIC AND REMOTE CONTROL SYSTEMS** **2.2 Registration Surveys** **2.2.1 Submission of Plans and Documents *** **1** In the case of automatic and remote control systems, the plans and documents specified in (1) to (3) are to be submitted. (1) Centralized monitoring and control systems for machinery or monitoring and control systems for periodically unattended machinery spaces: (a) Plans and documents specified in **18.1.3, Part D of the Rules for the Survey and Construction of Steel Ships** (b) Schedules of on-board tests and sea trials (2) Specific automation equipment: (a) Plans and documents specified in **18.1.3, Part D of the Rules for the Survey and Construction of Steel Ships** (b) Other plans and documents relative to automatic and remote controls (c) Plans showing construction and layouts (Omitted) **2** The plans and documents specified in 1 above are to be submitted the Society in accordace with (1) to (3) below.	**RULES FOR AUTOMATIC AND REMOTE CONTROL SYSTEMS** **Chapter 2 SURVEYS OF AUTOMATIC AND REMOTE CONTROL SYSTEMS** **2.2 Registration Surveys** **2.2.1 Drawings and Data*** In the case of automatic and remote control systems, three copies of the following drawings and data are to be submitted. (1) Centralized monitoring and control systems for machinery or monitoring and control systems for periodically unattended machinery spaces: (a) Drawings and data specified in **18.1.3, Part D of the Rules for the Survey and Construction of Steel Ships** (b) Schedules of on-board tests and sea trials (2) Specific automation equipment: (a) Drawings and data specified in **18.1.3, Part D of the Rules for the Survey and Construction of Steel Ships** (b) Other drawings and data relative to automatic and remote controls (c) Drawings showing construction and layouts (Omitted) (Newly added)	

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
(1) Where the submission of plans and documents by paper, 2 sets for the Society and necessary sets for returning to the applicant are to be submitted. (2) Where the submission of plans and documents electrically, the plans and documents are to be submitted using the systems prepared by the Society. (3) Where the submission of plans and documents by means other than **(1)** and **(2)** above, the plans and documents are to be submitted by the means deemed appropriate by the Society.		
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025. **2.** Notwithstanding the amendments to the Rules, the current requirements apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date. **3.** Notwithstanding the provision of preceding **2.**, the amendments to the Rules may apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date.		

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
RULES FOR NAVIGATION BRIDGE SYSTEMS **Chapter 2 SURVEYS OF NAVIGATION BRIDGE SYSTEMS** **2.2 Registration Surveys** **2.2.1 Submission of Plans and Documents** **1** In the case of navigation bridge systems of **BRS**-ships, the plans and documents specified in (1) to (5) are to be submitted to the Society for approval. (Omitted) **2** In the case of navigation bridge systems of **BRS1**-ships, the plans and documents specified in (1) to (3) are to be submitted to the Society for approval. (Omitted) **3** In the case of navigation bridge systems of **BRS1A**-ships, the plans and documents specified in (1) to (4) are to be submitted to the Society for approval.. (Omitted) **4** The plans and documents specified in 1 to 3 above are to be submitted the Society in accordace with (1) to (3) below. (1) Where the submission of plans and documents by paper, 2 sets for the Society and necessary sets for returning to the applicant are to be submitted. (2) Where the submission of plans and documents electrically, the plans and documents are to be	**RULES FOR NAVIGATION BRIDGE SYSTEMS** **Chapter 2 SURVEYS OF NAVIGATION BRIDGE SYSTEMS** **2.2 Registration Surveys** **2.2.1 Drawings and Data** **1** In the case of navigation bridge systems of **BRS**-ships, three copies of the following drawings and data are to be submitted to the Society for approval. (Omitted) **2** In the case of navigation bridge systems of **BRS1**-ships, three copies of the following drawings and data are to be submitted to the Society for approval. (Omitted) **3** In the case of navigation bridge systems of **BRS1A**-ships, three copies of the following drawings and data are to be submitted to the Society for approval. (Omitted) (Newly added)	

Amended	Original	Remarks
submitted using the systems prepared by the Society. (3) Where the submission of plans and documents by means other than **(1)** and **(2)** above, the plans and documents are to be submitted by the means deemed appropriate by the Society.		
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025. **2.** Notwithstanding the amendments to the Rules, the current requirements apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date. **3.** Notwithstanding the provision of preceding **2.**, the amendments to the Rules may apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date.		

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
RULES FOR PREVENTIVE MACHINERY MAINTENANCE SYSTEMS **Chapter 2 SURVEYS** **2.2 Registration Surveys** **2.2.1 Submission of Plans and Documents** **1** In the case of preventive machinery maintenance systems intended for registration, the plans and documents specified in (1) to (5) below are to be submitted to the Society for approval. (1) Plans and documents concerning the preventive machinery maintenance systems (Omitted) (c) Plans showing system configurations and arrangements (Omitted) (e) Any other plans and documents deemed necessary by the Society (2) Plans and documents concerning condition monitoring and diagnostic systems (Omitted) (3) Plans and documents concerning preventive maintenance management systems (Omitted) (4) Any other plans and documents deemed necessary by the Society **2** The plans and documents specified in 1 above are to	**RULES FOR PREVENTIVE MACHINERY MAINTENANCE SYSTEMS** **Chapter 2 SURVEYS** **2.2 Registration Surveys** **2.2.1 Drawings and Data** In the case of preventive machinery maintenance systems intended for registration, three copies of the following drawings and data are to be submitted to the Society for approval. (1) Drawings and data concerning the preventive machinery maintenance systems (Omitted) (c) Drawings showing system configurations and arrangements (Omitted) (e) Any other drawings and data deemed necessary by the Society (2) Drawings and data concerning condition monitoring and diagnostic systems (Omitted) (3) Drawings and data concerning preventive maintenance management systems (Omitted) (4) Any other drawings and data deemed necessary by the Society (Newly added)	

Amended	Original	Remarks
be submitted the Society in accordace with **(1)** to **(3)** below. (1) Where the submission of plans and documents by paper, 2 sets for the Society and necessary sets for returning to the applicant are to be submitted. (2) Where the submission of plans and documents electrically, the plans and documents are to be submitted using the systems prepared by the Society. (3) Where the submission of plans and documents by means other than **(1)** and **(2)** above, the plans and documents are to be submitted by the means deemed appropriate by the Society.		
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025. **2.** Notwithstanding the amendments to the Rules, the current requirements apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date. **3.** Notwithstanding the provision of preceding **2.**, the amendments to the Rules may apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date.		

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
RULES FOR INTEGRATED FIRE CONTROL SYSTEMS **Chapter 2 SURVEYS** **2.2 Registration Surveys** **2.2.1 Submission of Plans and Documents** **1** In the case of integrated fire control systems to be registered, if a system or an apparatus is installed in accordance with the requirements given in applicable chapters, the plans and documents specified in (1) to (6) below are to be submitted to the Society for approval. (1) Plans showing locations and arrangements of integrated fire control stations. (Omitted) (4) Plans showing details of remote control and monitoring including line diagrams of control circuits and of power supplies to remote control and monitoring systems as well as descriptions of operations concerning any of the systems or apparatuses listed in (a) to (o) below: (Omitted) (6) Any other plans and documents deemed necessary by the Society. **2** The plans and documents specified in 1 above are to be submitted the Society in accordace with (1) to (3) below. (1) Where the submission of plans and documents by paper, 2 sets for the Society and necessary sets for	**RULES FOR INTEGRATED FIRE CONTROL SYSTEMS** **Chapter 2 SURVEYS** **2.2 Registration Surveys** **2.2.1 Drawings and Data** In the case of integrated fire control systems to be registered, if a system or an apparatus is installed in accordance with the requirements given in applicable chapters, three copies of drawings and data listed in the following (1) to (6) are to be submitted for Society approval: (1) Drawings showing locations and arrangements of integrated fire control stations. (Omitted) (4) Drawings showing details of remote control and monitoring including line diagrams of control circuits and of power supplies to remote control and monitoring systems as well as descriptions of operations concerning any of the systems or apparatuses listed in the following (a) to (o): (Omitted) (6) Any other drawings and data deemed necessary by the Society. (Newly added)	

Amended	Original	Remarks
returning to the applicant are to be submitted. (2) Where the submission of plans and documents electrically, the plans and documents are to be submitted using the systems prepared by the Society. (3) Where the submission of plans and documents by means other than **(1)** and **(2)** above, the plans and documents are to be submitted by the means deemed appropriate by the Society.		
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025. **2.** Notwithstanding the amendments to the Rules, the current requirements apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date. **3.** Notwithstanding the provision of preceding **2.**, the amendments to the Rules may apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date.		

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
RULES FOR HULL MONITORING SYSTEMS **Chapter 2 SURVEY** **2.2 Registration Surveys** **2.2.1 General** During Registration Surveys, performance, installation and initial set-up of systems are to be satisfied with the relevant requirements given in the Rules. **2.2.2 Submission of Plans and Documents** **1** In the case of hull monitoring systems to be registered, the plans and documents specified in **(1)** to **(8)** below are to be submitted to the Society for approval. (Omitted) **2** The plans and documents specified in **(1)** to **(3)** below other than those listed in **-1** above are to be submitted. (Omitted) **3** The plans and documents specified in **1** and **2** above are to be submitted the Society in accordace with **(1)** to **(3)** below. (1) Where the submission of plans and documents by paper, 2 sets for the Society and necessary sets for returning to the applicant are to be submitted. (2) Where the submission of plans and documents electrically, the plans and documents are to be submitted using the systems prepared by the Society. (3) Where the submission of plans and documents by	**RULES FOR HULL MONITORING SYSTEMS** **Chapter 2 SURVEY** **2.2 Registration Surveys** **2.2.1 General** During Registration Surveys, performance, installation and initial set-up of systems are to be examined in detail in order to ascertain that they meet the relevant requirements given in the Rules. **2.2.2 Submission of Plans and Documents** **1** In the case of hull monitoring systems to be registered, three copies of the following drawings and data are to be submitted for Society approval. (Omitted) **2** Three copies of the following drawings and data other than those listed in **-1** above are to be submitted: (Omitted) (Newly added)	

Amended	Original	Remarks
means other than **(1)** and **(2)** above, the plans and documents are to be submitted by the means deemed appropriate by the Society.		
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025. **2.** Notwithstanding the amendments to the Rules, the current requirements apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date. **3.** Notwithstanding the provision of preceding **2.**, the amendments to the Rules may apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date.		

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
RULES FOR CENTRALIZED CARGO MONITORING AND CONTROL SYSTEMS **Chapter 2 SURVEYS** **2.2 Registration Surveys** **2.2.1 Submission of Plans and Documents** **1** In the case of centralized cargo monitoring and control systems, the plans and documents specified in (1) to (6) below are to be submitted. (Omitted) (3) Plans for computers concerning power supply sources, construction of systems and self-monitoring functions (Omitted) (6) Plans and documents other than those above in cases where deemed necessary by the Society **2** The plans and documents specified in 1 above are to be submitted the Society in accordace with (1) to (3) below. (1) Where the submission of plans and documents by paper, 2 sets for the Society and necessary sets for returning to the applicant are to be submitted. (2) Where the submission of plans and documents electrically, the plans and documents are to be submitted using the systems prepared by the Society. (3) Where the submission of plans and documents by means other than (1) and (2) above, the plans and documents are to be submitted by the means deemed	**RULES FOR CENTRALIZED CARGO MONITORING AND CONTROL SYSTEMS** **Chapter 2 SURVEYS** **2.2 Registration Surveys** **2.2.1 Drawings and Data** In the case of centralized cargo monitoring and control systems, three copies of the following drawings and data are to be submitted. (Omitted) (3) Drawings for computers concerning power supply sources, construction of systems and self-monitoring functions (Omitted) (6) Drawings and data other than those above in cases where deemed necessary by the Society (Newly added)	

Amended	Original	Remarks
appropriate by the Society.		
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025. **2.** Notwithstanding the amendments to the Rules, the current requirements apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date. **3.** Notwithstanding the provision of preceding **2.**, the amendments to the Rules may apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date.		

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
RULES FOR HIGH SPEED CRAFT **Part 2 CLASS SURVEYS** **Chapter 1 GENERAL** **1.1 Surveys** **1.1.1 Classification Surveys*** (Omitted) **2** Materials which contain asbestos are not to be used. **1.2.5 Procedure for Tests, Wear and Tear, etc.*** (Omitted) **2** Inclining Test Where alterations or repairs which might greatly affect craft's stability have been made on the occasion of Periodical Surveys or Planned Machinery Survey and be where deemed necessary by the Surveyor at any survey, **2.3.1-5(1), Part B of the Rules for Survey and Construction of Steel Ships** is to be followed to determine the need for re-inclining tests, and the need for amending stability information.	**RULES FOR HIGH SPEED CRAFT** **Part 2 CLASS SURVEYS** **Chapter 1 GENERAL** **1.1 Surveys** **1.1.1 Classification Surveys*** (Omitted) **2** Surveyors are to confirm that materials which contain asbestos are not being used. **1.2.5 Procedure for Tests, Wear and Tear, etc.*** (Omitted) **2** Inclining Test Where alterations or repairs which might greatly affect craft's stability have been made on the occasion of Periodical Surveys or Planned Machinery Survey and be where deemed necessary by the Surveyor at any survey, **2.5.1-2, Part B of the Rules for Survey and Construction of Steel Ships** is to be followed to determine the need for re-inclining tests, and the need for amending stability information.	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025.		

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
Chapter 2 CLASSIFICATION SURVEYS **2.1 Classification Survey during Construction** **2.1.2 Submission of Plans and Documents*** **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: (Omitted) (3) For crafts using low-flashpoint fuels, the plans and documents specified in **2.1.3-1(5)**, **Part B of the Rules for the Survey and Construction of Steel Ships** (Omitted) **2.1.3 Submission of Other Plans and Documents** **1** When it is intended to build a craft to the classification with the Society, the following plans and documents are to be submitted in addition to those required in **2.1.2**: (Omitted) (8) For crafts using low-flashpoint fuels, the plans and documents specified in **2.1.3-1(5)**, **Part B of the Rules for the Survey and Construction of Steel**	**Chapter 2 CLASSIFICATION SURVEYS** **2.1 Classification Survey during Construction** **2.1.2 Submission of Plans and Documents for Approval*** **1** When it is intended to build a craft to the classification with the Society, the following plans and documents 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: (Omitted) (3) For crafts using low-flashpoint fuels, the plans and documents specified in **2.1.2-1(5)**, **Part B of the Rules for the Survey and Construction of Steel Ships** (Omitted) **2.1.3 Submission of Other Plans and Documents** **1** When it is intended to build a craft to the classification with the Society, the following plans and documents are to be submitted in addition to those required in **2.1.2**: (Omitted) (8) For crafts using low-flashpoint fuels, the plans and documents specified in **2.1.3-1(10)**, **Part B of the Rules for the Survey and Construction of Steel Ships**	

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
Ships (Omitted)	(Omitted)	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025. **2.** Notwithstanding the amendments to the Rules, the current requirements apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date. **3.** Notwithstanding the provision of preceding **2.**, the amendments to the Rules may apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date.		

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
Part 8 BUOYANCY, STABILITY AND SUBDIVISION **Chapter 1 GENERAL** **1.7 Inclining and Stability Information** **1.7.3 Amendments of Stability Information Booklet** Where any alterations are made to a craft so as to materially affect its stability, **2.3.1-5(1), Part B of the Rules for Survey and Construction of Steel Ships** is to be followed to determine the need for re-inclining tests, and the need for amending stability information.	**Part 8 BUOYANCY, STABILITY AND SUBDIVISION** **Chapter 1 GENERAL** **1.7 Inclining and Stability Information** **1.7.3 Amendments of Stability Information Booklet** Where any alterations are made to a craft so as to materially affect its stability, **2.5.1-2, Part B of the Rules for Survey and Construction of Steel Ships** is to be followed to determine the need for re-inclining tests, and the need for amending stability information.	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025.		

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
RULES FOR THE SURVEY AND CONSTRUCTION OF PASSENGER SHIPS **Part 1 GENERAL** **Chapter 1 GENERAL** **1.2 Class Notations** **1.2.4 Hull Construction and Equipment, etc.*** (Omitted) **6** For ships complying with the provisions of **item 10, Table B2.11, Part B of the Rules for the Survey and Construction of Steel Ships**, the notation of "*Noise Code*" (abbreviated to *NC*) is affixed to the Classification Characters. (Omitted)	**RULES FOR THE SURVEY AND CONSTRUCTION OF PASSENGER SHIPS** **Part 1 GENERAL** **Chapter 1 GENERAL** **1.2 Class Notations** **1.2.4 Hull Construction and Equipment, etc.*** (Omitted) **6** For ships complying with the provisions of **2.3.1-1(11), Part B of the Rules for the Survey and Construction of Steel Ships**, the notation of "*Noise Code*" (abbreviated to *NC*) is affixed to the Classification Characters. (Omitted)	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025.		

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
Part 2 CLASS SURVEY **Chapter 2 CLASSIFICATION SURVEYS** **2.1 Classification Survey during Construction** **2.1.2 Submission of Plans and Documents** **1** With respect to ships intended to undergo the Classification Survey during Construction, the plans and documents indicated in the following **(1)** to **(7)** are to be submitted to the Society for approval, prior to the commencement of the works: (1) Hull (a) Plans specified in **2.1.3-1(1)**, **Part B of the Rules for the Survey and Construction of Steel Ships**. (Omitted) (2) Machinery Plans and data specified in **2.1.3-1(2)**, **Part B of the Rules for the Survey and Construction of Steel Ships**. (Omitted) (6) For ships using low-flashpoint fuels, the plans and documents specified in **2.1.3-1(5)**, **Part B of the Rules for the Survey and Construction of Steel Ships** (Omitted) **2.1.3 Submission of Other Plans and Documents*** With respect to ships intended to undergo the	**Part 2 CLASS SURVEY** **Chapter 2 CLASSIFICATION SURVEYS** **2.1 Classification Survey during Construction** **2.1.2 Submission of Plans and Documents** **1** With respect to ships intended to undergo the Classification Survey during Construction, the plans and documents indicated in the following **(1)** to **(7)** are to be submitted to the Society for approval, prior to the commencement of the works: (1) Hull (a) Plans specified in **2.1.2-1(1)(a) to (r), (x) and (z) to (ab)**, **Part B of the Rules for the Survey and Construction of Steel Ships**. (Omitted) (2) Machinery Plans and data specified in **2.1.2-1(2)**, **Part B of the Rules for the Survey and Construction of Steel Ships**. (Omitted) (6) For ships using low-flashpoint fuels, the plans and documents specified in **2.1.2-1(5)**, **Part B of the Rules for the Survey and Construction of Steel Ships** (Omitted) **2.1.3 Submission of Other Plans and Documents*** With respect to ships intended to undergo the	

Amended	Original	Remarks
Classification Survey during Construction, the following plans and documents are to be submitted for reference, in addition to the plans and documents specified in **2.1.2**: (1) Plans and documents specified in **item 1, 2, 3, 5, 6, 20, 47, 56, 59, 60 and 88, Table B2.1, Part B of the Rules for the Survey and Construction of Steel Ships.** (Omitted) (6) For ships using low-flashpoint fuels, the plans and documents specified in **2.1.3-1(5)**, **Part B of the Rules for the Survey and Construction of Steel Ships** (Omitted) **2.1.5 Presence of Surveyors*** (Omitted) **2** Presence of the Surveyor is required at necessary stages specified in **2.1.7, Part B of the Rules for the Survey and Construction of Steel Ships**. To implement surveys specified otherwise by the Society, in lieu of traditional ordinary surveys where the Surveyor is in attendance, the Society may approve survey methods which it considers to be appropriate. (Omitted) **2.1.6 Hydrostatic and Watertight Tests** In the Classification Survey during Construction, hydrostatic tests, watertight tests, etc. are to be carried out in accordance with the requirements of **item 10, Table B2.7**, **Part B of the Rules for the Survey and Construction of Steel Ships.**	Classification Survey during Construction, the following plans and documents are to be submitted for reference, in addition to the plans and documents specified in **2.1.2**: (1) Plans and documents specified in **2.1.3-1(1), (2), (5), (6), (7) and (16)**, **Part B of the Rules for the Survey and Construction of Steel Ships.** (Omitted) (6) For ships using low-flashpoint fuels, the plans and documents specified in **2.1.3-1(10)**, **Part B of the Rules for the Survey and Construction of Steel Ships** (Omitted) **2.1.5 Presence of Surveyors*** (Omitted) **2** Presence of the Surveyor is required at necessary stages specified in **2.1.4-1, 2.1.4-2 and 2.1.4-4, Part B of the Rules for the Survey and Construction of Steel Ships.** To implement surveys specified otherwise by the Society, in lieu of traditional ordinary surveys where the Surveyor is in attendance, the Society may approve survey methods which it considers to be appropriate. (Omitted) **2.1.6 Hydrostatic and Watertight Tests** In the Classification Survey during Construction, hydrostatic tests, watertight tests, etc. are to be carried out in accordance with the requirements of **2.1.5(1) and (2)**, **Part B of the Rules for the Survey and Construction of Steel Ships.**	

Amended	Original	Remarks
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025. **2.** Notwithstanding the amendments to the Rules, the current requirements apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date. **3.** Notwithstanding the provision of preceding **2.**, the amendments to the Rules may apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date.		
Part 2 CLASS SURVEY **Chapter 2 CLASSIFICATION SURVEYS** **2.2 Classification Survey of Ships Not Built under Survey** **2.2.2 Hydrostatic and Watertight Tests** Hydrostatic tests, watertight tests, etc. are to be carried out in accordance with the requirement of **item 10, Table B2.7, Part B of the Rules for the Survey and Construction of Steel Ships.**	**Part 2 CLASS SURVEY** **Chapter 2 CLASSIFICATION SURVEYS** **2.2 Classification Survey of Ships Not Built under Survey** **2.2.2 Hydrostatic and Watertight Tests** Hydrostatic tests, watertight tests, etc. are to be carried out in accordance with the requirement of **2.2.2, Part B of the Rules for the Survey and Construction of Steel Ships.**	

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
2.3 Sea Trials and Stability Experiments **2.3.1 Sea Trials** Sea trials are to be carried out in accordance with the requirement of **2.1.7-7, Part B of the Rules for the Survey and Construction of Steel Ships**. **2.3.2 Stability Experiments** Stability experiments are to be carried out in accordance with the requirement of **2.1.7-8, Part B of the Rules for the Survey and Construction of Steel Ships**. Omission of such experiments is not allowed. **2.4 Alterations** **2.4.1 Examinations of Altered Parts** The examinations of altered parts are to be in accordance with those specified in **2.3.1, Part B of the Rules for the Survey and Construction of Steel Ships**.	**2.3 Sea Trials and Stability Experiments** **2.3.1 Sea Trials** Sea trials are to be carried out in accordance with the requirement of **2.3.1, Part B of the Rules for the Survey and Construction of Steel Ships**. **2.3.2 Stability Experiments** Stability experiments are to be carried out in accordance with the requirement of **2.3.2, Part B of the Rules for the Survey and Construction of Steel Ships**. Omission of such experiments is not allowed. **2.4 Alterations** **2.4.1 Examinations of Altered Parts** The examinations of altered parts are to be in accordance with those specified in **2.5.1, Part B of the Rules for the Survey and Construction of Steel Ships**.	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025.		

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
Part 4 SUBDIVISION AND STABILITY **Chapter 4 INTACT STABILITY** **4.3 Stability Information** **4.3.1 General*** (Omitted) **2** Where any alternations are made to a ship so as to materially affect its stability, **2.3.1-5(1) Part B of the Rules for Survey and Construction of Steel Ships** is to be followed to determine the need for re-inclining tests, and the need for amending stability information.	**Part 4 SUBDIVISION AND STABILITY** **Chapter 4 INTACT STABILITY** **4.3 Stability Information** **4.3.1 General*** (Omitted) **2** Where any alternations are made to a ship so as to materially affect its stability, **2.5.1-2, Part B of the Rules for Survey and Construction of Steel Ships** is to be followed to determine the need for re-inclining tests, and the need for amending stability information.	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025.		

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
RULES FOR THE SURVEY AND CONSTRUCTION OF SHIPS OF FIBREGLASS REINFORCED PLASTICS **Chapter 2 CLASS SURVEYS** **2.2 Classification Survey during Construction** **2.2.2 Plans and Documents to be Submitted** With respect to *FRP* ships intended for the classification survey during construction, the plants and documents listed in the following **(1)** to **(3)** are, prior to the commencement of work, to be submitted for the approval by the Society. (Omitted) (2) Machinery Plans and documents in relation to the machinery specified in **2.1.3-1(2)**, **Chapter 2, Part B of the Rules for the Survey and Construction of Steel Ships**. (Omitted) **2.2.3 Plans and Documents to be Submitted for Reference*** **1** Where intended for the classification survey during construction, the following plans or documents are to be submitted for reference, in addition to those for approval required in **2.2.2**: (Omitted) (5) Where load lines are to be marked in accordance	**RULES FOR THE SURVEY AND CONSTRUCTION OF SHIPS OF FIBREGLASS REINFORCED PLASTICS** **Chapter 2 CLASS SURVEYS** **2.2 Classification Survey during Construction** **2.2.2 Plans and Documents to be Submitted** With respect to *FRP* ships intended for the classification survey during construction, the plants and documents listed in the following **(1)** to **(3)** are, prior to the commencement of work, to be submitted for the approval by the Society. (Omitted) (2) Machinery Plans and documents in relation to the machinery specified in **2.1.2-1(2)**, **Chapter 2, Part B of the Rules for the Survey and Construction of Steel Ships**. (Omitted) **2.2.3 Plans and Documents to be Submitted for Reference*** **1** Where intended for the classification survey during construction, the following plans or documents are to be submitted for reference, in addition to those for approval required in **2.2.2**: (Omitted) (5) Where load lines are to be marked in accordance	

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
with the requirements in **Chapter 20**, the plans and documents specified in **item 1, 2, 3, 5, 20, 47 and 59, Table B2.1**, **Chapter 2, Part B of the Rules for the Survey and Construction of Steel Ships**. (Omitted) **2.2.4 Inspections during Construction*** (Omitted) **3** With respect to the work in relation to machinery and equipment, the presence of the Surveyor is to be in accordance with the requirements in **2.1.7**, **Chapter 2, Part B of the Rules for the Survey and Construction of Steel Ships**. To implement surveys 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. (Omitted)	with the requirements in **Chapter 20**, the plans and documents specified in **2.1.3-1(5)**, **Chapter 2, Part B of the Rules for the Survey and Construction of Steel Ships**. (Omitted) **2.2.4 Inspections during Construction*** (Omitted) **3** With respect to the work in relation to machinery and equipment, the presence of the Surveyor is to be in accordance with the requirements in **2.1.4**, **Chapter 2, Part B of the Rules for the Survey and Construction of Steel Ships**. To implement surveys 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. (Omitted)	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025. **2.** Notwithstanding the amendments to the Rules, the current requirements apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date. **3.** Notwithstanding the provision of preceding **2.**, the amendments to the Rules may apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date.		

Amended	Original	Remarks
GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS **Part B CLASS SURVEYS** **B1 GENERAL** **B1.4 Preparation for Survey and Other Items** **B1.4.2 Preparation for Surveys** (Omitted) (Deleted)	**GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS** **Part B CLASS SURVEYS** **B1 GENERAL** **B1.4 Preparation for Survey and Other Items** **B1.4.2 Preparation for Surveys** (Omitted) **16** The following preparations are to be made before carrying out the engine tests specified in **2.3.1-1(5), Part B of the Rules** and **2.6.1-2, Part D of the Rules**: (1) All relevant equipment for the safety of attending personnel such as oil mist detection arrangements, overspeed protective devices and any other shut down functions are to be made available and are to be operational. (2) The overspeed protective device is to be set to a value which is not higher than the allowable overspeed value. This set point is to be verified by the surveyor. (3) The engines are to be run as prescribed by the engine manufacturer. (4) All fluids used for testing purposes (fuel oils, lubrication oils, cooling water, etc., including all fluids used temporarily or repeatedly for testing purposes only) are to be suitable for their intended	

Amended	Original	Remarks
	purposes (i.e., they are to be clean, preheated if necessary and cause no harm to engine parts).	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025.		
B2 CLASSIFICATION SURVEYS **B2.1 Classification Survey during Construction** **B2.1.7 Survey** **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. **2** With respect to **2.1.7-1(9), Part B of the Rules**, the asbestos-free declarations and supporting documents specified in **item54, Table B2.1, Part B of the Rules** are to be submitted to the Society. **3** With respect to **2.1.7-5, Part B of the Rules**, the ship construction files are to be verified the items pecified in **(1)** and **(2)** below upon completion of ship construction. In this context, "verify" is not to be intended to be an assessment of any plans or documents in order to verify their compliance with the applicable requirements.	**B2 CLASSIFICATION SURVEYS** (Newly added)	・The provisions specified in Original "B2.1.1 General" are moved to the Rules. ・The provisions related to plans and documents specified in Original "B2.1.1 Submission of Plans and Documents for Approval", "B2.1.6 Documents to be Maintained On Board" and "B2.1.7 Finished Plans" are moved to the Rules. ・Some provisions related to surveys specified in Original "B2.1.4 Presence of Surveyor", "B2.1.5 Hydrostatic Tests, Watertight Tests, and Relevant Tests" and "B2.3 Sea Trials and

Amended	Original	Remarks
(1) The ship construction files onboard are contained the required information. (2) For the ship construction files in the onshore archive, the list of information is contained required information. **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. **5** In applying **2.1.7-8(3) Part B of the Rules**, stability experiments may be dispensed with, provided the special approval of the Administration. In addition, a lightweight measurement is to be carried out, and it is to be confirmed that the deviation of lightweight between **(1)** and **(2)** below does not exceed a value specified in **Table B2.1.7-1**, and the deviation of lightship longitudinal centre of gravity between **(1)** and **(2)** does not exceed 0.5% of length for freeboard (L_f), as applicable. For ships other than those of 500 *gross tonnage* and above engaged on international voyages, 0.5% of length of ship (L) can be applied. For the purpose of this requirement, a sister ship is a ship built by the same yard from the same plan. (1) Lightweight and lightship longitudinal centre of gravity determined by a lightweight check of the ship intended. (2) Lightweight and lightship longitudinal centre of gravity of a lead sister ship or those values which are determined by detailed calculation regarding		Stability Experiments" are moved to Rules. The remaining provisions are specified in Amended "B2.1.7 Survey".

<table>
<tr><th>Amended</th><th>Original</th><th>Remarks</th></tr>
<tr><td>differences, where the ship is modified from a lead sister ship.</td><td></td><td></td></tr>
<tr><td>Table B2.1.7-1 Acceptable Deviation of Lightweight Regarding Dispensation of Inclining Tests
<table>
<tr><td>Length for freeboard (L_f)</td><td>$L_f < 50\ m$</td><td>$50\ m \le L_f \le 160\ m$</td><td>$160\ m < L_f$</td></tr>
<tr><td>Acceptable deviation, as given by a ratio of deviation to the lightweight of the lead ship subjected to the inclining test</td><td>2%</td><td>Obtained by linear interpolation</td><td>1%</td></tr>
</table></td><td></td><td>Amended Table B2.1.7-1 is no change from Original Table B2.3.2-1. except for table number.</td></tr>
<tr><td>6 Where the stability experiment was dispensed with in accordance with 2.1.7-8(3), Part B of the Rules and 5 above, lightweight and lightship centre of gravity are to be determined in accordance with (1) and (2) below.
(1) Lightweight as well as lightship longitudinal centre of gravity and lightship transverse centre of gravity are to be derived from 5(1) above.
(2) Lightship vertical centre of gravity is to be the higher of either the lead sister ship’s value or the calculated value for the considered ship.
7 The functional tests specified in 2.1.7-8(4), Part B of the Rules are to be carried out in accordance with Annex U1.2.2 “Guidance for Stability Computer”, Part U of the Guidance. “A computer for stability calculation is on board the ship as a supplement to the stability information booklet”, specified in 2.1.7-8(4), Part B of the Rules, refers to a computer for stability calculation or a computer in which software for stability calculation is installed that can be used at locations such as the navigation bridge and cargo control room.
8 With respect to the operation manuals and the functional tests for stability instruments specified in 2.1.7-8(4), Part B of the Rules, reference is to be made to</td><td></td><td></td></tr>
</table>

Amended	Original	Remarks
Chapter 4, Part B of *IMO* resolution *MSC*.267(85) *International Code on Intact Stability, 2008 (2008 IS Code)*.		
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025. **2.** Notwithstanding the amendments to the Guidance, the current requirements apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date. **3.** Notwithstanding the provision of preceding **2.**, the amendments to the Guidance, may apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date.		
B2.2 Classification Survey of Ships Not Built under Survey **B2.2.1 General** **1** "In cases where appropriate by the Society" specified in **2.2.1-9, Part B of the Rules** means the cases ships intended to implement classification survey of ships not built under survey are maintained the registration of the societies belong to International Association of Classification Societies (IACS) until the implementation of such survey. **2** "Other equivalent survey methods" specified in **2.2.1-9, Part B of the Rules** means the methods specified in latest IACS Procedural Requirement (PR) 1A.	(Newly added)	・The provisions specified in Original "B2.2 Classification Survey of Ship Not Built under Survey" are moved to Rules. ・Add "B2.2.1 General" for specifying IACS PR1A.

Amended	Original	Remarks
B2.3 Alterations **B2.3.1 Examinations of Altered Parts** In applying **2.3.1, Part B of the Rules**, in cases where single hull oil tankers are converted to double hull oil tanker or bulk carriers, except where specified by the Society or Administration, in addition to **2.3.1, Part B of the Rules, (1)** to **(11)** below are to be complied with: (1) With respect to the subdivision specified in **2.3, Part 1, Part C of the Rules**, the requirements in accordance with ship's type after conversion are to be complied with. (2) With respect to stability, the following requirements are to be complied with: (a) In the case of a conversion to a double hull oil tanker, **3.2.2, Part 3 of Rules for Marine Pollution Prevention Systems** is to still be applied. (b) In the case of a conversion to a bulk carrier, **(5)** below is to be applied. (3) The requirements on protective coating in seawater ballast tank, etc. specified in **3.3.5.3-1, Part 1, Part C of the Rules** are not required to be complied with, except in cases where the entire internal structure of the seawater ballast tank is newly made. However, **3.3.5.3-2, Part 1, Part C of the Rules** applies. (4) The requirements on towing and mooring equipment specified in **14.4, Part 1, Part C of the Rules** are to be applied. (5) In the case of conversion to a bulk carrier, **3.8.2.3, Part 1, Part C of the Rules** applies. However, the	(Newly added)	・ Other than the provisions related to the conversion from single hull oil tankers to double hull oil tanker or bulk carriers, the provisions specified in original "B2.5.1 Examination of Altered Parts" are moved to the Rules.

Amended	Original	Remarks
requirements on permanent means of access are to comply with **(6)** below. (6) The requirements on permanent means of access, except in the case of the addition of substantial new structures, are not required to be complied with. The wording "addition of substantial new structures" refers to hull structures that are entirely renewed or augmented by new double bottom and/or double side construction (e.g. replacing the entire structure within cargo areas or adding a new double bottom and/or double side section to existing cargo areas). In addition, an approved access manual is to be provided. (7) In the case of conversion to a bulk carrier, the requirements on dewatering arrangements and water level detection and alarm systems specified in **13.5.10** and **13.8.5, Part D of the Rules** apply. (8) The requirements on navigation bridge visibility specified in **2.1, Part W of the Rules** apply unless navigation bridge visibility at the ballast loading condition prior to the conversion is maintained after the conversion. (9) The requirements on fire protection, escape and fire fighting specified in **Part R of the Rules** may be applied only to those parts which are altered. (10) In the case of a conversion to a double hull oil tanker, the requirements related to assignment of freeboard specified in **2.2.1, Part V of the Rules** apply when the parameters used to determine the minimum freeboard are different before and after		

Amended	Original	Remarks
conversion or when there is a decrease in magnitude of freeboard assigned after the conversion. (11) The requirements specified in **3.8.1.1-1, 11.3.2.6,11.3.3.3, 14.3.1.5, 14.6, 14.7, 14.8, 14.9, 14.10, 14.11, 14.12** and **14.13, Part 1, Part C of the Rules**, and **13.4** and **13.6, Part D of the Rules** apply when structures or equipment are newly added, replaced or modified.		
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025.		
B10 SURVEYS FOR STEEL BARGES (Deleted)	**B10 SURVEYS FOR STEEL BARGES** **B10.2 Classification Survey during Construction** **B10.2.3 Presence of Surveyors** The wording "items specified otherwise by the Society" in **10.2.3, Part B of the Rules** means surveys of the tests specified in **10.3.2-2(1)** to **(3), Part B 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)**.	

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
B12 SURVEYS FOR MOBILE OFFSHORE DRILLING UNITS AND SPECIAL PURPOSE BARGES **B12.2 Classification Survey during Construction** **B12.2.3 Presence of Surveyor** (Omitted) **3** The following examinations for the fire extinguishing systems of the units specified in **12.1.1-3, Part B of the Rules** are to be carried out in the presence of the Surveyor. (1) Operation tests, performance test and verification of the fire extinguishing system in accordance with **2.1.7-2, Part B of the Rules** (Omitted) **7** The wording "items specified otherwise by the Society" in **12.2.3-1, Part B of the Rules** means surveys of the tests specified in **item 1, Table B2.7, 12.2.3-1(2) and 12.2.4, Part B 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 **item 1(3), Table B2.7, Part B of the Rules**. (Omitted)	**B12 SURVEYS FOR MOBILE OFFSHORE DRILLING UNITS AND SPECIAL PURPOSE BARGES** **B12.2 Classification Survey during Construction** **B12.2.3 Presence of Surveyor** (Omitted) **3** The following examinations for the fire extinguishing systems of the units specified in **12.1.1-3, Part B of the Rules** are to be carried out in the presence of the Surveyor. (1) Operation tests, performance test and verification of the fire extinguishing system in accordance with **B2.1.4-2** (Omitted) **7** The wording "items specified otherwise by the Society" in **12.2.3-1, Part B of the Rules** means surveys of the tests specified in **12.3.2-1(2) and 12.2.4, Part B of the Rules as well as B2.1.4-1(1),** 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)**. (Omitted)	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025. **2.** Notwithstanding the amendments to the Rules, the current requirements apply to the ships and equipment for which the application for Classification Survey		

Amended	Original	Remarks
during Construction submitted to the Society before the effective date. **3.** Notwithstanding the provision of preceding **2.**, the amendments to the Rules may apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date.		
B12 SURVEYS FOR MOBILE OFFSHORE DRILLING UNITS AND SPECIAL PURPOSE BARGES **B12.2 Classification Survey during Construction** **B12.2.7 Classification Survey of Units Not Built under Survey** **1** The treatment of the Classification Survey of Units not built under survey is to be in accordance with **2.2, Part B of the Rules**. (Omitted)	**B12 SURVEYS FOR MOBILE OFFSHORE DRILLING UNITS AND SPECIAL PURPOSE BARGES** **B12.2 Classification Survey during Construction** **B12.2.7 Classification Survey of Units Not Built under Survey** **1** The treatment of the Classification Survey of Units not built under survey is to be in accordance with **B2.2**. (Omitted)	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025.		

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
B14 SURVEY FOR FLOATING OFFSHORE FACILITIES FOR CRUDE OIL/PETROLEUM GAS PRODUCTION, STORAGE AND OFFLOADING **B14.2 Classification Surveys** **B14.2.3 Presence of Surveyors** The wording "items specified otherwise by the Society" in **14.2.3-1, Part B of the Rules** means surveys of the tests specified the relevant requirements in **2.1.7, Part B of the Rules** and **14.2.4-2**, and the wording "the Society may approve other survey methods which it considers to be appropriate" means to be in accordance with **item 1(3), Table B2.7, Part B of the Rules**.	**B14 SURVEY FOR FLOATING OFFSHORE FACILITIES FOR CRUDE OIL/PETROLEUM GAS PRODUCTION, STORAGE AND OFFLOADING** **B14.2 Classification Surveys** **B14.2.3 Presence of Surveyors** The wording "items specified otherwise by the Society" in **14.2.3-1, Part B of the Rules** means surveys of the tests specified the relevant requirements in **2.1.4, Part B of the Rules** and **14.2.4-2**, 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)**.	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025. **2.** Notwithstanding the amendments to the Rules, the current requirements apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date. **3.** Notwithstanding the provision of preceding **2.**, the amendments to the Rules may apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date.		

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
B15 SURVEYS FOR WORK-SHIPS **B15.2 Classification Surveys during Construction** **B15.2.3 Presence of Surveyor** (Omitted) **3** The wording "items specified otherwise by the Society" in **15.2.3-1, Part B of the Rules** means surveys of the shop tests specified in **2.1.7, Part B of the Rules** and **1.5** of **Annex 4.4.2-3, Part O 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 **item 1(3), Table B2.7, Part B of the Rules**. **B15.2.6 Classification Survey of Ships Not Built under Survey** **1** The treatment of the Classification Surveys of Ships not Build under Survey is to be in accordance with **2.2, Part B of the Rules**. (Omitted)	**B15 SURVEYS FOR WORK-SHIPS** **B15.2 Classification Surveys during Construction** **B15.2.3 Presence of Surveyor** (Omitted) **3** The wording "items specified otherwise by the Society" in **15.2.3-1, Part B of the Rules** means surveys of the shop tests specified in **2.1.4, Part B of the Rules** and **1.5** of **Annex 4.4.2-3, Part O 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)**. **B15.2.6 Classification Survey of Ships Not Built under Survey** **1** The treatment of the Classification Surveys of Ships not Build under Survey is to be in accordance with **B2.2**. (Omitted)	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025. **2.** Notwithstanding the amendments to the Rules, the current requirements apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date. **3.** Notwithstanding the provision of preceding **2.**, the amendments to the Rules may apply to the ships and		

Amended	Original	Remarks
equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date.		

Amended	Original	Remarks
GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS **Part CS HULL CONSTRUCTION AND EQUIPMENT OF SMALL SHIPS** **CS25 LOADING MANUAL** **CS25.1 General** **CS25.1.1 General** **1** "Ships deemed appropriate by the Society" as stipulated in **25.1.1-2, Part CS** of the Rules, refers to the following types of ships when their maximum deadweight does not exceed 30 % of their maximum displacement. (1) Ships with an arrangement that allows only small possibilities of variation in the distribution of cargo and ballast. (2) Ships in regular service that perform standard loading. However, it is to be clearly stated either in the "Stability Information" as stipulated in **2.1.7-8(1), Part B** of the Rules, or in some other suitable document that no non-standard loading is to be performed. (3) Ships other than those stipulated in **34.1.1-2, Part C** of the Rules. **2** For ships not required to be provided with a loading manual, the precautions for loading, such as the maximum allowable cargo weight on deck, are to be recorded either in	**GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS** **Part CS HULL CONSTRUCTION AND EQUIPMENT OF SMALL SHIPS** **CS25 LOADING MANUAL** **CS25.1 General** **CS25.1.1 General** **1** "Ships deemed appropriate by the Society" as stipulated in **25.1.1-2, Part CS** of the Rules, refers to the following types of ships when their maximum deadweight does not exceed 30 % of their maximum displacement. (1) Ships with an arrangement that allows only small possibilities of variation in the distribution of cargo and ballast. (2) Ships in regular service that perform standard loading. However, it is to be clearly stated either in the "Stability Information" as stipulated in **2.3.2-1, Part B** of the Rules, or in some other suitable document that no non-standard loading is to be performed. (3) Ships other than those stipulated in **34.1.1-2, Part C** of the Rules. **2** For ships not required to be provided with a loading manual, the precautions for loading, such as the maximum allowable cargo weight on deck, are to be recorded either in	

Amended	Original	Remarks
the “Stability Information” as stipulated in **2.1.7-8(1), Part B** of the Rules, or in some other suitable document.	the “Stability Information” as stipulated in **2.3.2-1, Part B** of the Rules, or in some other suitable document.	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025.		

Amended	Original	Remarks
GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS **Part D MACHINERY INSTALLATIONS** **D7 PROPELLERS** **D7.3 Force Fitting of Propellers** **D7.3.1 Pull-up Length** In the provision of coefficient "*c*" used in the calculation of tangential force F_v, specified in **7.3.1-1, Part D of the Rules**, the wording "the satisfaction of the Society", means determining "*c*" in accordance with **(2)** below using maximum torque Q_{max} as derived from **(1)** below: (1) Q_{max}, which is the value of the maximum torque acting on the propeller's fitted portion, is to be determined by measurements or precise estimation complying with the following **(a)** or **(b)**, and approved by the Society: (a) In cases where Q_{max} is determined by measuring, the measurements are to be carried out on a sister ship (complete same design including the main engine, shafting system and so on) under a fully loaded condition at the time of the astern tests required under the provision of **item 2, Table B2.11, Part B of the Rules**. (b) In cases where Q_{max} is determined by estimation, the estimation method is to be	**GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS** **Part D MACHINERY INSTALLATIONS** **D7 PROPELLERS** **D7.3 Force Fitting of Propellers** **D7.3.1 Pull-up Length** In the provision of coefficient "*c*" used in the calculation of tangential force F_v, specified in **7.3.1-1, Part D of the Rules**, the wording "the satisfaction of the Society", means determining "*c*" in accordance with **(2)** below using maximum torque Q_{max} as derived from **(1)** below: (1) Q_{max}, which is the value of the maximum torque acting on the propeller's fitted portion, is to be determined by measurements or precise estimation complying with the following **(a)** or **(b)**, and approved by the Society: (a) In cases where Q_{max} is determined by measuring, the measurements are to be carried out on a sister ship (complete same design including the main engine, shafting system and so on) under a fully loaded condition at the time of the astern tests required under the provision of **2.3.1-1(2), Part B of the Rules**. (b) In cases where Q_{max} is determined by estimation, the estimation method is to be	

Amended	Original	Remarks
verified with an estimation error not exceeding 10 % when compared with the results of actual measurements taken at the time of the astern tests. (Omitted) **D11 WELDING FOR MACHINERY INSTALLATIONS** **D11.6 Welding of Piping** **D11.6.5 Non-destructive Testing** **1** When the non-destructive testing specified in **11.6.5, Part D of the Rules** is carried out, test plans are to be submitted to the Society for approval prior to testing in accordance with **2.1.7-1(2) Part B of the Rules**. (Omitted)	verified with an estimation error not exceeding 10 % when compared with the results of actual measurements taken at the time of the astern tests. (Omitted) **D11 WELDING FOR MACHINERY INSTALLATIONS** **D11.6 Welding of Piping** **D11.6.5 Non-destructive Testing** **1** When the non-destructive testing specified in **11.6.5, Part D of the Rules** is carried out, test plans are to be submitted to the Society for approval prior to testing in accordance with **2.1.4-5, Part B of the Rules**. (Omitted)	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025.		

Amended	Original	Remarks
GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS **Part GF SHIPS USING LOW-FLASHPOINT FUELS** **GF16 MANUFACTURE, WORKMANSHIP AND TESTING** **GF16.5 Testing** **GF16.5.5 Membrane Tanks** (Omitted) **2** The "hydrostatically tested" referred to in the requirements in **16.5.5-2(1), Part GF of the Rules** means the hydraulic test according to the requirements in **item 10(1), Table B2.7, Part B of the Rules**. In this case, hydraulic pressure may be applied from hull structures such as ballast tanks and cofferdams. **3** The leakage test for the "all hold structure supporting the membrane" referred to in the requirements in **16.5.5-2(2), Part GF of the Rules** is to be in accordance with the requirements specified in **item 10(1), Table B2.7, Part B of the Rules.**	**GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS** **Part GF SHIPS USING LOW-FLASHPOINT FUELS** **GF16 MANUFACTURE, WORKMANSHIP AND TESTING** **GF16.5 Testing** **GF16.5.5 Membrane Tanks** (Omitted) **2** The "hydrostatically tested" referred to in the requirements in **16.5.5-2(1), Part GF of the Rules** means the hydraulic test according to the requirements in **2.1.5, Part B of the Rules**. In this case, hydraulic pressure may be applied from hull structures such as ballast tanks and cofferdams. **3** The leakage test for the "all hold structure supporting the membrane" referred to in the requirements in **16.5.5-2(2), Part GF of the Rules** is to be in accordance with the requirements specified in **2.1.5(1), Part B of the Rules**.	

Amended	Original	Remarks
Annex 1 GUIDANCE FOR EQUIPMENT AND FITTINGS OF SHIPS USING LOW-FLASHPOINT FUELS	**Annex 1 GUIDANCE FOR EQUIPMENT AND FITTINGS OF SHIPS USING LOW-FLASHPOINT FUELS**	
Chapter 1 GENERAL	**Chapter 1 GENERAL**	
1.2 Submission of Plans and Documents	**1.2 Submission of Plans and Documents**	
In accordance with the requirements in **2.1.3, Part B of the Rules**, the following plans and documents related to equipment, etc. as well as those specified in the following chapters of this annex and thereafter where appropriate are to be submitted to the Society. (Omitted)	In accordance with the requirements in **2.1.2-1(5), 2.1.3-1(10)** and **2.1.3-2, Part B of the Rules**, the following plans and documents related to equipment, etc. as well as those specified in the following chapters of this annex and thereafter where appropriate are to be submitted to the Society. (Omitted)	
Chapter 13 INSULATION SYSTEM FOR VACUUM INSULATED TANKS	**Chapter 13 INSULATION SYSTEM FOR VACUUM INSULATED TANKS**	
13.2 Submission of Plans and Documents	**13.2 Submission of Plans and Documents**	
13.2.1 Submission of Plans and Documents Notwithstanding **1.2**, in accordance with the requirements in **2.1.3, Part B of the Rules**, the plans and documents related to vacuum insulation systems which are to be submitted to the Society are as follows:	**13.2.1 Submission of Plans and Documents** Notwithstanding **1.2**, in accordance with the requirements in **2.1.2-1(5), 2.1.3-1(9)** and **2.1.3-2, Part B of the Rules**, the plans and documents related to vacuum insulation systems which are to be submitted to the Society are as follows:	

Amended	Original	Remarks
Annex 2 GUIDANCE FOR GAS-FUELLED BOILERS **Chapter 4 TESTS** **4.4 Sea Trials** (Omitted) **2** The sea trials specified in **2.1.7-7, Part B of the Rules** are to be carried out for dual fuel boilers operating using oil fuel only. In addition, only the tests in **2.1.7-7, Part B of the Rules** deemed necessary by the Society are to be carried out during the sea trials for dual fuel boilers and the gas only boilers operating by gas burning or oil/gas burning.	**Annex 2 GUIDANCE FOR GAS-FUELLED BOILERS** **Chapter 4 TESTS** **4.4 Sea Trials** (Omitted) **2** The sea trials specified in **2.3.1, Part B of the Rules** are to be carried out for dual fuel boilers operating using oil fuel only. In addition, only the tests in **2.3.1, Part B of the Rules** deemed necessary by the Society are to be carried out during the sea trials for dual fuel boilers and the gas only boilers operating by gas burning or oil/gas burning.	
Annex 2A GUIDANCE FOR GAS COMBUSTION UNITS **Chapter 4 Tests and Inspection** **4.4 Gas Trials** (Omitted) **2** For Gas trials of *GCU*s and related equipment, the wording “Sea Trail” specified in **2.1.7-7, Part B of the Rules** is to be interpreted to mean “Gas Trail”, the requirements are to apply and the gas trials carried out using oil fuel only.	**Annex 2A GUIDANCE FOR GAS COMBUSTION UNITS** **Chapter 4 Tests and Inspection** **4.4 Gas Trials** (Omitted) **2** For Gas trials of *GCU*s and related equipment, the wording “Sea Trail” specified in **2.3.1, Part B of the Rules** is to be interpreted to mean “Gas Trail”, the requirements are to apply and the gas trials carried out using oil fuel only.	

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
In addition, only the tests in **2.1.7-7, Part B of the Rules** deemed necessary by the Society are to be carried out during the gas trials for dual-fuel type engines and the gas-only type engines operating by gas burning or oil/gas burning. (Omitted)	In addition, only the tests in **2.3.1, Part B of the Rules** deemed necessary by the Society are to be carried out during the gas trials for dual-fuel type engines and the gas-only type engines operating by gas burning or oil/gas burning. (Omitted)	
Annex 3 GUIDANCE FOR HIGH PRESSURE GAS-FUELLED ENGINES **Chapter 4 TESTS** **4.4 Sea Trials** (Omitted) **2** The seal trials specified in **2.1.7-7, Part B of the Rules** are to be carried out using gas fuel only. Some of the aforementioned tests, however, may be omitted in cases where deemed to be appropriate the Society.	**Annex 3 GUIDANCE FOR HIGH PRESSURE GAS-FUELLED ENGINES** **Chapter 4 TESTS** **4.4 Sea Trials** (Omitted) **2** The seal trials specified in **2.3.1, Part B of the Rules** are to be carried out using gas fuel only. Some of the aforementioned tests, however, may be omitted in cases where deemed to be appropriate the Society.	

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
Annex 4 GUIDANCE FOR LOW PRESSURE GAS-FUELLED ENGINES **Chapter 4 TESTS** **4.4 Sea Trials** (Omitted) **2** The sea trials specified in **2.1.7-7, Part B of the Rules** are to be carried out using gas fuel only. Some of the aforementioned tests, however, may be omitted in cases where deemed appropriate by the Society.	**Annex 4 GUIDANCE FOR LOW PRESSURE GAS-FUELLED ENGINES** **Chapter 4 TESTS** **4.4 Sea Trials** (Omitted) **2** The sea trials specified in **2.3.1, Part B of the Rules** are to be carried out using gas fuel only. Some of the aforementioned tests, however, may be omitted in cases where deemed appropriate by the Society.	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025.		

Amended	Original	Remarks
GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS **Part H ELECTRICAL INSTALLATIONS** **H2 ELECTRICAL INSTALLATIONS AND SYSTEM DESIGN** **H2.9 Cables** **H2.9.15 Penetration of Bulkheads and Decks** (Omitted) **5** Cable penetrations which are required to be watertight may be verified, for example, in accordance any of the following **(1)** to **(3)**. (1) Confirmation as to whether watertightness is assured by a construction method in accordance with standards such as *JIS.* (2) The watertightness tests specified in **item 10(1), Table B2.7, Part B of the Rules.** (3) Approval in accordance with **Chapter 1**, **Part 4 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.**	**GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS** **Part H ELECTRICAL INSTALLATIONS** **H2 ELECTRICAL INSTALLATIONS AND SYSTEM DESIGN** **H2.9 Cables** **H2.9.15 Penetration of Bulkheads and Decks** (Omitted) **5** Cable penetrations which are required to be watertight may be verified, for example, in accordance any of the following **(1)** to **(3)**. (1) Confirmation as to whether watertightness is assured by a construction method in accordance with standards such as *JIS.* (2) The watertightness tests specified in **2.1.5**, **Part B of the Rules.** (3) Approval in accordance with **Chapter 1**, **Part 4 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.**	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025.		

Amended	Original	Remarks
GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS **Part N SHIPS CARRYING LIQUEFIED GASES IN BULK** **N4 CARGO CONTAINMENT** **N4.24 Membrane Tanks** **N4.24.9 Testing** **1** The "hydrostatically tested as deemed appropriate by the Society" referred to in the requirements in **4.24.9-1, Part N of the Rules** means the hydraulic test according to the requirements in **item 10(1), Table B2.7, Part B of the Rules**. In this case, hydraulic pressure may be applied from hull structures such as ballast tanks and cofferdams. **2** The leakage test for the "all hold structure supporting the membrane" referred to in the requirements in **4.24.9-2, Part N of the Rules** is to be in accordance with the requirements specified in **item 10(1), Table B2.7, Part B of the Rules**. **N4.25 Integral Tanks** **N4.25.5 Testing** For the purpose of the requirements in **4.25.5, Part N of the Rules**, the hydraulic test of integral tanks is to	**GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS** **Part N SHIPS CARRYING LIQUEFIED GASES IN BULK** **N4 CARGO CONTAINMENT** **N4.24 Membrane Tanks** **N4.24.9 Testing** **1** The "hydrostatically tested as deemed appropriate by the Society" referred to in the requirements in **4.24.9-1, Part N of the Rules** means the hydraulic test according to the requirements in **2.1.5, Part B of the Rules**. In this case, hydraulic pressure may be applied from hull structures such as ballast tanks and cofferdams. **2** The leakage test for the "all hold structure supporting the membrane" referred to in the requirements in **4.24.9-2, Part N of the Rules** is to be in accordance with the requirements specified in **2.1.5(1), Part B of the Rules**. **N4.25 Integral Tanks** **N4.25.5 Testing** For the purpose of the requirements in **4.25.5, Part N of the Rules**, the hydraulic test of integral tanks is to	

Amended	Original	Remarks
conform to the requirements in **item 10(1), Table B2.7, Part B of the Rules**. However, for tanks whose design *MARVS* exceeds 0.025 *MPa* or specific gravity of the cargo exceeds 0.6, the test may be such as to conform to the requirements specified in **N4.21.5-1** correspondingly.	conform to the requirements in **2.1.5, Part B of the Rules**. However, for tanks whose design *MARVS* exceeds 0.025 *MPa* or specific gravity of the cargo exceeds 0.6, the test may be such as to conform to the requirements specified in **N4.21.5-1** correspondingly.	
Annex 1 GUIDANCE FOR EQUIPMENT AND FITTINGS OF SHIPS CARRYING LIQUEFIED GASES IN BULK **Chapter 1 GENERAL** **1.2 Submission of Plans and Documents** According to the requirements in **2.1.3, Part B of the Rules**, the following plans and documents relating to the equipment, etc. and those specified in **Chapter 2** and thereafter where appropriate are to be submitted to the Society: (Omitted)	**Annex 1 GUIDANCE FOR EQUIPMENT AND FITTINGS OF SHIPS CARRYING LIQUEFIED GASES IN BULK** **Chapter 1 GENERAL** **1.2 Submission of Plans and Documents** According to the requirements in **2.1.2-1(7) and 2.1.3-2, Part B of the Rules**, the following plans and documents relating to the equipment, etc. and those specified in **Chapter 2** and thereafter where appropriate are to be submitted to the Society: (Omitted)	

Amended	Original	Remarks
Annex 2 GUIDANCE FOR DUAL FUEL BOILERS **Chapter 4 TESTS** **4.4 Sea Trials** (Omitted) **2** Sea trials specified in **2.1.7-7, Part B of the Rules** are to be carried out for operations using the oil fuel only. And also either the testing items as considered to be necessary by the Society are to be carried out with the operation by gas burning or oil/gas burning.	**Annex 2 GUIDANCE FOR DUAL FUEL BOILERS** **Chapter 4 TESTS** **4.4 Sea Trials** (Omitted) **2** Sea trials specified in **2.3.1, Part B of the Rules** are to be carried out for operations using the oil fuel only. And also either the testing items as considered to be necessary by the Society are to be carried out with the operation by gas burning or oil/gas burning.	
Annex 3 GUIDANCE FOR HIGH PRESSURE DUAL FUEL ENGINES **Chapter 5 TESTS** **5.4 Sea Trials** (Omitted) **2** Sea trials specified in **2.1.7-7, Part B** and **1.4.5, Part D of the Rules** are to be carried out for operations using the oil fuel only. In addition, however, either the testing items as considered to be necessary by the Society are to be carried out to verify the control performance of engine operations using the gas fuel.	**Annex 3 GUIDANCE FOR HIGH PRESSURE DUAL FUEL ENGINES** **Chapter 5 TESTS** **5.4 Sea Trials** (Omitted) **2** Sea trials specified in **2.3.1, Part B** and **1.4.5, Part D of the Rules** are to be carried out for operations using the oil fuel only. In addition, however, either the testing items as considered to be necessary by the Society are to be carried out to verify the control performance of engine operations using the gas fuel.	

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
Annex 4 GUIDANCE FOR LOW PRESSURE DUAL FUEL ENGINES **Chapter 5 TESTS** **5.4 Sea Trials** (Omitted) **2** Sea trials specified in **2.1.7-7, Part B** and **1.4.5, Part D of the Rules** are to be carried out for operations using the oil fuel only. In addition, however, either the testing items as considered to be necessary by the Society are to be carried out to verify the control performance of engine operations using the gas fuel.	**Annex 4 GUIDANCE FOR LOW PRESSURE DUAL FUEL ENGINES** **Chapter 5 TESTS** **5.4 Sea Trials** (Omitted) **2** Sea trials specified in **2.3.1, Part B** and **1.4.5, Part D of the Rules** are to be carried out for operations using the oil fuel only. In addition, however, either the testing items as considered to be necessary by the Society are to be carried out to verify the control performance of engine operations using the gas fuel.	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025.		

Amended	Original	Remarks
GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS **Part R FIRE PROTECTION, DETECTION AND EXTINCTION** **R4 PROBABILITY OF IGNITION** **R4.5 Cargo Areas of Tankers** **R4.5.2 Restriction on Boundary Openings** (Omitted) **5** The navigational bridge external doors and windows which are located within the limits specified in **4.5.2-2, Part R of the Rules**, are to be provided with packing and clamping fittings. For ensuring their gas-tightness, appropriate test are to be carried out. If a water hose test is applied, such tests are to be in accordance with the provisions of **An1.4.4-3, Annex 2.1.5 "TESTING PROCEDURES OF WATERTIGHT COMPARTMENTS", Part B of the Rules**. (Omitted)	**GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS** **Part R FIRE PROTECTION, DETECTION AND EXTINCTION** **R4 PROBABILITY OF IGNITION** **R4.5 Cargo Areas of Tankers** **R4.5.2 Restriction on Boundary Openings** (Omitted) **5** The navigational bridge external doors and windows which are located within the limits specified in **4.5.2-2, Part R of the Rules**, are to be provided with packing and clamping fittings. For ensuring their gas-tightness, appropriate test are to be carried out. If a water hose test is applied, such tests are to be in accordance with the provisions of **1.4.4-3 of Annex B2.1.5-1 "TESTING PROCEDURES OF WATERTIGHT COMPARTMENTS"**. (Omitted)	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025.		

Amended	Original	Remarks
GUIDANCE FOR MARINE POLLUTION PREVENTION SYSTEMS **Part 2 SURVEYS** **2.1 Registration Surveys during Construction** (Deleted) **2.1.2 Submission of Plans and Documents** (Omitted) **2.1.4 Inspections of Construction and Equipment** (Omitted) **2** Inspections of equipment for the prevention of pollution by oil carried in bulk by oil tankers are to be carried out specifically in accordance with the following procedures **(1)** through **(8)**: (1) At inspections specified in **2.1.4-2(1)(d) in Part 2 of the Rules**, it is to be ensured that no leakage is caused by a hydrostatic test carried out at the working pressure. (2) Pressure tests for crude oil washing system specified in **2.1.4-2(2)(a)ii) in Part 2 of the Rules** are to be carried out either with water or oil for the range as	**GUIDANCE FOR MARINE POLLUTION PREVENTION SYSTEMS** **Part 2 SURVEYS** **2.1 Registration Surveys during Construction** **2.1.1 General** With respect to **2.1.1-2, Part 2 of the Rules**, surveyors are to confirm the asbestos-free declarations and supporting documents specified in **2.1.2-2(5), Part 2 of the Rules**. **2.1.2 Submission of Plans and Documents for Approval** (Omitted) **2.1.3 Inspections of Construction and Equipment** (Omitted) **2** Inspections of equipment for the prevention of pollution by oil carried in bulk by oil tankers are to be carried out specifically in accordance with the following procedures **(1)** through **(8)**: (1) At inspections specified in **2.1.3-2(1)(d) in Part 2 of the Rules**, it is to be ensured that no leakage is caused by a hydrostatic test carried out at the working pressure. (2) Pressure tests for crude oil washing system specified in **2.1.3-2(2)(a)ii) in Part 2 of the Rules** are to be carried out either with water or oil for the range as	

Amended	Original	Remarks
shown in **Fig. 2.2.1-1** between the valve closest to the crude washing pump outlet and the deck piece or thereabouts of the crude washing branch line. The test pressure is to be 1.5 times the working pressure at crude washing as specified in the *COW* procedures and arrangements manual, and pressure measurements are to be taken at the on-deck crude washing main. However, on board pressure tests may be omitted for the portion from the stop valve to the open end, provided that pressure tests are carried out at shop. (3) Inspections specified in **2.1.4-2(3)(b)i) in Part 2 of the Rules** are to be carried out in accordance with the following procedures : (Omitted) (4) Inspections of oil/water interface detectors specified in **2.1.4-2(3)(c) in Part 2 of the Rules** are to be carried out in accordance with the following procedures : (Omitted) (5) The wording "interconnecting system for connection to reception facilities" in **2.1.4-2(4)(c) in Part 2 of the Rules** means the small diameter discharge pipes connected over boarded of the ships manifold valves specified in **3.3.2-4(2) in Part 3 of the Rules**. (Omitted) (8) With respect to the operation manuals and the functional tests for stability instruments specified in **2.1.4-2(6)(b), Part 2 of the Rules**, reference is to be	shown in **Fig. 2.2.1-1** between the valve closest to the crude washing pump outlet and the deck piece or thereabouts of the crude washing branch line. The test pressure is to be 1.5 times the working pressure at crude washing as specified in the *COW* procedures and arrangements manual, and pressure measurements are to be taken at the on-deck crude washing main. However, on board pressure tests may be omitted for the portion from the stop valve to the open end, provided that pressure tests are carried out at shop. (3) Inspections specified in **2.1.3-2(3)(b)i) in Part 2 of the Rules** are to be carried out in accordance with the following procedures : (Omitted) (4) Inspections of oil/water interface detectors specified in **2.1.3-2(3)(c) in Part 2 of the Rules** are to be carried out in accordance with the following procedures : (Omitted) (5) The wording "interconnecting system for connection to reception facilities" in **2.1.3-2(4)(c) in Part 2 of the Rules** means the small diameter discharge pipes connected over boarded of the ships manifold valves specified in **3.3.2-4(2) in Part 3 of the Rules**. (Omitted) (8) With respect to the operation manuals and the functional tests for stability instruments specified in **2.1.3-2(6)(b), Part 2 of the Rules**, reference is to be	

Amended	Original	Remarks
made to Chapter 4, Part B of *IMO resolution MSC*.267(85) "*International Code on Intact Stability, 2008 (2008 IS Code)*". **3** Inspection procedures for equipment for the prevention of discharge of noxious liquid substances in ships carrying noxious liquid substances in bulk are to be in accordance with the following procedures **(1)** to **(3)**: (1) The Registration Surveys of prewashing system specified in **2.1.4-3(1)(a) in Part 2 of the Rules** is to be carried out by operating the system correspondingly in accordance with the washing procedure specified in The Annex II of The International Convention for the Prevention of Pollution from Ships, 1973, as modified by Protocol of 1978 relating thereto (hereinafter referred to as the "*Annex* II " in this Guidance) (2) The wording "water test by an approved procedure" specified in **2.1.4-3(2)(b) in Part 2 of the Rules** means the test procedure approved by the Society on the basis of the procedure specified in Appendix *5* of the *Annex* II. (3) The Registration Surveys of ventilated washing system specified in **2.1.4-3(8)(a) in Part 2 of the Rules** is to be carried out by operating the system correspondingly in accordance with the wash procedure specified in Appendix *7* of the *Annex* II. (Omitted) **5** The "examinations of work, such as installation, etc." referred to in **2.1.4-5(2)(b)i), Part 2 of the Rules** are to be in accordance with the following **(1)** or **(2)**:	made to Chapter 4, Part B of *IMO resolution MSC*.267(85) "*International Code on Intact Stability, 2008 (2008 IS Code)*". **3** Inspection procedures for equipment for the prevention of discharge of noxious liquid substances in ships carrying noxious liquid substances in bulk are to be in accordance with the following procedures **(1)** to **(3)**: (1) The Registration Surveys of prewashing system specified in **2.1.3-3(1)(a) in Part 2 of the Rules** is to be carried out by operating the system correspondingly in accordance with the washing procedure specified in The Annex II of The International Convention for the Prevention of Pollution from Ships, 1973, as modified by Protocol of 1978 relating thereto (hereinafter referred to as the "*Annex* II " in this Guidance) (2) The wording "water test by an approved procedure" specified in **2.1.3-3(2)(b) in Part 2 of the Rules** means the test procedure approved by the Society on the basis of the procedure specified in Appendix *5* of the *Annex* II. (3) The Registration Surveys of ventilated washing system specified in **2.1.3-3(8)(a) in Part 2 of the Rules** is to be carried out by operating the system correspondingly in accordance with the wash procedure specified in Appendix *7* of the *Annex* II. (Omitted) **5** The "examinations of work, such as installation, etc." referred to in **2.1.3-5(2)(b)i), Part 2 of the Rules** are to be in accordance with the following **(1)** or **(2)**:	

Amended	Original	Remarks
(Omitted) **6** The "performance tests" referred to in **2.1.4-5(2)(b)ii), Part 2 of the Rules** are to be in accordance with the following **(1)** or **(2)**: (Omitted) **7** In applying **2.1.4-5(3), Part 2 of the Rules**, the definitions of terms which appear in said paragraph are as specified in **1.1.2, Part 8 of the Rules**. **8** The wording "diesel engines deemed necessary by the Society" in **2.1.4-5(3)(a), Part 2 of the Rules** means diesel engines except those whose NOx emissions are verified on board using the same method as the measurement procedures for emission verification on a test bed in accordance with 2.2.4.1 of the *NOx Technical Code,* or which are verified using the on-board simplified measurement method in accordance with 2.2.5.2 of the *NOx Technical Code*. **9** The wording "where deemed appropriate by the Society" in **2.1.4-5(3)(a), Part 2 of the Rules** means where it is considered by the Surveyor upon physical verification that all the other engines and cylinders perform in the same manner as those tested. The verification on a spare may be carried out only where the component represented by the spare part is one which is suitably defined in the approved Technical File on-board NOx verification procedures. **10** The wording "standard deemed appropriate by the Society" in **2.1.4-5(3)(b), Part 2 of the Rules** means Section 7 of *IMO* resolution *MEPC*.291(71), as amended, or others deemed appropriate by the Administration taking into account this resolution. **11** The wording "the tests otherwise specified by the	(Omitted) **6** The "performance tests" referred to in **2.1.3-5(2)(b)ii), Part 2 of the Rules** are to be in accordance with the following **(1)** or **(2)**: (Omitted) **7** In applying **2.1.3-5(3), Part 2 of the Rules**, the definitions of terms which appear in said paragraph are as specified in **1.1.2, Part 8 of the Rules**. **8** The wording "diesel engines deemed necessary by the Society" in **2.1.3-5(3)(a), Part 2 of the Rules** means diesel engines except those whose NOx emissions are verified on board using the same method as the measurement procedures for emission verification on a test bed in accordance with 2.2.4.1 of the *NOx Technical Code,* or which are verified using the on-board simplified measurement method in accordance with 2.2.5.2 of the *NOx Technical Code*. **9** The wording "where deemed appropriate by the Society" in **2.1.3-5(3)(a), Part 2 of the Rules** means where it is considered by the Surveyor upon physical verification that all the other engines and cylinders perform in the same manner as those tested. The verification on a spare may be carried out only where the component represented by the spare part is one which is suitably defined in the approved Technical File on-board NOx verification procedures. **10** The wording "standard deemed appropriate by the Society" in **2.1.3-5(3)(b), Part 2 of the Rules** means Section 7 of *IMO* resolution *MEPC*.291(71), as amended, or others deemed appropriate by the Administration taking into account this resolution. **11** The wording "the tests otherwise specified by the	

Amended	Original	Remarks
Society" in **2.1.4-5(5)(a), Part 2 of the Rules** means the tests required in 7.2 of *IMO* resolution *MEPC*.76(40) or *MEPC*.244(66) as may be amended. Those tests may be replaced with the verification by the report of the same tests carried out by the manufacturer of the incinerator. **12** The wording "the tests otherwise specified by the Society" in **2.1.3-5(5)(c), Part 2 of the Rules** means the tests required in 7.3 of *IMO* resolution *MEPC*.76(40) or *MEPC*.244(66) as may be amended. **13** The wording "deemed appropriate by the Society" in **2.1.4-6(1), Part 2 of the Rules** means as follows: (Omitted) **14** The "guidelines deemed appropriate by the Society" specified in **2.1.4-7, Part 2 of the Rules** refers to the *2021 Guidelines on the Shaft/Engine Power Limitation System to Comply with the EEXI Requirements and Use of a Power Reserve (IMO Res.MEPC.335(76))*. (Deleted)	Society" in **2.1.3-5(5)(a), Part 2 of the Rules** means the tests required in 7.2 of *IMO* resolution *MEPC*.76(40) or *MEPC*.244(66) as may be amended. Those tests may be replaced with the verification by the report of the same tests carried out by the manufacturer of the incinerator. **12** The wording "the tests otherwise specified by the Society" in **2.1.3-5(5)(c), Part 2 of the Rules** means the tests required in 7.3 of *IMO* resolution *MEPC*.76(40) or *MEPC*.244(66) as may be amended. **13** The wording "deemed appropriate by the Society" in **2.1.3-6(1), Part 2 of the Rules** means as follows: (Omitted) **14** The "guidelines deemed appropriate by the Society" specified in **2.1.3-7, Part 2 of the Rules** refers to the *2021 Guidelines on the Shaft/Engine Power Limitation System to Comply with the EEXI Requirements and Use of a Power Reserve (IMO Res.MEPC.335(76))*. **2.1.5 Documents to be Maintained On Board** The certificates specified in **2.1.5, Part 2 of the Rules** are those such as the ones issued for each piece of equipment, device, etc., type approval certificates valid at the time of the Registration Survey, or others applicable. In addition, unless equipment or devices on board are renewed after the ship has entered service, these certificates need not be updated.	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025. **2.** Notwithstanding the amendments to the Rules, the		

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
current requirements apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date. **3.** Notwithstanding the provision of preceding **2.**, the amendments to the Rules may apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date.		

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
GUIDANCE FOR ANTI-FOULING SYSTEMS ON SHIPS **Chapter 2 SURVEYS** **2.3 Registration Surveys Not Built under the Survey** **2.3.2 Submission of Plans and Documents** (Omitted) **2.3 Registration Surveys Not Built under the Survey** **2.3.2 Submission of Plans and Documents** (Omitted) **2.3.3 Survey** (Omitted)	**GUIDANCE FOR ANTI-FOULING SYSTEMS ON SHIPS** **Chapter 2 SURVEYS** **2.3 Registration Surveys Not Built under the Survey** **2.3.2 Submission of Plans and Documents <u>for Reference</u>** (Omitted) **2.3 Registration Surveys Not Built under the Survey** **2.3.2 Submission of Plans and Documents <u>for Reference</u>** (Omitted) **2.3.3 <u>Presence of Surveyor</u>** (Omitted)	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025.		

Amended	Original	Remarks
GUIDANCE FOR BALLAST WATER MANAGEMENT INSTALLATIONS **Part 2 SURVEYS** **Chapter 2 REGISTRATION SURVEYS** **2.1 Registration Surveys during Construction** **2.1.4 Inspections of Equipment** **1** For the purpose of **2.1.4-2(10), Part 2 of the Rules**, commissioning testing of *BWMS* is to be carried out after all equipment (including associated piping, etc.) has been fully installed on board in consideration of *BWM*.2/*Circ*.70/*Rev*.1 *2020 Guidance for the Commissioning Testing of Ballast Water Management Systems* and in accordance with **Annex 2.1.3-2(10) "Guidance Procedure for Commissioning Testing"**.	**GUIDANCE FOR BALLAST WATER MANAGEMENT INSTALLATIONS** **Part 2 SURVEYS** **Chapter 2 REGISTRATION SURVEYS** **2.1 Registration Surveys during Construction** **2.1.3 Inspections of Equipment** **1** For the purpose of **2.1.3-2(10), Part 2 of the Rules**, commissioning testing of *BWMS* is to be carried out after all equipment (including associated piping, etc.) has been fully installed on board in consideration of *BWM*.2/*Circ*.70/*Rev*.1 *2020 Guidance for the Commissioning Testing of Ballast Water Management Systems* and in accordance with **Annex 2.1.3-2(10) "Guidance Procedure for Commissioning Testing"**.	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025. **2.** Notwithstanding the amendments to the Rules, the current requirements apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date. **3.** Notwithstanding the provision of preceding **2.**, the amendments to the Rules may apply to the ships and		

Amended	Original	Remarks
equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date.		

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
GUIDANCE FOR CARGO HANDLING APPLIANCES **Chapter 2 SURVEYS** **2.3 Registration Surveys** **2.3.1 <u>Submission of Plans and Documents</u>** (Omitted) **2.3.2 <u>Survey</u>** (Omitted)	**GUIDANCE FOR CARGO HANDLING APPLIANCES** **Chapter 2 SURVEYS** **2.3 Registration Surveys** **2.3.1 <u>Drawings and Other Documents to be Submitted</u>** (Omitted) **2.3.2 <u>Examinations for Workmanship</u>** (Omitted)	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025. **2.** Notwithstanding the amendments to the Rules, the current requirements apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date. **3.** Notwithstanding the provision of preceding **2.**, the amendments to the Rules may apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date.		

Amended	Original	Remarks
GUIDANCE FOR AUTOMATIC AND REMOTE CONTROL SYSTEMS **Chapter 2 SURVEYS OF AUTOMATIC AND REMOTE CONTROL SYSTEMS** **2.2 Registration Surveys** **2.2.1 Submission of Plans and Documents** **1** The data specified in **2.2.1-1(1) of the Rules** is to be submitted using, as far as possible, those forms designated by the Society. **2** In applying **2.2.1-1(1)(a) and (2)(a) of the Rules**, in cases where the automatic and remote control system includes computer based systems subject to **18.1.1-3, Part D of the Rules for the Survey and Construction of Steel Ships**, the drawings and data stipulated in **1.2, Annex 18.1.1, Part D of the Rules for the Survey and Construction of Steel Ships** are to be submitted. However, for computer based systems which have been already approved by the Society in accordance with **Chapter 8, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use**, only drawings and data on parts that differ from ship to ship need to be submitted; this, however, excludes those specified in **1.2(2)(a)** of the said Annex. **3** The drawings and data specified in **2.2.1-1(2)(b) of the Rules** are as follows: (Omitted)	**GUIDANCE FOR AUTOMATIC AND REMOTE CONTROL SYSTEMS** **Chapter 2 SURVEYS OF AUTOMATIC AND REMOTE CONTROL SYSTEMS** **2.2 Registration Surveys** **2.2.1 Drawings and Data** **1** The data specified in **2.2.1(1) of the Rules** is to be submitted using, as far as possible, those forms designated by the Society. **2** In applying **2.2.1(1)(a) and (2)(a) of the Rules**, in cases where the automatic and remote control system includes computer based systems subject to **18.1.1-3, Part D of the Rules for the Survey and Construction of Steel Ships**, the drawings and data stipulated in **1.2, Annex 18.1.1, Part D of the Rules for the Survey and Construction of Steel Ships** are to be submitted. However, for computer based systems which have been already approved by the Society in accordance with **Chapter 8, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use**, only drawings and data on parts that differ from ship to ship need to be submitted; this, however, excludes those specified in **1.2(2)(a)** of the said Annex. **3** The drawings and data specified in **2.2.1(2)(b) of the Rules** are as follows: (Omitted)	

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025. **2.** Notwithstanding the amendments to the Rules, the current requirements apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date. **3.** Notwithstanding the provision of preceding **2.**, the amendments to the Rules may apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date.		

Amended	Original	Remarks
GUIDANCE FOR HIGH SPEED CRAFT **Part 2 CLASS SURVEYS** **Chapter 2 CLASSIFICATION SURVEYS** **2.1 Classification Survey during Construction** **2.1.2 Submission of Plans and Documents** (Omitted) **2.3 Sea Trials and Stability Experiments** **2.3.1 Sea Trials** (Omitted) (5) Operating test of machinery installations Operating test of machinery installations is to be in accordance with the requirement specified in **item 5, Table B2.11, Part B of the Rules for the Survey and Construction of Steel Ships**. (6) Performance test of windlass Performance test of windlass is to be in accordance with the requirement specified in **item 6, Table B2.11, Part B of the Rules for the Survey and Construction of Steel Ships**. (Omitted) (8) The accumulation test of a boiler The accumulation test of a boiler is to be in	**GUIDANCE FOR HIGH SPEED CRAFT** **Part 2 CLASS SURVEYS** **Chapter 2 CLASSIFICATION SURVEYS** **2.1 Classification Survey during Construction** **2.1.2 Submission of Plans and Documents for Approval** (Omitted) **2.3 Sea Trials and Stability Experiments** **2.3.1 Sea Trials** (Omitted) (5) Operating test of machinery installations Operating test of machinery installations is to be in accordance with the requirement specified in **2.3.1-1(5), Part B of the Rules for the Survey and Construction of Steel Ships**. (6) Performance test of windlass Performance test of windlass is to be in accordance with the requirement specified in **2.3.1-1(6), Part B of the Rules for the Survey and Construction of Steel Ships**. (Omitted) (8) The accumulation test of a boiler The accumulation test of a boiler is to be in	

Amended	Original	Remarks
accordance with the requirement specified in **item 7 Table B2.11, Part B of the Rules for the Survey and Construction of Steel Ships**. (Omitted) **2.5 Alterations** **2.5.1 Requirements of Surveys** (Omitted) **3** The stability after alterations, **2.3.1-5, Part B of the Rules for the Survey and Construction of Steel Ships** is to be followed to determine the need for re-inclining tests, and the need for amending stability information. (Omitted)	accordance with the requirement specified in **2.3.1-1(8), Part B of the Rules for the Survey and Construction of Steel Ships**. (Omitted) **2.5 Alterations** **2.5.1 Requirements of Surveys** (Omitted) **3** The stability after alterations, **B2.5.1-7 to -9, Part B of the Guidance for Survey and Construction of Steel Ships** is to be followed to determine the need for re-inclining tests, and the need for amending stability information. (Omitted)	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025. **2.** Notwithstanding the amendments to the Rules, the current requirements apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date. **3.** Notwithstanding the provision of preceding **2.**, the amendments to the Rules may apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date.		

Amended	Original	Remarks
GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF PASSENGER SHIPS **Part 2 CLASS SURVEY** **Chapter 2 CLASSIFICATION SURVEYS** **2.1 Classification Survey during Construction** **2.1.5 Presence of Surveyors** (Omitted) **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**. (Omitted)	**GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF PASSENGER SHIPS** **Part 2 CLASS SURVEY** **Chapter 2 CLASSIFICATION SURVEYS** **2.1 Classification Survey during Construction** **2.1.5 Presence of Surveyors** (Omitted) **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 **B2.1.4-1(1) and -8, Part B of the Guidance for the Survey and Construction of Steel Ships**. (Omitted)	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025. **2.** Notwithstanding the amendments to the Rules, the current requirements apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date.		

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
3. Notwithstanding the provision of preceding **2.**, the amendments to the Rules may apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date.		

Amended	Original	Remarks
GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF SHIPS OF FIBREGLASS REINFORCED PLASTICS **Chapter 2 CLASS SURVEYS** **2.2 Classification Survey during Construction** **2.2.4 Inspections during Construction** (Omitted) **2** The wording "items specified otherwise by the Society" in **2.2.4-3 of the Rules** 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** and the wording "the Society may approve other survey methods which it considers to be appropriate" means to be in accordance with **-1(2)**.	**GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF SHIPS OF FIBREGLASS REINFORCED PLASTICS** **Chapter 2 CLASS SURVEYS** **2.2 Classification Survey during Construction** **2.2.4 Inspections during Construction** (Omitted) **2** The wording "items specified otherwise by the Society" in **2.2.4-3 of the Rules** means surveys of the tests specified in **B2.1.4-1(1) and -8, Part B of the Guidance for the Survey and Construction of Steel Ships** and the wording "the Society may approve other survey methods which it considers to be appropriate" means to be in accordance with **-1(2)**.	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025. **2.** Notwithstanding the amendments to the Rules, the current requirements apply to the ships and equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date. **3.** Notwithstanding the provision of preceding **2.**, the amendments to the Rules may apply to the ships and		

Amended	Original	Remarks
equipment for which the application for Classification Survey during Construction submitted to the Society before the effective date.		

Amended-Original Requirements Comparison Table (Classification Surveys)

Amended	Original	Remarks
GUIDANCE FOR THE APPROVAL AND TYPE APPROVAL OF MATERIALS AND EQUIPMENT FOR MARINE USE **Part I GENERAL** **Chapter 2 DEFINITIONS** **2.6 Approval of Standardized Design** Approval of Standardized Design means a method to certify for the manufacturers that the drawings and documents specifying the particulars, construction, dimensions and materials of equipment for marine use may be dealt with as the standard design, by conducting the approval for these drawings in advance.	**GUIDANCE FOR THE APPROVAL AND TYPE APPROVAL OF MATERIALS AND EQUIPMENT FOR MARINE USE** **Part I GENERAL** **Chapter 2 DEFINITIONS** **2.6 Approval of Standardized Design** Approval of Standardized Design means a method for applying the requirement in **2.1.2-6, Part B of Rules for the Survey and Construction of Steel Ships** and to certify for the manufacturers that the drawings and documents specifying the particulars, construction, dimensions and materials of equipment for marine use may be dealt with as the standard design, by conducting the approval for these drawings in advance.	

Amended	Original	Remarks
Part 4 NON-METALLIC MATERIALS AND COATING MATERIALS FOR HULL **Chapter 4 APPROVAL OF COATING SYSTEM** **4.1 General** **4.1.1 Application** **1** The requirements of this chapter apply to tests and inspection for approval of coating system specified in **(1)(a) or (2)(a), item1, Table B2.10, Part B of the Rules for the Survey and Construction of Steel Ships** or **2.1.9-2(1), Part 2, Guidance for the Survey and Construction of Passenger ships**. (Omitted) **4.2 Application Procedures** **4.2.2 Reference Materials and Data to be Attached to the Application for Approval** (Omitted) (9) Specifications of the coating system (including the items specified in **2.1.6-1(2), Part B of the Rules for the Survey and Construction of Steel Ships**, in principle) (Omitted)	**Part 4 NON-METALLIC MATERIALS AND COATING MATERIALS FOR HULL** **Chapter 4 APPROVAL OF COATING SYSTEM** **4.1 General** **4.1.1 Application** **1** The requirements of this chapter apply to tests and inspection for approval of coating system specified in **B2.1.8-2(1) or B2.1.8-3(1), Guidance for the Survey and Construction of Steel Ships Part B** or **2.1.9-2(1), Part 2, Guidance for the Survey and Construction of Passenger ships**. (Omitted) **4.2 Application Procedures** **4.2.2 Reference Materials and Data to be Attached to the Application for Approval** (Omitted) (9) Specifications of the coating system (including the items specified in **B2.1.2-7(2), Guidance for the Survey and Construction of Steel Ships Part B**, in principle) (Omitted)	

Amended	Original	Remarks
Chapter 6 APPROVAL OF AIRBORNE SOUND INSULATION PROPERTIES OF MATERIALS USED FOR BULKHEADS AND DECKS **6.1 General** **6.1.1 Scope** The requirements of this chapter apply to the tests and inspections for the approval of the airborne sound insulation properties of materials used for bulkheads and decks in accordance with the requirements of **An5.2, Annex 2.3.1-2 "PROCEDURES FOR ON BOARD NOISE MEASUREMENTS", Part B of the Rules for the Survey and Construction of Steel Ships**.	**Chapter 6 APPROVAL OF AIRBORNE SOUND INSULATION PROPERTIES OF MATERIALS USED FOR BULKHEADS AND DECKS** **6.1 General** **6.1.1 Scope** The requirements of this chapter apply to the tests and inspections for the approval of the airborne sound insulation properties of materials used for bulkheads and decks in accordance with the requirements of **5.2, Annex B2.3.1-1(11) "PROCEDURES FOR ON BOARD NOISE MEASUREMENTS", Part B of the Guidance**.	
Part 6 MACHINERY **Chapter 1 APPROVAL OF STANDARDIZED DESIGN FOR MACHINERY AND EQUIPMENT** **1.1 General** **1.1.1 Scope** The requirements of this chapter deal with the approval of the drawings and documents which are submitted in advance to the Society as the standardized design designating the construction, dimensions, materials,	**Part 6 MACHINERY** **Chapter 1 APPROVAL OF STANDARDIZED DESIGN FOR MACHINERY AND EQUIPMENT** **1.1 General** **1.1.1 Scope** The requirements of this chapter deal with the approval of the drawings and documents which are submitted in advance to the Society as the standardized design designating the construction, dimensions, materials,	

Amended	Original	Remarks
specifications, etc. on machinery and equipment required to obtain approval by submitting drawings to the Society in accordance with the requirements of **2.1.3, Part B of the Rules for the Survey and Construction of Steel Ships**, **2.1.2, Part 2 of the Rules for High Speed Craft**, **2.1.2, Part 2 of the Rules for the Survey and Construction of Inland Waterway Ships**, **2.3.1-2 of the Rules for Cargo Handling Appliances** and **2.1.1 of the Rules for Cargo Refrigerating Installations**. **1.4 Handling after Approval** **1.4.1 Allocation of Machinery and Equipment to Ships** In case where the machinery and equipment for which the standardized design have been approved are allocated to *NK*-classed ships, the appropriate application form is to be submitted to the Society (Head Office), in triplicate, in place of the drawings and documents required by the rules.	specifications, etc. on machinery and equipment required to obtain approval by submitting drawings to the Society in accordance with the requirements of **2.1.2, Part B of the Rules for the Survey and Construction of Steel Ships**, **2.1.2, Part 2 of the Rules for High Speed Craft**, **2.1.2, Part 2 of the Rules for the Survey and Construction of Inland Waterway Ships**, **2.3.1-2 of the Rules for Cargo Handling Appliances** and **2.1.1 of the Rules for Cargo Refrigerating Installations**. **1.4 Handling after Approval** **1.4.1 Allocation of Machinery and Equipment to Ships** In case where the machinery and equipment for which the standardized design have been approved are allocated to *NK*-classed ships, the appropriate application form **(Form 6-1-2)** is to be submitted to the Society (Head Office), in triplicate, in place of the drawings and documents required by the rules.	
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025.		

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	Ships subject to *SOLAS* Chapter II-1 Regulation 3-10
1 General arrangement		○		○	○	○	○
2 Midship section	(1) Cross sections of the holds, machinery spaces, and areas containing wing tanks (if fitted). (2) Plans showing the following in **(a)** to **(e)** items. (a) Intended classification characters and notations (b) Designed maximum load draught (c) Draught in *metres* corresponding to the designed timber freeboard, where the timber load line is intended to be marked (d) The position of the freeboard deck in ships with multiple decks (e) For ships complying with the requirements in **1.1.12-1** or **-2, Part 1, Part C of the Rules**, design temperatures.	○		○	○	○	○
3 Structural arrangement plans	(1) Plans showing the construction arrangements and scantlings of hull structural members (including fore and aft end structures).	○		○	○	○	○
4 Stem, sternframe, propeller post and rudder	(1) Plans showing materials and ship speed. (2) Plans for rudder construction (including push-up pressures and rudder stock lengths).	○		○	○	○	○
5 Longitudinal section at centreline	(1) Plans showing arrangements of watertight bulkheads, load draughts, sizes of brackets and transverse sections of ships at 0.1 L and 0.2 L from both ends of the ship. (2) Plans showing the arrangements and sizes of hull constructions and cargoes on deck which are counted as part of projected areas with respect to wind, buoyancy or both.	○					
6 Deck plans	(1) Plans showing the following **(a)** to **(d)** items. (a) Freeboards, superstructure decks, hatchways and hatch beams. (b) The forward end of L_f specified in **Part A of the Rules** and the point 0.25 L_f aft of it. (c) For car decks of vehicle carriers, the routes vehicles frequently use during loading and unloading (i.e. the deck areas subject to dynamic loads in the vicinities of ramp ways and the routes taken by the vehicles when moving between decks). (d) For ships fitted with movable car decks, plans of their support structures.	○		○	○	○	○
7 Single bottoms and double bottoms		○					
8 Watertight bulkheads and oiltight bulkheads	(1) For oiltight bulkheads, plans showing the highest positions of tanks and positions of tops of overflow pipes.	○		○	○	○	○

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

Name*1	Notes	Submission			Maintained On Board		
		Approval	Other	Finished Plans (Submission)	Finished Plans (On Board)	Ship Construction File	
						Ships engaged in international voyages	Ships subject to *SOLAS* Chapter II-1 Regulation 3-10
9 Superstructure end bulkheads	(1) Plans showing the details of closing appliances for bulkhead openings.	○					
10 Equipment numbers and equipment		○					
11 Plans showing arrangements for resisting panting in both peaks and their vicinity		○					
12 Pillars and deck girders		○					
13 Shell expansion	(1) Plans showing dimensions and arrangements of freeing ports and draught at the ballast condition (for ships complying with **3.2.2.2, Part 1, Part C of the Rules**). (2) Comparative tables for the standard sheer specified in **Part V of the Rules** and the actual sheer on exposed decks, where exposed freeboards or superstructure decks have wells formed by the bulwarks and end bulkheads of superstructures.	○		○	○	○	○
14 Copies of certificates for forgings and castings welded into the hull structures						○	○
15 Shaft tunnels		○					
16 Plans for the seatings of boilers, engines, thrust and plummer blocks, dynamos and other important auxiliary machinery	(1) Plans showing horsepower, heights and weights of main engines, and arrangements of holding down bolts.	○					

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

Name*1	Notes	Submission			Maintained On Board		
		Approval	Other	Finished Plans (Submission)	Finished Plans (On Board)	Ship Construction File	
						Ships engaged in international voyages	Ships subject to *SOLAS* Chapter II-1 Regulation 3-10
17 Machinery casings		○					
18 Deckhouses	(1) Plans for ships equipped with long deckhouses.	○					
19 Winch platforms		○					
20 Plans showing equipment forming part of the watertight and weathertight integrity of the ship	(1) Plans showing equipment locations, sizes and details. (2) Plans showing hatch covers and piping.	○				○	○
21 Pumping system	(1) Plans showing capacity of each tank (water or oil).	○					
22 Height of timber cargo, and the location of loading and securing equipment	(1) Plans for ships equipped for loading timber cargoes.	○					
23 Arrangements of scupper pipes	(1) The Summer Load Line determined by the requirements of **Part V of the Rules** load lines 600 *mm* 0.01 L_f and 0.02 L_f above it, and load lines 450 *mm* below the freeboard deck. (2) Regardless of **(1)** above, the maximum designed load line above the Summer Load Line may be acceptable instead of the load line itself.	○					
24 Fire protection plans	(1) Plans showing materials used in the construction of superstructures, bulkheads, decks, deckhouses, trunks, stairways, deck coverings, etc. and the arrangements of the closing appliances for openings.	○		○	○		
25 Plans showing arrangements for airborne sound insulation properties of bulkheads and decks in accommodation spaces	(1) "Airborne sound insulation properties of bulkheads and decks within accommodation spaces" refers to the weighted sound reduction index (R_w) in **An5.1, Annex 2.3.1-2 "Procedures for On Board Noise Measurements", Part B of the Rules.**	○					

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

Name*1	Notes	Submission			Maintained On Board		
		Approval	Other	Finished Plans (Submission)	Finished Plans (On Board)	Ship Construction File	
						Ships engaged in international voyages	Ships subject to *SOLAS* Chapter II-1 Regulation 3-10
26 Plans showing ventilation systems		○					
27 Plans showing the arrangements for gaseous fuel for domestic purposes	(1) Requirements for gaseous fuel for domestic purposes are specified in **4.3, Part R of the Rules**.	○					
28 Plans showing means of escape	(1) Plans showing details of escape routes, passage widths, etc.	○					
29 Plans showing fire extinguishing arrangements	(1) Plans showing the locations, numbers and types, etc. of fire-fighting systems, fire detection and alarm systems, inert gas systems, fire extinguishers, fire pumps (including emergency fire pumps), fire hydrants, fire hoses, fire fighter outfits, helicopter facilities and international shore connections, etc. in accordance with **Part R of the Rules**.	○		○			
30 Plans showing specifications and arrangements, etc. of fixed fire detection and fire alarm systems	(1) Systems are required to be provided in accordance with **Chapters 7** and **20, Part R of the Rules**.	○					
31 Plans showing specifications and arrangements etc. for fixed fire extingushier systems (including fixed local application fire-fighting systems, fixed deck foam systems and fixed water spray systems)	(1) Systems are required to be provided in accordance with **Chapters 10, 18, 19 and 20, Part R of the Rules**.	○					

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

Name*1	Notes	Submission			Maintained On Board		
		Approval	Other	Finished Plans (Submission)	Finished Plans (On Board)	Ship Construction File	
						Ships engaged in international voyages	Ships subject to *SOLAS* Chapter II-1 Regulation 3-10
32 Plans showing specifications and arrangements, etc. of inert gas systems	(1) Systems are required to be provided in accordance with **4.5.5, Part R of the Rules**.	○					
33 Plans showing specifications and arrangements, etc. of fixed hydrocarbon gas detection systems	(1) The systems are required to provided by **Part 4.5.7 and 4.5.10, Part R of the Rules**.	○					
34 Plans showing arrangements for means of access	(1) As specified in **14.16.2.5, Part 1, Part C** or **26.1.5, Part CS of the Rules**.	○			○		
35 Ship structure access manuals	(1) As specified in **14.16.3.6, Part 1, Part C** or **26.2.6, Part CS of the Rules**.	○			○*2	○	○
36 Plans and data showing navigation bridge visibility	(1) For ships for which overall length (L_{oa}) is 55 *m* or over. (2) As specified in **1.1.4, Part W of the Rules**.	○		○	○		
37 General arrangements for the bilge systems and ventilation systems of cargo oil pump rooms		○					
38 General arrangements for venting systems for cargo vapours, etc.		○					
39 Plans showing arrangements of ships identification numbers	(1) As specified in **14.2, Part 1, Part C of the Rules**.	○					
40 Plans showing towing and mooring fitting arrangements	(1) As specified in **14.4.1.4, Part 1, Part C** or **23.2.9 Part CS of the Rules**.	○			○		

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

Name*1	Notes	Submission			Maintained On Board		
		Approval	Other	Finished Plans (Submission)	Finished Plans (On Board)	Ship Construction File	
						Ships engaged in international voyages	Ships subject to *SOLAS* Chapter II-1 Regulation 3-10
41 Plans showing arrangements of means of embarkation and disembarkation	(1) For ships of 500 *gross tonnage* and above engaged in international voyages. (2) As specified in **14.14, Part 1, Part C** or **21.9 Part CS of the Rules**. (3) Plans showing the following **(a)** to **(c)** items. (a) Arrangements of equipment and related devices (including lighting and lifebuoys) (b) Overall arrangements of the means of embarkation and disembarkation (including situations related to the use of maximum and minimum angles of inclination) (c) Detailed plans of connections between the means of embarkation and disembarkation and the deck	○					
42 Plans and documents for in-water surveys	(1) For ships that are subject to **6.1.2, Part B of the Rules**. (2) As specified in **6.1.2-3, Part B of the Rules**.	○			○*2	○	○
43 Loading manuals	(1) For ships only required to have a loading manual in accordance with **3.8.1.1, Part 1, Part C of the Rules** or **25.1.1, Part CS of the Rules**. (2) As specified in **3.8.1.2, Part 1, Part C of the Rules** or **25.1.2, Part CS of the Rules**.	○			○*2	○	○
44 Damage control plans	(1) For ships of 500 *gross tonnage* and above. (2) As specified in **2.3.4.3, Part 1, Part C of the Rules**.	○			○*2	○	○
45 Operating and maintenance manuals for doors and inner doors	(1) As specified in **14.10.1.10-1** and **14.10.2.9-1, Part 1, Part C of the Rules** or **21.3.10-1** and **21.4.9-1, Part CS of the Rules**.	○			○*2	○	○
46 Stability information booklets	(1) As specified in **Annex U1.2.1 "Guidance for Stability Information for Master"**. (2) Booklets are to 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*"t), 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	○	○

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

Name*1	Notes	Submission			Maintained On Board		
		Approval	Other	Finished Plans (Submission)	Finished Plans (On Board)	Ship Construction File	
						Ships engaged in international voyages	Ships subject to *SOLAS* Chapter II-1 Regulation 3-10
47 Lines (provided with offset table), light load hydrostatic curves, tank capacity plans (finished plan), and inclining test results	(1) For ships required to have loading computers in accordance with **3.8.1.1, Part 1, Part C of the Rules**, lines are to be submitted. (2) For ships other than **(1)** above which arerequired to provide stability information booklets or which are subject to **Part V of the Rules**, lines are to be submitted.		○				
48 Plans showing locations of emergency towing arrangements	(1) As specified in **14.5.2, Part 1, Part C of the Rules**.	○					
49 Plans showing the construction of the parts of hulls where emergency towing arrangements are installed	(1) As specified in **14.5.2 , Part 1, Part C of the Rules**.	○					
50 Plans showing the access to the bows of tankers		○					
51 Coating technical files for dedicated seawater ballast tanks, etc.	(1) As specified in **3.3.5.3, Part 1, Part C of the Rules** and **22.4.2 Part CS of the Rules**. (2) The information to be included in coating technical files is specified in **2.1.6, Part B of the Rules**.	○			○*2	○	○
52 Coating technical files, corrosion resistant steel technical files or both for cargo oil tanks	(1) As specified in **3.3.5.4, Part 1, Part C of the Rules** and **22.4.3, Part CS of the Rules**. (2) The information. to be included in coating technical files and corrosion resistant steel technical files is specified in **2.1.6, Part B of the Rules**.	○			○*2	○	○

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

Name *1	Notes	Submission			Maintained On Board		
		Approval	Other	Finished Plans (Submission)	Finished Plans (On Board)	Ship Construction File	
						Ships engaged in international voyages	Ships subject to *SOLAS* Chapter II-1 Regulation 3-10
53 Polar water operational manual	(1) As specified in **2.3.1, Part I of the Rules**.				○*2		
54 Asbestos-free declarations and supporting documents			○				
55 Drawings indicating critical structural areas	(1) For ships whose surveys for construction monitoring are carried out in accordance with the requirements in **2.1.2, Part B of the Rules**. (2) "Drawings indicating critical structural areas" means those drawings indicating locations which have been identified from calculations to require monitoring or from the service history of similar or sister ships to be sensitive to cracking, buckling or corrosion which would impair the structural integrity of the ship. The following **(1)** and **(2)** are to be considered depending on the subject ship: (a) For ships subject to **14.16.3, Part 1, Part C of the Rules**, drawings are to include the critical structural areas indicated in the ship structural access manuals specified in **14.16.3.6, Part 1, Part C of the Rules**. (b) For ships subject to *SOLAS Chapter II-1 Regulation 3-10*, drawings are to be consistent with information regarding those "areas requiring special attention throughout the ship's life, including critical structural areas" included in the Ship Construction File specified in item **79** below.	○			○		○
56 Specifications			○				
57 Corrosion prevention scheme	(1) Items included in the Coating Technical Files specified in item **51** and **52** above may be omitted.		○			○	○

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

Name*1	Notes	Submission			Maintained On Board		
		Approval	Other	Finished Plans (Submission)	Finished Plans (On Board)	Ship Construction File	
						Ships engaged in international voyages	Ships subject to *SOLAS* Chapter II-1 Regulation 3-10
58 Plans showing the particulars of the cargo intended to be carried and its distribution	(1) For ships that are to be made exceptional conditions of loading.		○				
59 Plans showing the arrangement, size and projected lateral area of bilge keels, if fitted.	(1) For ships required to have stability information documents.		○				
60 Hydrostatic curves	(1) For ships complying with **Part V of the Rules**. (2) Documents showing the displacement and the change of displacement per *cm* of immersion at each draught up to the freeboard deck		○				
61 Capacity calculation sheets for pressure and vacuum valves and overpressure protective devices of cargo oil tanks	(1) For ships installed with such valves or devices.		○				
62 Instruction and operation manuals for inert gas systems	(1) As specified in **35.2.2-5, Part R of the Rules**. (2) For ships that are installed the systems. (3) Documents showing cautionary notes related to operator safety.		○		○		
63 Strength calculation sheets associated with various supporting hull structures of towing and mooring fittings	(1) As specified in **14.4, Part 1, Part C of the Rules** and **23.2, Part CS of the Rules**. (2) Documents showing design loads. (3) Documents including those for towing and mooring fittings which are not selected from standards approved by the Society.		○				
64 Operation manuals for emergency towing arrangements	(1) For ships required to have emergency towing arrangements in accordance with **14.5.2, Part 1, Part C of the Rules**.		○		○		

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

Name*1	Notes	Submission			Maintained On Board		
		Approval	Other	Finished Plans (Submission)	Finished Plans (On Board)	Ship Construction File	
						Ships engaged in international voyages	Ships subject to *SOLAS* Chapter II-1 Regulation 3-10
65 Booklets for damage control and damage stability information	(1) As specified in **2.3.4.4** and **2.3.4.5, Part 1, Part C of the Rules**.		○		○		
66 Operation manuals for loading computers	(1) As specified in **3.8, Part 1, Part C of the Rules**.				○		
67 Operation manuals for stability instruments or stability computers	(1) Reference is to be made to Chapter 4, Part B of *IMO resolution MSC*.267(85) "*International Code on Intact Stability, 2008* (*2008 IS Code*)".				○		
68 Instruction manuals for the cargo tank venting systems	(1) Documents showing the handling of venting systems as specified in **4.5.3, Part R of the Rules**.				○		
69 Fire control plans, fire safety operational booklets, training manuals and maintenance plans	(1) As specified in **Chapters 14, 15 and 16, Part R of the Rules**.				○		
70 Operation manuals for the helicopter facilities	(1) As specified in **18.8, Part R of the Rules**.				○		
71 Emergency Towing Procedures	(1) Specified in **14.5.3, Part 1, Part C of the Rules** and **23.3 Part CS of the Rules**.				○		
72 Noise survey report	(1) The reports referred to in **An4.2, Annex 2.3.1-2 "Procedures for On Board Noise Measurements", Part B of the Rules**. It is recommended that documents containing the noise exposure levels determined in accordance with **An3.3.6, Annex 2.3.1-2 "Procedures for On Board Noise Measurements" , Part B of the Rules** be attached to noise survey reports.			○	○		

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

Name*1	Notes	Submission			Maintained On Board		
		Approval	Other	Finished Plans (Submission)	Finished Plans (On Board)	Ship Construction File	
						Ships engaged in international voyages	Ships subject to *SOLAS* Chapter II-1 Regulation 3-10
73 Documents related to watertight cable penetrations			○				
74 Watertight cable penetration registers	(1) All watertight cable penetrations are to be recorded and identified in the watertight cable penetration register. This is to includes documentation referencing manufacturer manuals for each type of watertight cable penetration installed, type approval certificates for each type of watertight cable penetration, applicable installation drawings, records of each installed watertight cable penetration documenting the as-built condition after final inspections at shipyards, and sections to record any inspection, modification, repair or maintenance. (2) Watertight cable penetration registers are to be provided by shipbuilders and reviewed by attending surveyors. (3) Watertight cable penetration registers can be either hard copies or digitised media. (4) Watertight cable penetration manuals for unmanned vessels may be kept on shore.				○	○	○

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

Name*1	Notes	Submission			Maintained On Board		
		Approval	Other	Finished Plans (Submission)	Finished Plans (On Board)	Ship Construction File	
						Ships engaged in international voyages	Ships subject to *SOLAS* Chapter II-1 Regulation 3-10
75 Certificates showing that the devices related to fire fighting and fire protection maintained on board have passed all required examinations and tests	(1) Such certificates are the type approval certificates valid at the time of Classification Surveys issued for each piece of equipment, device, etc., or other applicable certificates. Unless the equipment or devices on board are renewed after the ship has entered service, such certificates need not be updated. Devices related to fire-fighting and fire protection means are those listed in **(a)** to **(q)** below. (a) Fire pumps (including emergency fire pumps) (hose test records after installation on board may be accepted.) (b) Fire hoses and nozzles (c) Fire extinguishers (including spare charges) (d) Fire-fighter outfits (e) Emergency escape breathing devices (f) Fixed fire-extinguishing systems (g) Fire dampers and power-operated closing doors (h) Fixed fire detection and fire alarm systems, and automatic sprinkler systems (i) Fire protection materials (j) Additional equipment (e.g. electrical equipment of an explosion-proof type, detection systems, full protective clothing, portable fire extinguishers and water spraying systems) required for ships carrying dangerous goods (k) Deck foam systems (nozzles and foam concentrates) (l) Inert gas systems (portable oxygen content meters) (m) Equipment for protection of cargo pump rooms (temperature sensing devices and hydrocarbon gases concentration meters) (n) Watertight doors below freeboard decks (o) Side scuttles (p) Portable gas detectors (q) Fixed hydrocarbon gas detection systems				○		

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

Name *1	Notes	Submission			Maintained On Board		
		Approval	Other	Finished Plans (Submission)	Finished Plans (On Board)	Ship Construction File	
						Ships engaged in international voyages	Ships subject to *SOLAS* Chapter II-1 Regulation 3-10
76 Docking plan	(1) Documents (including locations and other necessary information) for all penetrations specified in **item 3, Table B6.1, Part B of the Rules**.					○	○
77 Plans and documents for anti-fouling systems	(1) As specified in **2.2.2, Rules for Anti-Fouling Systems on Ships**.		○			○	○
78 Test plans, test records, measurement records, etc.	(1) Documents including the following **(a)** and **(b)** items. The allowable deviations referred to in **(a)** below mean allowable values specified in appropriate standards such as *JSQS* or other equivalent values applied to the ship. (a) Measurement records of the ship's principal dimensions (including allowable deviations). (b) Details of markings for load lines and associated measurement records (including allowable deviations).					○	○
79 Areas requiring special attention throughout the ship's life (including critical structural areas specified in item **55**)							○
80 All design parameters limiting the operation of the ship							○
81 "As built" drawings and information which are verified to incorporate all alterations approved by the Society during the construction process	(1) Documents showing scantling details, material details, location of butts and seams, cross section details and the locations of all partial and full penetration welds.						○

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

Name*1	Notes	Submission			Maintained On Board		
		Approval	Other	Finished Plans (Submission)	Finished Plans (On Board)	Ship Construction File	
						Ships engaged in international voyages	Ships subject to *SOLAS* Chapter II-1 Regulation 3-10
82 Net (renewal) scantlings for all structural constituent parts, as built scantlings and voluntary addition thickness		○					○
83 Any alternatives to the Rules	(1) Documents showing structural details and equivalency calculations.	○					○
84 A listing of materials used for the construction of the hull structure, and provisions for document-ing changes to any of the above during the ship's service life							○
85 Minimum hull girder section modulus along the length of the ship which has to be maintained throughout the ship's life, including cross section details such as the values of the areas of the deck zone and bottom zone, the renewal value for the neutral axis zone	(1) Plans are to be submitted prior to the commencement of the survey.						○

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

Name*1	Notes	Submission			Maintained On Board		
		Approval	Other	Finished Plans (Submission)	Finished Plans (On Board)	Ship Construction File	
						Ships engaged in international voyages	Ships subject to *SOLAS* Chapter II-1 Regulation 3-10
86 List of documents constituting the Ship Construction File							○
87 Survey records	(1) For ships whose surveys for construction monitoring are carried out in accordance with **2.1.2, Part B of the Rules**.				○		○
88 Construction monitoring plans	(1) For ships whose surveys for construction monitoring are carried out in accordance with **2.1.2, Part B of the Rules**. (2) Plans are to be submitted prior to the commencement of the survey.		○		○		○
89 Lists of blocks manufactured by subcontractors	(1) Documents are to be submitted prior to the commencement of the survey.		○				
90 Welding application plans	(1) Plans are to be submitted prior to the commencement of the survey.	○					
91 Non-destructive inspection plans	(1) Plans are to be submitted prior to the commencement of the survey.	○					
92 Non-destructive operator qualification records	(1) Documents are to be submitted prior to the commencement of the survey.		○				
93 Hydrostatic and watertight test plans	(1) Plans are to be submitted prior to the commencement of the survey.	○					
94 Welding procedure specifications and welding details	(1) Documents are to be submitted prior to the commencement of the survey.	○					
95 Welder's qualification records	(1) Documents are to be submitted prior to the commencement of the survey.		○				
96 Guidance for maintenance and inspection of steel wires	(1) As specified in **23.1.4, Part CS of the Rules**.				○		
97 Technical specification documents for mooring lines	(1) As specified in **14.4.4.4, Part 1, Part C of the Rules**.		○		○		

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

Name*1	Notes	Submission			Maintained On Board		
		Approval	Other	Finished Plans (Submission)	Finished Plans (On Board)	Ship Construction File	
						Ships engaged in international voyages	Ships subject to *SOLAS* Chapter II-1 Regulation 3-10
98 Management plans for inspection and maintenance of mooring equipment (including mooring lines)	(1) Plans are to be prepared in accordance with *MSC*.1/*Circ*.1620 and are to include the following **(a)** to **(f)**. (a) Procedures for mooring equipment (including mooring lines) operations, inspection and maintenance. (b) Procedures to allow the identification and management of mooring lines, tails and associated attachments. (c) Manufacturer criteria for mooring line replacement. (d) Records of the original mooring design concepts, equipment, arrangements and specifications. For ships the keels of which were laid before 1 January 2007 and which are without appropriate documentation, MBL_{sd} is to be established in accordance with the following **i)** and **ii)**. i) MBL_{sd} is to be established based on the Safe Working Load (*SWL*) of the mooring equipment provided on board. ii) If no safe working load is specified, the strength of the mooring equipment and its supporting hull structure should be checked based on **14.4.3, Part 1, Part C of the Rules** and determine MBL_{sd} based on the actual capacity of the equipment on board and its supporting hull structure. (e) Manufacturers' test certificates for mooring lines, joining shackles and synthetic tails. (f) Records of mooring equipment inspections and maintenance, and mooring line inspections and replacement.				○		
99 Documented agreement related to performance standard for protective coating and corrosioin resistant	(1) Documents showing the agreement between shipowners, shipyards and coating manufacturers regarding inspections of surface preparations and coating processes.		○				

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.

Table B2.2 Plans and Documents – Machinery

Name*1	Notes	Submission			Maintained On Board
		Approval	Other	Finished Plans (Submission)	Finished Plans (On Board)
1 Arrangement of machinery in machinery space, diagram for internal communication systems	(1) Including diagram for engineers' alarm systems.	○			
2 Main and auxiliary engines (including attachments)	(1) Plans and data specified in **2.1.3-1(1), Part D of the Rules** in relation to the kind of engine as well as documents showing specifications of louvers for emergency generator rooms and closing appliances of ventilators fitted to the rooms (if they are of a power-operated type.) .	○			○
	(2) Plans and data specified in **2.1.3-1.(2)** and **(3), Part D of the Rules**.		○		○
3 Steam turbines (including attachments)	(1) Plans and data specified in **3.1.2(1), Part D of the Rules**.	○			○
	(2) Plans and data specified in **3.1.2(2), Part D of the Rules**.		○		○
4 Gas turbines (including attachments)	(1) Plans and data specified in **4.1.2(1), Part D of the Rules**.	○			○
	(2) Plans and data specified in **4.1.2(2), Part D of the Rules**.		○		○
5 Power transmission gears	(1) Plans and data specified in **5.1.2, Part D of the Rules**.	○			○
6 Shafting	(1) Plans and data specified in **6.1.2(1), Part D of the Rules**.	○			○
	(2) Plans and data specified in **6.1.2(2), Part D of the Rules**.		○		○
7 Propellers	(1) Plans and data specified in **7.1.2, Part D of the Rules**.	○			○
8 Torsional vibration calculations	(1) Data specified in **8.1.2, Part D of the Rules**.	○			○
9 Boilers and incinerators	(1) Plans and data specified in **9.1.3** and **9.13.2, Part D of the Rules**.	○			○
10 Pressure vessels	(1) Plans and data specified in **10.1.4, Part D of the Rules**.	○			○
11 Piping	(1) Plans and data specified in **13.1.2, Part D of the Rules**. (2) Bilge and ballast piping diagrams are to be submitted as finished plans.	○		○	○
12 Piping for tankers	(1) Plans and data specified in **14.1.2, Part D of the Rules**. (2) Cargo piping diagrams are to be submitted as finished plans.	○		○	○
13 Steering gear	(1) Plans and data specified in **15.1.3, Part D of the Rules**.	○			○
14 Windlasses and mooring winches	(1) Plans and data specified in **16.2.2(1), Part D of the Rules**.	○			○
	(2) Plans and data specified in **16.2.2(2), Part D of the Rules**.		○		○

Table B2.2 Plans and Documents – Machinery

Name*1	Notes	Submission			Maintained On Board
		Approval	Other	Finished Plans (Submission)	Finished Plans (On Board)
1 Arrangement of machinery in machinery space, diagram for internal communication systems	(1) Including diagram for engineers' alarm systems.	○			
2 Main and auxiliary engines (including attachments)	(1) Plans and data specified in **2.1.3-1(1), Part D of the Rules** in relation to the kind of engine as well as documents showing specifications of louvers for emergency generator rooms and closing appliances of ventilators fitted to the rooms (if they are of a power-operated type.) .	○			○
	(2) Plans and data specified in **2.1.3-1.(2)** and **(3), Part D of the Rules**.		○		○
3 Steam turbines (including attachments)	(1) Plans and data specified in **3.1.2(1), Part D of the Rules**.	○			○
	(2) Plans and data specified in **3.1.2(2), Part D of the Rules**.		○		○
4 Gas turbines (including attachments)	(1) Plans and data specified in **4.1.2(1), Part D of the Rules**.	○			○
	(2) Plans and data specified in **4.1.2(2), Part D of the Rules**.		○		○
5 Power transmission gears	(1) Plans and data specified in **5.1.2, Part D of the Rules**.	○			○
6 Shafting	(1) Plans and data specified in **6.1.2(1), Part D of the Rules**.	○			○
	(2) Plans and data specified in **6.1.2(2), Part D of the Rules**.		○		○
7 Propellers	(1) Plans and data specified in **7.1.2, Part D of the Rules**.	○			○
8 Torsional vibration calculations	(1) Data specified in **8.1.2, Part D of the Rules**.	○			○
9 Boilers and incinerators	(1) Plans and data specified in **9.1.3** and **9.13.2, Part D of the Rules**.	○			○
10 Pressure vessels	(1) Plans and data specified in **10.1.4, Part D of the Rules**.	○			○
11 Piping	(1) Plans and data specified in **13.1.2, Part D of the Rules**. (2) Bilge and ballast piping diagrams are to be submitted as finished plans.	○		○	○
12 Piping for tankers	(1) Plans and data specified in **14.1.2, Part D of the Rules**. (2) Cargo piping diagrams are to be submitted as finished plans.	○		○	○
13 Steering gear	(1) Plans and data specified in **15.1.3, Part D of the Rules**.	○			○
14 Windlasses and mooring winches	(1) Plans and data specified in **16.2.2(1), Part D of the Rules**.	○			○
	(2) Plans and data specified in **16.2.2(2), Part D of the Rules**.		○		○

Table B2.2 Plans and Documents – Machinery (Continued)

Name*1	Notes	Submission			Maintained On Board
		Approval	Other	Finished Plans (Submission)	Finished Plans (On Board)
15 Refrigerating machinery and controlled atmosphere systems	(1) Plans and data specified in **17.1.2, Part D of the Rules**.	○			○
16 Automatic and remote controls	(1) Plans and data specified in **18.1.3(1), Part D of the Rules**.	○			○
	(2) Plans and data specified in **18.1.3(2), Part D of the Rules**.		○		○
17 Waterjet propulsion systems	(1) Plans and data specified in **19.1.3, Part D of the Rules**.	○			
18 Azimuth thrusters	(1) Plans and data specified in **20.1.3, Part D of the Rules**.	○			
19 Selective catalytic reduction systems and associated equipment	(1) Plans and data specified in **21.1.3(1), Part D of the Rules**.	○			
	(2) Plans and data specified in **21.1.3(2), Part D of the Rules**.		○		
20 Exhaust gas cleaning systems and associated equipment	(1) Plans and data specified in **22.1.3(1), Part D of the Rules**.	○			
	(2) Plans and data specified in **22.1.3(2), Part D of the Rules**.		○		
21 Exhaust gas recirculation systems and associated equipment	(1) Plans and data specified in **23.1.3(1), Part D of the Rules**.	○			
	(2) Plans and data specified in **23.1.3(2), Part D of the Rules**.		○		
22 Instructions and operation manuals for the following equipment when fitted on ships: selective catalytic reduction systems and associated equipment; exhaust gas cleaning systems and associated equipment; or exhaust gas recirculation systems and associated equipment	(1) Including cautionary notes related to operator safety.				○
23 Spare parts	(1) List of spare parts specified in **24.1.2, Part D of the Rules**.	○			
24 Electrical installations	(1) Plans and data specified in **1.1.6, Part H of the Rules**.	○			
	(2) Plans and data specified in **1.1.6(2), Part H of the Rules**. Total Harmonic Distortion (THD) calculation reports and harmonic filter operation guides are to be provided as finished plans and maintained on board.	○			○
	(3) Maintenance records of batteries specified in **1.1.8, Part H of the Rules**.				○

Table B2.2 Plans and Documents – Machinery (Continued)

Name*1	Notes	Submission			Maintained On Board
		Approval	Other	Finished Plans (Submission)	Finished Plans (On Board)
25 Test plans for sea trials	(1) Test plans related to astern tests are to be provided by yards. If specific operational characteristics have been defined by manufacturers, these are to be included in the test plans.	○			
26 Sea trial records	(1) Including the results of the tests specified in **2.1.7-6, Part B** and the test plans for the sea trials specified in **item 25** above.		○		○
27 Operating and maintenance instructions for ship machinery and equipment	(1) Documents specified in **1.3.9, Part D of the Rules**.				○
28 Manuals for the water level detection and alarm systems	(1) Documents specified in **13.8.5-4** or **13.8.6-3, Part D of the Rules**.				○
29 Computer systems	(1) Plans and data specified in **2.1.1(1), Part X of the Rules**.	○			
	(2) Plans and data specified in **2.1.1(2), Part X of the Rules**.		○		

Notes

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

Table B2.3 Plans and Documents – Ships Carrying Liquefied Gases in Bulk

Name*1	Notes	Submission			Maintained On Board
		Approval	Other	Finished Plans (Submission)	Finished Plans (On Board)
1 Manufacturing specifications for cargo tanks, insulations and secondary barriers	(1) Includes the following: welding procedures; inspection and testing procedures for welds and cargo tanks; properties and installation procedures of insulation materials and secondary barriers; and working standards. (2) For cargo tanks treated with mechanical stress relieving by pressurising, the test plans specified in **6.6.2-3, Part N of the Rules** are to be included. (3) For cargo tanks using pressure accumulation systems as pressure and temperature control systems, the design conditions specified in **7.5, Part N of the Rules** are to be included.	○			
2 Details of cargo tank construction		○			
3 Arrangement of cargo tank accessories	(1) Including details of fittings inside tanks.	○			
4 Details of cargo tank supports, deck portions through which cargo tanks penetrate, and their sealing devices		○			
5 Details of secondary barriers		○			
6 Specifications or standards for materials (including insulation) used for cargo piping system in connection with design pressure and temperature		○			
7 Specifications and standards of materials of cargo tanks, insulation, secondary barriers and cargo tank supports		○			
8 Layout and details of attachment for insulations		○			
9 Constructions of cargo pumps, cargo compressors and their prime movers		○			
10 Piping diagrams of cargo hold, cargo gauging system, and cargo tank venting system	(1) Cargo piping diagrams are to be submitted as finished plans.	○		○	

Table B2.3 Plans and Documents – Ships Carrying Liquefied Gases in Bulk (Continued)

Name*1	Notes	Submission			Maintained On Board
		Approval	Other	Finished Plans (Submission)	Finished Plans (On Board)
11 Constructions of main parts of refrigeration systems		○			
12 Piping diagrams for refrigeration system refrigerant		○			
13 Bilge arrangements and ventilation systems in hold spaces or interbarrier spaces, cargo pump rooms, cargo compressor rooms, and cargo control rooms		○			
14 Arrangement of sensors for gas detectors, temperature indicators, pressure gauges		○			
15 Diagrams of inert gas lines and details of pressure adjusting devices	(1) Where hold spaces or interbarrier spaces are filled by inert gases.	○			
16 Details of pressure relief device and drainage systems for leakage of liquefied cargo in hold spaces or interbarrier spaces	(1) As specified in **21.1.2, Part D of the Rules**.	○			
17 Sectional assembly, details of nozzles, fitting arrangement and details of fittings for various pressure vessels		○			
18 Details of valves for special purposes, cargo hoses, expansion joints, filters, etc. for cargo piping system		○			
19 Arrangement of earth connections for cargo tank, pipe lines, machinery, equipment, etc.		○			
20 Plans showing arrangements for personnel protection	(1) Personnel protection arrangements are specified in **Chapter 14, Part N of the Rules**.	○			

Table B2.3 Plans and Documents – Ships Carrying Liquefied Gases in Bulk (Continued)

Name*1	Notes	Submission			Maintained On Board
		Approval	Other	Finished Plans (Submission)	Finished Plans (On Board)
21 Programs of the non-destructive testing for periodical surveys	(1) For independent tanks of Type *B*. (2) Refer to **Item 1, (1)(d), Table B5.27, Part B of the Rules**.	○			○*2
22 Programs of examination and testing of cargo containment systems for periodical surveys	(1) For membrane and semi-membrane tanks *B*. (2) Refer to **Note 1, Table B5.27, Part B of the Rules**.	○			○*2
23 Inspection/survey plans for cargo containment systems	(1) As specified in **4.3.6, Part N of the Rules**.	○			○*2
24 Cargo operations manuals	(1) As specified in **18.2.1, Part N of the Rules**.	○			○*2
25 Basic design principal and technical reports of cargo containment systems			○		
26 Data on test method and result of model test carried out in compliance with the requirements of **Chapter 4, Part N**			○		
27 Data on notch toughness, corrosiveness, physical and mechanical properties of materials and welded parts at the minimum design temperature and room temperature, where new materials or welding methods are adopted for constructing the cargo tanks, secondary barriers, thermal insulation, etc.			○		
28 Data on design loads of cargo tanks	(1) As specified in **4.13** to **4.18, Part N of the Rules**.		○		
29 Calculation sheets of cargo tanks and supports specified in **4.8** and **4.21** to **4.25, Part N**	(1) As specified in **4.8** and **4.21** to **4.25, Part N of the Rules**.		○		
30 Data on test analysis and results of model tests carried out to demonstrate strength and performance of cargo tanks, thermal insulation, secondary barriers, and cargo tank supports			○		

Table B2.3 Plans and Documents – Ships Carrying Liquefied Gases in Bulk (Continued)

Name*1	Notes	Submission			Maintained On Board
		Approval	Other	Finished Plans (Submission)	Finished Plans (On Board)
31 Calculation sheets on heat transfer between primary members of cargo tanks under various loading conditions	(1) Where considered necessary by the Society.		○		
32 Calculation sheets for thermal stress on primary members of cargo tanks at temperature distributions specified in **item 33**	(1) Where considered necessary by the Society.		○		
33 Hull structure temperature distribution calculation sheets	(1) Where considered necessary by the Society.		○		
34 Cargo system specifications			○		
35 Cargo composition and physical properties	(1) Including a saturated vapour pressure diagram within the necessary temperature range.		○		
36 Cargo tank pressure relief valve relieving capacity calculation sheets	(1) Including calculation of the back pressure in cargo vent system.		○		
37 Refrigeration system capacity calculation sheets			○		
38 Cargo piping arrangements	(1) Including the details of cargo sampling arrangements.		○		
39 Cargo tank filling limit calculation sheets			○		
40 Cargo tank area access manhole arrangements and associated guides	(1) As specified in **3.5, Part N of the Rules**.		○		
41 Ship survival capability calculations	(1) As specified in **Chapter 2, Part N of the Rules**.	○			○
42 Documents related to failure mode and effects analysis	(1) As specified in **10.2.6, Part N of the Rules**.		○		
43 Cargo handling plans	(1) As specified in **17.18.13-2** and **17.23.12-10, Part N of the Rules**.	○			○*2
44 Lists of loading/filling limits	(1) As specified in **15.6.1, Part N of the Rules**.	○			○*2
45 A copy of the *IGC* Code or national regulations incorporating the provisions of the *IGC* Code	(1) As specified in **18.1.1, Part N of the Rules**.				○

Table B2.3 Plans and Documents – Ships Carrying Liquefied Gases in Bulk (Continued)

Name*1	Notes	Submission			Maintained On Board
		Approval	Other	Finished Plans (Submission)	Finished Plans (On Board)
46 Plans for additional fire-fighting equipment and other fire-fighting means	(1) The specification and arrangements of fire-fighting equipment and other means specified in **Chapter 11, Part N of the Rules.**	○			
47 Documents specifying maximum allowable loading limits	(1) As specified in **15.6.1-1, Part N of the Rules.**	○			
48 Stress analysis	(1) As specified in **5.11.5, Part N of the Rules.**		○		
49 Calculation results of the evaluation of the adequacy of vent systems	(1) For cargo tanks that are loaded the cargoes in accordance with **15.5.2, Part N of the Rules.** (2) Specified in **1.3, Annex 5, Part N of the Rules.**	○			
50 Specifications, piping and operation manuals of cargo emergency shutdown (ESD) systems	(1) Cargo emergency shutdown(ESD) systems means the systems specified in **18.3, Part N of the Rules.**	○			
51 Piping diagram, constructions and particulars of utilisation units	(1) Where cargo is used as fuel.	○			
52 Plans and documents for equipment and fittings of ships carrying liquefied gases in bulk	(1) As specified in **1.2(1), 21.2.1** and **21.2.2, Annex 1, Part N of the Rules.**	○			
	(1) As specified in **1.2(2), 2.2.1, 3.2.1, 17.2.1, 18.2.1** and **20.2.1 Annex 1, Part N of the Rules.**		○		
53 Plans and documents for dual fuel boilers	(1) As specified in **1.3(1), Annex 2, Part N of the Rules.**	○			
	(2) As specified in **1.3(2), Annex 2, Part N of the Rules.**		○		
54 Plans and documents for gas combustion units	(1) As specified in **1.3(1), Annex 2A, Part N of the Rules.**	○			
	(2) As specified in **1.3(2), Annex 2A, Part N of the Rules.**		○		
55 Plans and documents for high pressure gas-fuelled engines	(1) As specified in **1.3 (1)** and **(3), Annex 16.1.1-2, Part N of the Rules.**	○			
	(2) As specified in **1.3 (2), Annex 16.1.1-2, Part N of the Rules.**		○		
56 Plans and documents for low pressure gas-fuelled engines	(1) As specified in **1.3 (1)** and **(3), Annex 16.1.1-3, Part N of the Rules.**	○			
	(2) As specified in **1.3 (2), Annex 16.1.1-3, Part N of the Rules.**		○		
57 Plans of access to bows of tankers		○			

Notes

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

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

Table B2.4 Plans and Documents – Ships Carrying Dangerous Chemicals in Bulk

Name*1	Notes	Submission			Maintained On Board
		Approval	Other	Finished Plans (Submission)	Finished Plans (On Board)
1 Cargo tank construction details		○			
2 Cargo tank accessory arrangements	(1) Including details of fittings inside tanks.	○			
3 Manufacturing specifications, details of cargo tank supports, deck portions through which cargo tanks penetrate and their sealing devices for independent cargo tanks	(1) For independent cargo tanks. (2) Manufacturing specifications including materials to be used, welding procedures and inspection and testing procedures for weld and cargo tanks.	○			
4 Coating or lining procedures of insides of cargo tanks, and corrosion test results of such coating or lining, if required		○			
5 Plans showing arrangement and the methods of attachment of the insulation together with the working procedure concerned		○			
6 Cargo pump construction plans	(1) Including list of materials to be used and their specifications.	○			
7 Cargo tank area piping arrangements		○		○	
8 Cargo tank ventilation arrangement		○			
9 Ventilation plan	(1) Including cargo pump rooms, pump rooms, cofferdams, double bottoms, etc.	○			
10 Cargo level monitoring and measurement system diagrams	(1) Including the detailed construction of the equipment.	○			
11 Cargo temperature control systems		○			
12 Plans for cargo tank environmental control systems	(1) Where environmental control is implemented by inerting, padding, drying and ventilation systems. (2) Including piping diagrams and construction of systems.	○			
13 Cargo vapour detection instruments	(1) Listed by applicable cargo.	○			
14 Cargo tank, pipe line, machinery and equipment earthing connection arrangements	(1) Where flammable cargoes are intended to be loaded.	○			
15 Personnel protection arrangement plans	(1) Personnel protection arrangements are specified in **Chapter 14, Part S of the Rules**.	○			
16 Cargo operations manuals	(1) As specified in **16.1.1 Part S, Part S of the Rules**.	○			○*2

Table B2.4 Plans and Documents – Ships Carrying Dangerous Chemicals in Bulk (Continued)

Name*1	Notes	Submission	Maintained On Board

		Approval	Other	Finished Plans (Submission)	Finished Plans (On Board)
17 Lists showing chemical and physical properties and other special properties of all cargoes intended to be loaded			○		
18 Loading plans of dangerous chemicals coming within the scope of **Part S of the Rules** and other chemicals loaded simultaneously with these dangerous chemicals			○		
19 Data on reactivity hazard of cargo in relation to other chemicals or water; self-reactionary traits such as polymerisation; and where deemed necessary, hazardous reactivity with heating or cooling media	(1) For chemicals not intended to be loaded simultaneously with the dangerous chemicals coming within the scope of **Part S of the Rules** may be excluded.		○		
20 Data on reactivity hazard between intended cargoes and coating or lining in cargo tanks and of piping and equipment that may come into contact with cargo liquid or vapour			○		
21 Data on compatibility of corrosion-resistant materials and cargoes having corrosive properties			○		
22 Strength calculation of each cargo tank and, where deemed necessary, thermal stress calculations			○		
23 Capacity calculations for heating systems	(1) For loading cargoes that require heating.		○		
24 Arrangements of access manholes in cargo tank area and the guide for access through these manholes	(1) Specified in **3.4, Part S of the Rules**.	○			
25 Ship survival capability calculations	(1) As specified in **Chapter 2, Part S of the Rules**.	○			○
26 Lists of loading/filling limits	(1) As specified in **15.3.2-12, 15.8.33-3** and **15.14.7-3, Part S of the Rules**.	○			○*2

Table B2.4 Plans and Documents – Ships Carrying Dangerous Chemicals in Bulk (Continued)

Name*1	Notes	Submission			Maintained On Board
		Approval	Other	Finished Plans (Submission)	Finished Plans (On Board)
27 Cargo handling plans	(1) As specified in **15.3.2-15** and **15.8.32, Part S of the Rules**.	○			○*2
28 A copy of the *IBC* Code or national regulations incorporating the *IBC* Code	(1) As specified in **16.2.3-1, Part S of the Rules**.				○
29 Manufacturing specifications for cargo tanks and insulation	(1) Where cargoes are required to be cooled, and the Society judges there is a need to document based on cargo storage plans and cargo tank construction. (2) Including the following: welding procedures; inspection and testing procedures for welds and cargo tanks; properties and installation procedures of insulation materials; and working standards.	○			
30 Specifications and standards of materials (including insulations) used for cargo piping system in connection with design pressure and/or temperature	(1) Where cargoes are required to be cooled, and the Society judges there is a need to document based on cargo storage plans and cargo tank construction.	○			
31 Specifications and standards of materials of cargo tanks, insulations and cargo tank supports	(1) Where cargoes are required to be cooled, and the Society judges there is a need to the document based on cargo storage plans and cargo tank construction.	○			
32 Constructions of main parts of refrigeration systems	(1) Where cargoes are required to be cooled, and the Society judges there is a need to document based on cargo storage plans and cargo tank construction.	○			
33 Piping diagrams for refrigeration system refrigerant	(1) Where cargoes are required to be cooled, and the Society judges there is a need to document based on cargo storage plans and cargo tank construction.	○			
34 Data on notch toughness, corrosiveness, physical and mechanical properties of materials and welded parts at the minimum design temperature and room temperature, where new materials or welding methods are adopted for constructing the cargo tanks, thermal insulation, etc.	(1) Where cargoes are required to be cooled, and the Society judges there is a need to document based on cargo storage plans and cargo tank construction.		○		

Table B2.4 Plans and Documents – Ships Carrying Dangerous Chemicals in Bulk (Continued)

Name*1	Notes	Submission			Maintained On Board
		Approval	Other	Finished Plans (Submission)	Finished Plans (On Board)
35 Data on test analysis and results of model tests carried out to demonstrate strength and performance of cargo tanks, thermal insulation, secondary barriers, and cargo tank supports	(1) Where cargoes are required to be cooled, and the Society judges there is a need to document based on cargo storage plans and cargo tank construction.		○		
36 Calculation sheets on heat transfer between the primary members of the cargo tank under various loading conditions	(1) Where cargoes are required to be cooled, and the Society judges there is a need to document based on cargo storage plans and cargo tank construction.		○		
37 Calculation sheets for thermal stress on primary members of cargo tanks at the temperature distributions specified in **Item 36**	(1) Where cargoes are required to be cooled, and the Society judges there is a need to document based on cargo storage plans and cargo tank construction.		○		
38 Hull structure temperature distribution calculation sheets	(1) Where cargoes are required to be cooled, and the Society judges there is a need to document based one cargo storage plans and cargo tank construction.		○		
39 Cargo composition and physical properties	(1) Where cargoes are required to be cooled, and the Society judges there is a need to document based on cargo storage plans and cargo tank construction. (2) Including a saturated vapour pressure diagram within the necessary temperature range.		○		
40 Refrigeration system capacity calculation sheets	(1) Where cargoes are required to be cooled, and the Society judges there is a need to document based on cargo storage plans and cargo tank construction.		○		
41 Plans for additional fire-fighting equipment and other fire-fighting means	(1) The specification and arrangements of fire-fighting equipment and other means specified in **Chapter 11, Part S of the Rules**.	○			
42 Tanker bow access plans		○			

Notes

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

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

Table B2.5 Plans and Documents – Ships Using Low-flashpoint Fuels

Name*1	Notes	Submission		Maintained On Board
		Approval	Other	Finished Plans (On Board)
1 Manufacturing specifications for fuel tanks, thermal insulation and secondary barriers	(1) Including the following: welding procedures, inspection and testing procedures for welds and fuel tanks, installation procedures of thermal insulation materials and secondary barriers, and working standards.	○		
2 Arrangements and construction of fuel tanks		○		
3 System drawings and arrangements of fuel tank accessories	(1) Including details of the internal fittings.	○		
4 Arrangements and construction of fuel tank supports		○		
5 Construction of fuel tank deck portions through which fuel tanks penetrate, and their sealing arrangements		○		
6 Arrangements and construction of secondary barriers		○		
7 Specifications or standards for materials used for fuel tanks, thermal insulations, secondary barriers and fuel tank supports		○		
8 Layout and detailed installation of thermal insulation		○		
9 Manufacturing specifications for fuel piping systems	(1) Including the following: welding procedures, testing and inspection procedures for fuel piping, installation procedures of double wall piping, ducts and thermal insulation materials and secondary barriers, and working standards.	○		
10 Piping diagrams for fuel piping, fuel gauging systems and fuel vent piping		○		
11 Bilge systems in fuel storage hold spaces or interbarrier spaces, fuel preparation rooms, tank connection spaces and bunkering stations		○		

Table B2.5 Plans and Documents – Ships Using Low-flashpoint Fuels (Continued)

Name*1	Notes	Submission		Maintained On Board
		Approval	Other	Finished Plans (On Board)
12 Specifications, piping diagrams and arrangements of gas detection systems		○		
13 Piping diagrams of inert gas lines and details of pressure adjusting devices	(1) Where fuel storage hold spaces or interbarrier spaces may be inerted.	○		
14 Details of pressure relief systems for fuel storage hold spaces, interbarrier spaces and tank connection spaces as well as details of drainage arrangements for leaked fuel		○		
15 Assembly cross section of various pressure vessels, details of nozzles, system plans of fittings and details of fittings		○		
16 Arrangements of electrical bonding for fuel tanks, piping systems, machinery, equipment, etc.		○		
17 Arrangements of equipment installed in fuel preparation rooms, tank connection spaces, bunkering stations and bunkering control stations		○		
18 Programs of non-destructive testing for periodical surveys	(1) For independent fuel storage tanks of Type *B*. (2) Refer to **Item 1, (1) (d), Table B5.29, Part B of the Rules**.	○		○*2
19 Programs of examination and testing of liquefied gas fuel containment systems for periodical surveys	(1) For membrane tanks. (2) Refer to **Note *1, Table B5.29, Part B of the Rules**.	○		○*2
20 Inspection/survey plans for liquefied gas fuel containment systems for ships using low-flashpoint fuels	(1) As specified in **6.4.1-8, Part GF of the Rules**.	○		○*2

Table B2.5 Plans and Documents – Ships Using Low-flashpoint Fuels (Continued)

Name*1	Notes	Submission		Maintained On Board
		Approval	Other	Finished Plans (On Board)
21 Arrangements of access to hazardous areas, fuel preparation rooms, tank connection spaces, *ESD*-protected machinery spaces and inerted spaces and guides for said access thereto (including air locks)		○		
22 Diagrams for control systems (including monitoring, safety and alarm systems) of bunkering systems, fuel tanks, fuel supply systems and fuel consumers and lists of the setting values		○		
23 Plans and documents for high pressure gas-fuelled engines	(1) As specified in **1.3(1)** and **(3), Annex 1.1.3-2, Part GF of the Rules**.	○		
	(2) As specified in **1.3(2)** and **(3), Annex 1.1.3-2, Part GF of the Rules**.		○	
24 Plans and documents for low pressure gas-fuelled engines	(1) As specified in **1.3(1)** and **(3), Annex 1.1.3-3, Part GF of the Rules**.	○		
	(2) As specified in **1.3(2)** and **(3), Annex 1.1.3-3, Part GF of the Rules**.		○	
25 Plans and documents for equipment and fittings of ships using low-flashpoint fuels	(1) As specified in **1.2(1), Annex 1, Part GF of the Rules**.	○		
	(2) As specified in **1.2(2), Annex 1, Part GF of the Rules**.		○	
26 Plans and documents for gas-fuelled boilers	(1) As specified in **1.3(1), Annex 2, Part GF of the Rules**.	○		
	(2) As specified in **1.3(2), Annex 2, Part GF of the Rules**.		○	
27 Plans and documents for gas combustion units	(1) As specified in **1.3(1), Annex 2A, Part GF of the Rules**.	○		
	(2) As specified in **1.3(2), Annex 2A, Part GF of the Rules**.		○	
28 Arrangements and construction of ventilation systems	(1) Including materials, ventilation capacity, etc.	○		
29 Arrangements of ventilation inlets and exhaust outlets		○		

Table B2.5 Plans and Documents – Ships Using Low-flashpoint Fuels (Continued)

Name*1	Notes	Submission		Maintained On Board
		Approval	Other	Finished Plans (On Board)
30 Ventilation duct diagrams	(1) Including design pressures, materials, and arrangements and construction of fittings.	○		
31 Details of bunkering manifold connections		○		
32 Plans showing distance between fuel tanks and shell plating at each section		○		
33 Arrangements, capacity calculation sheets and drip tray details	(1) Including materials, thermal protection for the hull structure and drainage arrangements.	○		
34 Access routes and means of access to protected spaces within hold spaces		○		
35 Arrangements of air lock doors, air lock ventilation capacity calculation sheets and air lock alarm system details		○		
36 Operational procedures	(1) As specified in **17.2.2-3, Part GF of the Rules**.	○		○*2
37 Emergency procedures	(1) As specified in **17.2.2-4, Part GF of the Rules**.	○		○*2
38 Basic design principal and technical reports for fuel containment systems			○	
39 Data on test methods and results of model and other tests, etc.	(1) As specified in **Chapter 16, Part GF of the Rules**.		○	
40 Data on physical and mechanical properties of materials and welded parts at low and normal temperatures as well as their toughness at low temperatures and corrosion resistance where new materials and welding methods are adopted for construction of the fuel tanks, secondary barriers, thermal insulation, etc.			○	

Table B2.5 Plans and Documents – Ships Using Low-flashpoint Fuels (Continued)

Name*1	Notes	Submission		Maintained On Board
		Approval	Other	Finished Plans (On Board)
41 Data on design loads	(1) As specified in **6.4.9, Part GF of the Rules.**		○	
42 Strength calculation sheets for fuel tanks and associated supports	(1) As specified in **6.4.6** and **6.4.15, Part GF of the Rules.**		○	
43 Heat transfer calculation sheets for primary members of fuel tanks under various loading conditions	(1) Where deemed necessary by the Society.		○	
44 Thermal stress calculation sheets for the primary members at the temperature distributions	(1) Where deemed necessary by the Society.		○	
45 Temperature distribution calculation sheets for hull structures	(1) Where deemed necessary by the Society.		○	
46 Specifications of fuel systems			○	
47 Composition and physical properties of fuels	(1) Including a saturated vapour pressure diagram within the necessary temperature range.		○	
48 Calculation sheets of relieving capacities of pressure relief systems for fuel tanks	(1) Including calculation sheets of back pressure in discharge lines.		○	
49 Technical data relating to design concepts for fuel preparation rooms and tank connection spaces			○	
50 Calculation sheets for refrigeration system capacities			○	
51 Strength calculation sheets for pipes	(1) As specified in **7.3.4-2, Part GF of the Rules.**		○	
52 Investigation reports of the stress analysis for high pressure fuel piping systems	(1) As specified in **7.3.4-4, Part GF of the Rules.**		○	
53 Stress analysis reports for piping systems with design temperatures of −110 °C or lower	(1) As specified in **7.3.4-5, Part GF of the Rules.**		○	
54 Investigation reports of the design pressures for outer pipes or ducts of high pressure fuel piping	(1) As specified in **9.8.2, Part GF of the Rules.**		○	
55 Details of pump shaft penetrations	(1) Including information on design specifications, construction, materials, etc.		○	

Table B2.5 Plans and Documents – Ships Using Low-flashpoint Fuels (Continued)

Name*1	Notes	Submission		Maintained On Board
		Approval	Other	Finished Plans (On Board)
56 Investigation documents for fuel tank filling limits			○	
57 Probability calculation sheets in cases	(1) Where a probabilistic approach is used to decide fuel tank arrangements.		○	
58 List of data on risk assessment			○	
59 Documents related to failure modes and effects analysis	(1) As specified in **14.3.4, Part GF of the Rules**.		○	
60 A copy of the *IGF* Code or national regulations incorporating the *IGF* Code	(1) As specified in **17.2.2-1, Part GF of the Rules**.			○
61 Plans for additional fire-fighting equipment and other fire-fighting means	(1) The specification and arrangements of fire-fighting equipment and other means specified in **Chapter 11, Part GF of the Rules**.	○		
62 Construction of main parts of refrigeration systems		○		
63 Piping diagrams for refrigeration system refrigerant		○		

Notes

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

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

Table B2.6 List of Information to be Included in the Ship Construction File (SCF)
(Ships subject to *SOLAS Chapter II-1 Regulation 3-10*)

Items		Information to be included	Further explanation of the content	Example documents	Normal storage location
DESIGN					
1	Design life	• assumed design life in years	• statement or note on midship section	• SCF-specific	on board ship
				• midship section plan	on board ship
2	Environmental conditions	• assumed environmental conditions	• statement referencing data source or Rule (specific rule and data); or • in accordance with Rule (date and revision)	• SCF-specific	on board ship
3	Structural strength				
3.1	General design	• applied Rule (date and revision)	• applied design method alternative to Rule and subject structure(s)	• SCF-specific	on board ship
		• applied alternative to Rule		• capacity plan	on board ship
3.2	Deformation and failure modes	• calculating conditions and results	• allowable loading pattern	• loading manual	on board ship
		• assumed loading conditions	• maximum allowable hull girder bending moment and shear force	• trim and stability booklet	on board ship
3.3	Ultimate strength	• operational restrictions due to structural strength	• maximum allowable cargo density or storage factor	• loading instrument instruction manual	on board ship
				• operation and maintenance manuals	on board ship
3.4	Safety margins	• strength calculation results	• bulky output of strength calculation	• strength calculation	on shore archive
			• plan showing highly stressed areas (e.g. critical structural areas) prone to yielding and/or buckling	• areas prone to yielding and/or buckling	on board ship
		• gross hull girder section modulus			

Table B2.6 List of Information to be Included in the Ship Construction File (SCF)
(Ships subject to *SOLAS Chapter II-1 Regulation 3-10*) (Continued)

Items		Information to be included	Further explanation of the content	Example documents	Normal storage location
3.4	Safety margins	• minimum hull girder section modulus along the length of the ship to be maintained throughout the ship's life, including cross section details such as the value of the area of the deck zone and bottom zone, the renewal value for the neutral axis zone		• general arrangement plan	on board ship
		• gross scantlings of structural constituent parts	• structural drawings	• key construction plans	on board ship
		• net scantlings of structural constituent parts, as built scantlings and voluntary addition thicknesses	• rudder and stern frame		
			• structural details of typical members	• rudder and rudder stock plans	on board ship
				• structural details	on board ship
				• yard plans	on shore archive
				• dangerous area plan	on board ship
		• hull form			
			• hull form information indicated in key construction plans	• lines plan	on shore archive
			• hull form data stored within an onboard computer necessary for trim and stability and longitudinal strength calculations	or	
				equivalent	on board ship
4	Fatigue life	• applied Rule (date and revision)	• applied design method alternative to Rule and subject structures	• SCF-specific	on board ship
		• applied alternative to Rule			
		• calculating conditions and results	• assumed loading conditions and rates	• structural details	on board ship
		• assumed loading conditions			

Table B2.6 List of Information to be Included in the Ship Construction File (SCF)
(Ships subject to *SOLAS Chapter II-1 Regulation 3-10*) (Continued)

Items		Information to be included	Further explanation of the content	Example documents	Normal storage location
4	Fatigue life	• fatigue life calculation results	• bulky output of fatigue life calculation • plan showing areas (e.g. critical structural areas) prone to fatigue	• fatigue life calculation • areas prone to fatigue	on shore archive on board ship
5	Residual strength	• applied Rule (date and revision)		• SCF-specific	on board ship
6	Protection against corrosion				
6.1	Coating life	• coated areas and target coating life and other measures for corrosion protection in holds, cargo and ballast tanks, other structure-integrated deep tanks and void spaces	• plans showing areas (e.g. critical structural areas) prone to excessive corrosion	• SCF-specific	on board ship
6.2	Corrosion addition			• Coating Technical File required by PSPC (*Performance standard for Protective Coatings for Dedicated Seawater Ballast Tanks in All Types of Ships and Double-side Skin Spaces of Bulk Carriers*, adopted as *IMO* Resolution *MSC*.215(82), as amended and *Performance Standard for Protective Coatings for Cargo Oil Tanks of Crude Oil Tankers*, adopted as *IMO* Resolution *MSC*.288(87), as amended)	on board ship
		• specification for coating and other measures for corrosion protection in holds, cargo and ballast tanks, other structure-integrated deep tanks and void spaces		• areas prone to excessive corrosion	on board ship
		• gross scantlings of structural constituent parts • net scantlings of structural constituent parts, as built scantlings and voluntary addition thicknesses		• key construction plans	on board ship
7	Structural redundancy	• applied Rule (date and revision)		• SCF-specific	on board ship

Table B2.6 List of Information to be Included in the Ship Construction File (SCF)
(Ships subject to *SOLAS Chapter II-1 Regulation 3-10*) (Continued)

Items		Information to be included	Further explanation of the content	Example documents	Normal storage location
8	Watertight and weathertight integrity	• applied Rule (date and revision)		• SCF-specific	on board ship
		• key factors for watertight and weathertight integrity	• details of equipment forming part of the watertight and weathertight integrity	• structural details of hatch covers, doors and other closings integral with the shell and bulkheads	on board ship
9	Human element considerations	• list of ergonomic design principles applied to ship structure design to enhance safety during operations, inspections and maintenance of ship		• SCF-specific	on board ship
10	Design transparency	• applied Rule (date and revision) • applicable industry standards for design transparency and IP protection		• intellectual property provisions	on board ship
		• reference to part of SCF information kept ashore		• summary, location and access procedure for part of SCF information on shore	on board ship
CONSTRUCTION					
11	Construction quality procedures	• applied construction quality standard	• recognized national or international construction quality standard	• SCF-specific	on board ship
12	Survey during construction	• survey regime applied during construction (to include all owner and class scheduled inspections during construction)	• applied Rules (date and revision) • copies of certificates of forgings and castings welded into the hull	• SCF-specific	on board ship
				• tank testing plan	on board ship
		• information on non-destructive examination		• non-destructive testing plan	on board ship
				• Coating Technical File required by PSPC	on board ship

Table B2.6 List of Information to be Included in the Ship Construction File (SCF)
(Ships subject to *SOLAS Chapter II-1 Regulation 3-10*) (Continued)

Items		Information to be included	Further explanation of the content	Example documents	Normal storage location
IN-SERVICE CONSIDERATIONS					
13	Survey and maintenance	• maintenance plans specific to the structure of the ship where higher attention is called for	• plan showing highly stressed areas (e.g. critical structural areas) prone to yielding, buckling, fatigue and/or excessive corrosion	• SCF-specific • operation and maintenance manuals (e.g. hatch covers and doors)	on board ship on board ship
		• preparations for survey	• arrangement and details of all penetrations normally examined at dry-docking	• docking plan	on board ship
		• gross hull girder section modulus	• details for dry-docking	• dangerous area plan	on board ship
		• minimum hull girder section modulus along the length of the ship to be maintained throughout the ship's life, including cross section details such as the value of the area of the deck zone and bottom zone, the renewal value for the neutral axis zone	• details for in-water survey	• Ship Structure Access Manual	on board ship
				• Means of access to other structure-integrated deep tanks	on board ship
				• Coating Technical File required by PSPC	on board ship
		• gross scantlings of structural constituent parts		• key construction plans	on board ship
		• net scantlings of structural constituent parts, as built scantlings and voluntary addition thicknesses		• rudder and rudder stock	on board ship
				• structural details	on board ship
				• yard plans	on shore archive

Table B2.6 List of Information to be Included in the Ship Construction File (SCF)
(Ships subject to *SOLAS Chapter II-1 Regulation 3-10*) (Continued)

Items		Information to be included	Further explanation of the content	Example documents	Normal storage location
13	Survey and maintenance	• hull form	• hull form information indicated in key construction plans	• lines plan or equivalent	on shore archive on board ship
14	Structural accessibility	• means of access to holds, cargo and ballast tanks and other structure-integrated deep tanks	• plans showing arrangement and details of means of access	• Ship Structure Access Manual • means of access to other structure-integrated deep tanks	on board ship on board ship
RECYCLING CONSIDERATIONS					
15	Recycling	• identification of all materials that were used in construction and may need special handling due to environmental and safety concerns	• list of materials used for the construction of the hull structure	• SCF-specific	on board ship

Notes:

1 "SCF-specific" means documents to be developed especially to meet the requirements of this Table.

2 "Key construction plans" means plans such as midship section, main O.T. and W.T. transverse bulkheads, construction profiles/plans, shell expansions, forward and aft sections in cargo tank (or hold) region, engine-room construction, forward construction and stern construction drawings.

3 "Yard plans" means a full set of structural drawings, which include scantling information of all structural members.

4 "Hull form" means a graphical or numerical representation of the geometry of the hull. Examples would include the graphical description provided by a lines plan and the numerical description provided by the hull form data stored within an onboard computer.

5 "Lines plan" means a special drawing which is dedicated to show the entire hull form of a ship.

6 "Equivalent (to Lines plan)" means a set of information of hull form to be indicated in key construction plans for SCF purposes. Sufficient information is to be included in the drawings to provide the geometric definition to facilitate the repair of any part of the hull structure.

7 "Normal storage location" means a standard location where each SCF information item is to be stored. However, those items listed as being on board in the table above are to be on board as a minimum.

8 "Shore archive" is to be operated in accordance with applicable international standards.

Table B2.7 Survey - Hull and Equipment

Survey Item	Details
1 Materials, equipments and weldings	(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 methods considered to sufficient for obtaining information equivalent to that obtained through traditional ordinary surveys where a surveyor is in attendance.
2 Ships carrying liquefied gases in bulk, ships carrying dangerous chemicals in bulk and ships using low-flashpoint fuels	(1) For ships carrying liquefied gases in bulk, ships carrying dangerous chemicals in bulk and ships using low-flashpoint fuels, the tests specified in **Part N, Part S** and **Part GF of the Rules** respectively are carried out in addition to the survey items specified in this table.
3 Welding	(1) Welding consumables are approved. (2) Welders are appropriately qualified. (3) Welding application plans are approved in accordance with **2.2.1, Part D of the Rules**. (4) New welding procedure qualification tests are carried out. (5) Welding equipment is appropriately calibrated and maintained. (6) The environment (cleanliness, dryness, lighting, etc.) and preparation (pre- or post-heat treatment, drying of surfaces, etc.) are appropriate. (7) Welding are appropriately monitored by supervisors. (8) Welding is appropriately implemented without serious surface defects. (9) Non-destructive inspections for the welded joints of hull constructions are carried out in accordance with **Chapter 8, Part D of the Rules**.
4 Steel preparation and fit up	(1) Steels are traceable and appropriately identified. (2) Surface preparation and cutting are appropriately carried out. (3) Straightening is appropriately carried out. (4) Forming is appropriately carried out. (5) Alignment, fit up and gaps are in accordance with appropriate standards.
5 Steelwork process (sub-assembly, block, grand and mega block assembly, pre-erection and erection, closing plates)	(1) Welded parts and materials are appropriately fitted. (2) Alignment and deformations are in accordance with appropriate standards.
6 Rework, remedial works, alternation	(1) Welding is appropriately carried out, and alignment and deformations are in accordance with appropriate standards.
7 Rudders and rudder installations	(1) Rudders and rudder installations are appropriately installed. (2) Leak tests are carried out. (3) Rudder carriers are appropriately installed.. (4) Inspections of the centring of carriers and bearings are carried out. (5) Bushes are appropriately fitted. (6) Rudder stocks are appropriately installed. (7) Rudder stocks and rudders are appropriately connected. (8) Swing tests of rudder are carried out. (9) Clearances are measured. (10) Carrier bearings are appropriately lubricated.
8 Keel line profiling, principle dimension measurement, hull deflection measurement	(1) Measure plan accuracy.
9 Load lines, freeboard marks and ship identification numbers	(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.

Table B2.7 Survey - Hull and Equipment (Continued)

Survey Items	Details
10 Airtight tests (including leakage and hose tests), hydrostatic tests, watertight tests	(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.
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**.
12 Dewatering arrangements	(1) Performance tests are carried out for the dewatering arrangements specified in **13.5.10 Part D of the Rules**.
13 Closing appliances of openings (including watertight and ramp doors)	(1) Closing appliances for maintaining shell and weatherdeck watertightness or weathertightness are appropriately installed. (2) Watertightness or weathertightness performance tests are carried out.
14 Bulwark	(1) Bulwark (including freeing ports) is appropriately provided.
15 Guardrails, walkways, etc.	(1) Appopriate means (including guardrails, walkways and other means) for protection of seafarers are provided. (2) Safe access to operating positions for windlasses located in the bow are is provided for tankers.
16 Navigation bridge visibility	(1) Navigation bridge arrangement is appropriate. (2) Watch location visibility from the navigation bridge complies with **Chapter 2, Part W of the Rules**.
17 Loading computers	(1) Operating tests, using several of the loading conditions examined in accordance with **3.8.3.2-2, Part 1, Part C of the Rules**, are carried out for loading computers after installation to confirm proper operation.
18 Stability computers	(1) Functional tests are carried out to verify proper operation.
19 Emergency towing arrangements	(1) Emergency towing arrangements are located in accordance with approved plans. (2) Functional tests are carried out.

Table B2.7 Survey - Hull and Equipment (Continued)

Survey Items	Details
20 Means of embarkation and disembarkation	(1) Means of embarkation and disembarkation comply with **14.14, Part 1, Part C of the Rules**. (2) Accommodation ladders are subjected to static load tests at their specified maximum operational loads. (3) Winch hoisting and lowering of accommodation ladders are tested a minimum of two times in accordance with *ISO* 7364:1983 or another standard deemed appropriate by the Society. (4) Winches and accommodation ladders are verified to be in good conditions after testing.
21 Corrosion prevention systems	(1) Corrosion prevention systems are fitted in dedicated seawater ballast tanks arranged in ships, double-side skin spaces arranged in bulk carriers of 150m in length and upwards and cargo oil tanks of crude oil tankers, of 5,000 tonnes dead weight and above.
22 Water level detection and alarm systems	(1) Performance tests (including audible and visible alarms tests) are carried out for the water level detection and alarm systems specified in **13.8.5** and **13.8.6, Part D of the Rules**.
23 Collision bulkheads	(1) Collision bulkheads are watertight up to the freeboard deck. (2) Valves fitted onto pipes penetrating collision bulkheads are capable of being operated from above the freeboard deck. (3) There are no doors, manholes, ventilation ducts or other openings.
24 Towing and mooring equipment	(1) Towing and mooring equipment is properly marked to indicate restriction associated with safe operation. (2) The opearation tests specified in **16.3.2, Part D of the Rules** are carried out.
25 Control of gases	(1) Portable instruments for measuring gases specified in **4.5.7, Part R of the Rules** are provided. (2) Suitable means for calibrating portable instruments for measuring gases is provided. (3) Arrangements for the gas measurements specified in **4.5.7(2), Part R of the Rules** are provided.
26 Cargo tank venting	(1) Cargo tank venting is appropriately arranged.
27 Ventilators and air pipes	(1) Ventilators and air pipes (including associatedr coamings and closing appliances) located on the freeboard deck and superstructure decks are appropriately provided.
28 Scuppers, inlets and discharges	(1) Scuppers, inlets and discharges are appropriately provided.
29 Means to prevent blockage of drainage arrangements	(1) Means to prevent blockage of drainage arrangements are provided for closed vehicle and ro-ro spaces, and special category spaces where fixed pressure water-spraying systems are provided.
30 Side scuttles and deadlights	(1) Side scuttles and deadlights are appropriately provided.
31 Spurling pipes and cable lockers	(1) Spurling pipes and cable lockers are appropriately provided.
32 Garbage chutes	(1) Garbage chutes are appropriately provided.
33 Type “A” or type “B-minus” freeboards	(1) Ships satisfy special requirements for type “A” and type “B-minus” freeboards(only when applicable).
34 Fittings and appliances for timber deck cargoes	(1) Fittings and appliances for timber deck cargoes are appropriately provided.
35 Provision of means of access	(1) Means of access are appropriately provided in accordance with approved manuals for oil tankers and bulk carriers.
36 Watertight cable penetrations	(1) Watertight cable penetrations are installed in accordance with **H2.9.15-5, Part H of the Guidance**.

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

Survey Items	Details
1 General	(1) Machinery, electrical installations, cables and piping etc. are appropriately arranged. (2) Machinery and electrical installations etc manufactured away from the site are to be confirmed when they are used for ships. (3) Machinery, boilers and other pressure vessels, associated piping systems and fittings are installed and protected so as to reduce to a minimum any danger to persons on board with due regard being given to moving parts, hot surfaces and other hazards. (4) Normal operation of the propulsion machinery can be sustained or restored even though one of the essential auxiliaries becomes inoperative. (5) Means are provided so that the machinery can be brought into operation from the dead ship condition without external aid. (6) Means are provided to protect against overpressure in the parts of main, auxiliary and other machinery. (7) Means are provided to prevent the contacting of fuel oils, lubrication oils and other combustible oils to high temperature surfaces. (8) Arrangements to operate main and other machinery from machinery control room are satisfactory. (9) Means are provided for the cancellation of the remote control functions specified in **18.2.4-6, Part D of the Rules**. (10) The override arrangemens specified in **18.2.6-3, Part D of the Rules** are provided (11) Ventilation systems for machinery spaces operate as intended. (12) Precautions are provided against shock, fire and other hazards of electrical origin. (13) Means are provided for ascertaining the amount of oil contained in any oil fuel tanks specified in **4.2.2(1)(e), Part R of the Rules**.
2 Hydrostatic tests, watertight tests and relevant tests	(1) Hydrostatic, leakage or airtight tests are to be carried out as specified in **Part D of the Rules** in accordance with the kind of machinery (2) For pipes, relevant tests specified in **Part D of the Rules** are to be carried out.
3 Ships using low-flashpoint fuels	(1) For ships using low-flashpoint fuels, tests specified in **Part GF of the Rules** are to be carried out in addition to the survey items specified in this table.
4 Welds for machinery	(1) Production weld tests and non-destructive tests specified in **Chapter 11, Part D of the Rules** are to be carried out.
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 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.
6 Installation	(1) Main parts of machinery are properly installed on board.

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

Survey Items	Details
7 Shafting	(1) Confirmation tests for the optical or laser sighting of shaft centres specified in **D6.3.2(1), Part D of the Guidance** are to be carried out. (2) Clearance between stern tube bearings and propeller shafts or stern tube shafts, and propeller shafts weardown are to be measured. (3) Shaft alignment is to be satisfied in accordance with the following **(a)** to **(c)** items. (a) Shaft bearings are appropriately arranged. (b) The confirmation tests for measuring sag and the gaps between shaft coupling flanges specified in **D6.3.2(2), Part D of the Guidance** are to be carried out. (c) Confirmation tests for jacking up shafts near bearings are to be carried out in accordance with **Annex 6.2.13** and **1.4.2, Part D of the Guidance**. (4) Connecting bolts of shafts are properly installed. (5) F Performance tests for propeller shafts kind 1 C are to be carried out in accordance with **6.1.2(1)(l)ii), Part D of the Rules** for the systems and equipment, etc. specified in **6.2.11, Part D of the Rules**.
8 Stern tubes	(1) Inner conditions of stern tube bosses are appropriate. (2) Stern tubes are properly installed. (3) Leakage tests for the sealing devices specified in **6.2.10-2, Part D of the Rules** are to be carried out at the supply pressures of lubrication oils or fresh water after installation on board.
9 Propellers	(1) Propellers are properly fitted. (2) The force-fitting tests specified in **7.4.2, Part D of the Rules** are to be carried out for propellers force-fitted onto propellor shafts.
10 Sea chest valves and overboard discharge valves, etc.	(1) Sea chest valves and overboard discharge valves, etc. are properly fitted.
11 Reciprocating internal combustion engines (including reciprocating internal combustion engines for emergency installations)	(1) Performance tests for the safety devices and alarm systems specified in **2.4, Part D of the Rules** are to be carried out. (2) Performance tests for the automatic or remote control systems specified in **18.7.3, Part D of the Rules** are to be carried out. (3) Performance tests for the operation, watching, reporting, alarm and safety systems from the bridge are to be carried out for main propulsion machinery. (4) Crankshaft deflection is to be measured for main propulsion machinery.
12 Steam turbines	(1) Performance tests for the safety devices and alarm systems specified in **3.3, Part D of the Rules** are to be carried out. (2) One cross-compound type main steam turbines are to satisfy **3.2.2-1, Part D of the Rules** when provided. (3) Performance tests for the automatic or remote control systems specified in **18.7.3, Part D of the Rules** are to be carried out. (4) Performance tests for the operation, watching, reporting, alarm and safety systems from the bridge are to be carried out for main propulsion machinery.
13 Gas turbines	(1) Performance tests for the safety devices and alarm systems specified in **4.3, Part D of the Rules** are to be carried out. (2) Performance tests for the automatic or remote control systems specified in **18.7.3, Part D of the Rules** are to be carried out. (3) Performance tests for the operation, watching, reporting, alarm and safety systems from the bridge are to be carried out.
14 Boilers	(1) Popping tests of safety valves are to be carried out. (2) Performance tests for the safety devices and alarm systems specified in **9.9.10** and **9.11.2-3, Part D of the Rules** are to be carried out.

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

Survey Items	Details
15 Thermal oil heaters	(1) Performance tests for the safety devices and alarm systems specified in **9.12.2** and **9.12.3, Part D of the Rules** are to be carried out.
16 Incinerators	(1) Operation tests of the safety devices and the alarm devices specified as well as the burning tests in **9.13.5, Part D of the Rules** are to be carried out.
17 Pipes and piping systems	(1) Means are to be provided to prevent overpressure in oil tanks or in any part of oil fuel systems, including the filling pipes served by pumps on board. (2) Oil piping systems (including fuel oil and lubrication oil) are not to lead to forepeak tanks. (3) Bilge suction tests are to be carried out. (4) The sounding pipes specified in **13.8** and **14.2.8, Part D of the Rules** are to be provided. (5) The tests specified in **Chapter 13** and **Chapter 14, Part D of the Rules** are to be carried out.
18 Air compressors	(1) Performance tests are to be carried out for the relief valves specified in **13.13.1-2** and **13.13.2, Part D of the Rules.** (2) Charging tests are to be carried out.
19 Pressure vessels	(1) Performance tests are to be carried out for the pressure relief devices specified in **10.8.3, Part D of the Rules.**
20 Steering gear	(1) Steering gear compartments are to be readily accessible under safe conditions. (2) The bearings specified in **2.4, Part D of the Rules** are permanently lubricated or provided with lubrication fittings. (3) The relief valves specified in **15.2.4-4, Part D of the Rules** are provided. (4) Cables used in the power circuits specified in **15.2.7-1, Part D of the Rules** are separated as far apart as practicable throughout their entire length. (5) The rudder angle indicators specified in **15.2.10, Part D of the Rules** are provided. (6) Performance tests are to be carried out for the low level alarms specified in **15.2.4-5, Part D of the Rules** provided for hydraulic fluid reservoirs to give the earliest practical indication of hydraulic fluid leakage. (7) Fixed storage tanks to recharge the power actuating systems specified in **15.2.4-6, Part D of the Rules** are to be provided. (8) For the steering gear of in oil tankers, ships carrying liquefied gases in bulk or ships carrying dangerous chemicals in bulk of 10,000 *gross tonnage* or more, **15.6.1-2, Part D of the Rules** is to be satisfied.
21 Windlasses	(1) The tests specified in **16.2.5, Part D of the Rules** are to be carried out.
22 Refrigerating machinery and controlled atmosphere systems	(1) For refrigerating machinery, the pressure relief devices specified in **17.2.4, Part D of the Rules** are properly installed. (2) The hydrostatic or tightness tests specified in **17.2.1, Part D of the Rules** are to be carried out for pressure vessels exposed to the pressure of primary refrigerants, cylinders and crank cases of the compressors of refrigerators. (3) The leak tests specified in **17.4.2-1, Part D of the Rules** are to be carried out at a pressure of 90 % of the design pressure for piping systems which are exposed to the pressure of primary refrigerants after installation on board. (4) The operation tests and other tests specified in **17.4.2-2, Part D of the Rules** are to be carried out for installations and equipment connected with controlled atmosphere systems to confirm normal operation.
23 Waterjet propulsion systems	(1) The tests specified in **Chapter 19, Part D of the Rules** are to be carried out.
24 Azimuth Thrusters	(1) The tests specified in **Chapter 20, Part D of the Rules** are to be carried out.

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

Survey Items	Details
25 Selective catalytic reduction systems and associated equipment, exhaust gas cleaning systems and associated equipment or exhaust gas recirculation systems and associated equipment	(1) The tests specified in **Chapter 21, 22 and 23, Part D of the Rules** are to be carried out.
26 Prevention of electrical hazards	(1) Distribution systems for tankers, ships carrying liquefied gases in bulk and ships carrying chemicals in bulk are to satisfy **4.2.2, Part H of the Rules**.
27 Circuits of electric propulsion, auxiliary power and lighting	(1) The insulation resistance tests specified in **2.18.1, Part H of the Rules** are to be carried out.
28 Internal communication systems	(1) The tests specified in **2.18.1-2** and **2.18.2-6, Part H of the Rules***2 are to be carried out.
29 Generators	(1) The performance tests specified in **2.18.2, Part H of the Rules** are to be carried out. (2) Performance tests for starting arrangement are to be carried out.
30 Emergency sources of electrical power	(1) Emergency sources of electrical power are appropriately arranged. (2) The performance tests specified in **2.18.2, Part H of the Rules** are to be carried out. (3) Performance tests for starting arrangements are to be carried out.
31 Switchboards, section boxes and distribution boxes	(1) All switches, circuit-breakers and associated equipment on switchboards are to be operated on loads to demonstrate*2 suitability, and section boxes and distribution boxes are to be tested in the same way.
32 Motors	(1) The performance tests specified in **2.18.2-3, Part H of the Rules***2 are to be carried out.
33 Electric heaters, electric cooking ranges and the like	(1) Electric heaters, electric cooking ranges and the like are to be tested to demonstrate that their heating elements function satisfactorily.
34 Lighting systems(including emergency lighting circuits)	(1) All circuits are to be tested*2 to demonstrate that lighting fittings, branch boxes, switches, socket-outlets and other accessories are effectively connected and function satisfactorily. Performance tests are to be carried out for all circuits.
35 Protective enclosures and degrees, types of protection	(1) Protective enclosures and the type of protection for electrical installations are to satisfy relevant requirements.
36 High voltage cables	(1) The high voltage tests specified in **2.17.6-6, Part H of the Rules** are to be carried out.
37 Computer-based systems	(1) The tests specified in **2.2 Part X of the Rules** are to be carried out.

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**.

Table B2.9 Survey – Fire Protection, Means of Escape and Fire Fighting Equipment

Survey Items	Details
1 Fire-extinguishing system arrangements	(1) Fire-extinguishing systems are installed in accordance with plans approved by the Society. (2) The control systems for fixed fire-extinguishing systems are to be clearly identified.
2 Fire control plans	(1) Fire control plans are correctly posted.. (2) Fire control plans are permanently stored in prominently marked weathertight enclosures outside of deckhouses.
3 Fire main pumps, fire main lines and fire hydrants	(1) For fire main pumps, confirmation that two jets of water are simultaneously produced from the highest positioned hydrants and hydrants which impose the strictest condition, taking into account their distances from fire pumps, and that the pressures at each hydrant are not less than the minimum pressure required by **10.2.1-6(1), Part R of the Rules**. (2) Notwithstanding **(1)** above, confirmation that four jets of water are simultaneously produced from four fire hydrants for ships subject to **19.3.1, Part R of the Rules**. (3) For periodically unattended machinery spaces or spaces in which only one person is required on watch, the following **(a)** to **(c)** items are to be satisfied. (a) Operation tests of remote control systems or automatic operation systems for one pump are to be carried out. (b) Sea suction and outlet valves of such pumps in machinery spaces are to be capable of being opened from the same location where the pumps are started. Otherwise such valves are to be of a locked-open type with adequate notification such as “Keep open” attached thereto. (c) In cases where sea suction and outlet valves of such pumps are capable of being opened remotely, operation tests for remote control systems are to be carried out. (4) Tests for remote control systems of fire main pumps are to be carried out for ships subject to **19.3.1, Part R of the Rules**. (5) Pressure tests for ordinarily pressurised parts of systems with a pressure 1.5 *times* the working pressure are to be carried out for ships employing permanent pressurisation of fire main systems. (6) The tests specified in **11.2.5, Part N of the Rules** are to be carried out for ships carrying liquefied gases in bulk.
4 Emergency fire pumps	(1) For emergency fire pumps, confirmation that two jets of water are simultaneously produced from the highest positioned hydrants and hydrants which impose the strictest condition, taking into account their distances from fire pumps, and that the pressures at each hydrant are not less than the minimum pressure required by **32.2.2-2, Part R of the Rules**. The tests are to be carried out at the shallowest draught possible but need not be shallower than the one corresponding to the lightest seagoing condition. (2) Where suction or discharge piping penetrates machinery spaces, **10.2.1-4(1), Part R** and **R10.2.1-5, Part R of the Guidance** are to be satisfied. (3) Where sea-chests are fitted in machinery spaces, **10.2.1-4(1), Part R** and **R10.2.1-4, Part R of the Guidance** are to be satisfied.
5 Mobile water monitors	(1) Performance tests are to be carried out, and **10.7.3-2(5), Part R of the Rules** is to be satisfied during the tests.
6 Water mist lances	(1) Performance tests are to be carried out.
7 Fixed carbon dioxide fire extinguishing system (High pressure)	(1) Airtight tests of piping are to be carried out. The test pressure is to be 3.5 ***MPa*** for starting lines and lines between manifolds and selection valves and 1.0 ***MPa*** for lines between selection valves and open ends. (2) Piping is to be confirmed to be in good condition by delivering air through the pipes. (3) Performance tests of alarm systems are to be carried out. (4) Selection valves are to be marked in a way that clearly indicates the space for which they are intended.

Table B2.9 Survey – Fire Protection, Means of Escape and Fire Fighting Equipment (Continued)

Survey Items	Details
8 Fixed carbon dioxide fire-extinguishing systems (low pressure)	(1) Low pressure fixed carbon dioxide fire-extinguishing systems and their associated equipment are to satisfy relevant requirements in **Part D of the Rules**. (2) Carbo dioxide vessels are to subjected to magnetic particle inspections for welded joints after completion of hydraulic tests, and then subjected to tightness tests at a pressure equal to the designed pressure together with their fittings. (3) Pipes from release valves on distribution manifolds to nozzles are to be tested for tightness and the free flow of carbon dioxide gas (or air) after being assembled on board. The test pressure is to be 1.0 *MPa*. (4) Carbon dioxide storage systems are to be subjected to operational tests under the charged condition of liquefied carbon dioxide gas after installation on board to ensure no leakage of carbon dioxide gas and verify the operations of alarms, pressure gauges and liquid level indicators. (5) The refrigerating plants are to be subjected to operational tests under the charged condition of liquefied carbon dioxide gas (including pressure control function tests) after being installed on board. (6) Selection valves are to be marked in a way that clearly indicates the space for which they are intended.
9 Fixed foam fire-extinguishing systems, fixed deck foam fire extinguishing systems and foam fire fighting appliances for helidecks and helicopter landing areas (except for portable foam applicators provided at helicopter landing areas)	(1) Piping tests which consist of delivering water are to be carried out. (2) Performance tests which consist of delivering foam are to be carried out. Such tests may be replaced with other equivalent tests at the discretion of surveyors. (Fixed foam fire-extinguishing systems and fixed deck foam fire-extinguishing systems) (3) Performance tests which consist of delivering foam are to be carried out. Such tests may be dispensed with when the following **(a)** and **(b)** items are confirmed. (Foam fire fighting appliances for helidecks and helicopter landing areas) (a) Confirmation that water and foam concentrates are mixed in appropriate proportions. (b) Confirmation that fluid can be released from outlets by performing the test specified **(1)** above.
10 Fixed high-expansion foam fire extinguishing systems	(1) The tests specified in **26.3.5 Part R of the Rules**.
11 Fixed pressure water-spraying fire-extinguishing systems	(1) Pressure tests for the ordinarily pressurised parts of systems with pressures 1.5 *times* working pressure are to be carried out. (2) Performance tests which consist of spraying water are to be carried out. (3) Operation tests of relevant pumps are to be carried out.
12 Automatic sprinkler, fire detection and fire alarm systems	(1) Pressure test for the ordinarily pressurised parts of systems with pressures 1.5 *times* working pressure are to be carried out. (2) Operation tests of relevant pumps and water delivery alarms are to be carried out by activating one fire detector.
13 Fixed dry chemical powder fire extinguishing systems	(1) Airtight tests of powder transfer lines, powder pressurising lines and starting gas lines with pressures not less than maximum working pressure are to be carried out. (2) Piping tests which consist of delivering air are to be carried out. (3) Operation tests of monitors and hand hoses are to be carried out. (4) Operation tests of remote control systems and associated automatic valves are to be carried out. (5) The tests specified in **11.4.8, Part N of the Rules** are to be carried out.
14 Fixed water spray systems	(1) The water delivered by the remotest spray nozzle is to be confirmed during performance tests. (2) The tests specified in **11.3.8, Part N of the Rules** are to be carried out.

Table B2.9 Survey – Fire Protection, Means of Escape and Fire Fighting Equipment (Continued)

Survey Items	Details
15 Fixed local application fire-fighting systems	(1) Airtight tests of piping with pressures not less than maximum working pressure are to be carried out. (2) Piping tests which consist of delivering air are to be carried out. (3) Performance tests of alarm systems are to be carried out. (4) For ships with periodically unattended machinery spaces, performance tests of feed water pumps and starting valves by automatic and manual operation are to be carried out. For other ships, performance tests of feed water pumps and starting valves by manual operation are to be carried out.
16 Fire detecting systems	(1) Performance tests for one detector in each group are to be carried out. (2) Performance tests of alarm systems under loss of power or fault conditions are to be carried out.
17 Sample extraction smoke detection systems	(1) The performance tests specified in **30.2.4-2(2), Part R of the Rules** are to be carried out.
18 Manually operated call points	(1) Performance tests are to be carried out.
19 Fixed means for extinguishing a fire within exhaust ducts from galley ranges	(1) Relevant requirements in **R9.7.4, Part R of the Guidance** are to be satisfied.
20 Extinguishing systems for deep-fat cooking equipment	(1) Performance tests for the automatic shutting off of electrical power specified in **10.6.3(3), Part R of the Rules** are to be carried out. (2) Performance tests for alarms indicating the operations specified in **10.6.3(4), Part R of the Rules** are to be carried out.

Table B2.9 Survey – Fire Protection, Means of Escape and Fire Fighting Equipment (Continued)

Survey Items	Details
21 Inert gas systems	(1) Operation tests for systems and performance tests for control and safety devices are to be carried out. During the tests, the following **(a)** to **(k)** items are to be satisfied. (a) There is no sign of gas or effluent leakage. (b) Inert gas blowers properly operate. (c) Scrubber-room ventilation systems properly operate. (d) Where deck water seals are provided as non return devices, automatic filling and draining properly operate, In addition, means for protecting systems against freezing are provided. (e) Where double block and bleed valves are provided as non return devices, automatic operation upon loss of power is confirmed. (f) Where two shut-off valves in a series with a venting valve in between are provided as non-return devices, automatic operation of the venting valve is confirmed. In addition, activation of alarms for faulty valve operations is confirmed. (g) All remotely operated or automatically controlled valves and, in particular, flue gas isolating valves properly operate. (h) Interlocking features of soot blowers properly operate. (i) Gas pressure regulating valves operate automatically. (j) Means for separating cargo tanks not being inerted from inert gas mains are provided. (k) Alarms of two oxygen sensors positioned in spaces containing inert gas systems properly operate. (2) Performance tests of alarms under the following **(a)** to **(i)** conditions are to be carried out, as far as practicable. (a) High oxygen content of gas in inert gas mains (b) Low gas pressures in inert gas mains (c) Low water levels in water seals (d) High temperatures of gas in inert gas mains (e) Low water pressures or low water flow rates to cooling and scrubbing arrangements (f) High water levels in scrubbers (g) Failures of inert gas blowers (h) Failures of power supplies to generators (i) High pressures of gas in inert gas mains (3) Accuracy of portable and fixed oxygen-measuring equipment by means of calibration gas is to be confirmed. (4) For inert gas supply piping systems, airtight tests at least 1.25 *times* maximum system working pressure are to be carried out after installation on board. Where pressure/vacuum valves are provided for such systems, the pressures of airtight tests are to be not less than the setting pressures of pressure/vacuum valves but at least 0.024 *MP*. (5) It is to be confirmed through the use of inert gas or fresh air that the capacities of inert gas blowers are equal to or greater than 1.25 *times* the maximum design discharge capacity of the ship. Where fresh air is used in the tests, it is to be taken in from areas in proximity to flue gas isolating valves. However, such tests may be omitted for ships of the same design (including inert gas system design) as ships which have already been tested.

Table B2.9 Survey – Fire Protection, Means of Escape and Fire Fighting Equipment (Continued)

Survey Items	Details
22 Fixed hydrocarbon gas detection systems	(1) Performance tests are to be carried out.
23 Fire protection	(1) Fire protection (including ventilation systems) are properly installed.
24 Means of closing	(1) Performance tests for the shut-off valves provided for fuel oil tanks, fuel supply lines and lubrication tanks are to be carried out. (2) Performance tests for the fire dampers and means of closing for main inlets and outlets of ventilation systems installed in accommodation and service spaces, control stations, machinery spaces and cargo spaces are to be carried out. (3) Performance tests for emergency stop systems to pumps of combustible oil and ventilation systems are to be carried out.
25 Arrangements for gases and gas welding equipment for domestic purpose	(1) Relevant requirements in **4.3, Part R of the Rules** and **R4.3, Part R of the Guidance** are to be satisfied.
26 Lighting enclosures used in cargo pump rooms	(1) **4.5.2-5, Part R of the Rules** is to be satisfied.
27 Means of escape	(1) **Chapter 13, Part R of the Rules** is to be satisfied.

Table B2.10 Survey – Coating Application

Survey Items	Details
1 Technical data sheet*1 and statement of compliance or type approval certificate	(1) The technical data sheet and statement of compliance or type approval certificate comply with the *"PERFORMANCE STANDARD FOR PROTECTIVE COATINGS FOR DEDICATED SEAWATER BALLAST TANKS IN ALL TYPE OF SHIPS AND DOUBLE-SIDE SKIN SPACES OF BULK CARRIERS"* (*IMO* Performance Standard for Protective Coatings for Seawater Ballast Tanks, etc. / *IMO* resolution *MEPC*.215(82) as amended). The statement of compliance or type approval certificate is to be one of the following **(a)** to **(c)** items. (a) The Society's approval certificate specified in **Chapter 4, Part 4 of Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use** (b) Statement of compliance issued by the Research Institute of Marine Engineering, Japan (*RIME*), the Japan Paint Inspection and Testing Association or MARINTEK (c) Other documents approved by the Society (2) The technical data sheet and statement of compliance or type approval certificate comply with the *"PERFORMANCE STANDARD FOR PROTECTIVE COATINGS FOR CARGO OIL TANKS OF CRUDE OIL TANKERS"* (*IMO* Performance Standard for Protective Coatings for Cargo Oil Tanks / IMO resolution *MEPC*.288(87) as amended). The statement of compliance or type approval certificate is to be either of the following **(a)** or **(b)** items. (a) The Society's approval certificate specified in **Chapter 4, Part 4 of Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use** (b) Other documents approved by the Society
2 Coating identification	(1) The coating identification on representative containers is consistent with the coating identified in the technical data sheet and statement of compliance or type approval certificate specified in **item 1** above.
3 Inspector qualifications	(1) The inspector is qualified in accordance with one of the following **(a)** to **(c)** qualification standards. (a) NACE Coating Inspector Level 2 (b) FROSIO Inspector Level III (c) Equivalent qualifications approved by the Society
4 Inspector reports	(1) Inspector reports on surface preparation and coating application indicate compliance with manufacturer technical data sheets and the statements of compliance or type approval certificates specified in **item 1** above.
5 Monitoring	(1) Monitor coating inspections are implemented in accordance with **6**, *IMO* Resolution *MSC*.215(82) or **6**, *IMO* Resolution *MSC*.288(87).

Notes

*1 : "Technical data sheet" refers to the paint manufacturer product data sheets which contain detailed technical instructions and other information relevant to coatings and their application.

Table B2.11 Survey – Sea Trials *1

Test Items	Details
1 Speed tests	(1) Speed tests are to be carried out. For ships that are to perform speed tests under the full load condition, the ship speed defined in **2.1.8, Part A of the Rules** is to be confirmed. For ships that are unable to perform speed tests under the full load condition, the ship speed at maximum continuous revolutions of main engines is to be confirmed. This speed is hereinafter referred to as the "maximum speed of the ship". (2) Speed tests at the main engine outputs specified in **Table B2.12** "Survey – Sea Trials of Reciprocating Internal Combustion Engines", **Part B of the Rules** (not including 110 % and minimum revolutions) are to also be carried out.
2 Astern tests	(1) Astern tests are to be carried out in accordance with the following **(a)** and **(b)**, and the items related to stopping ability specified in **An1.4.3, Annex 2.3.1-1** "Guidance for the Test of Ship Maneuverability", **Part B of the Rules** are to be measured. When applying this requirement, tests are to be carried out from all control positions where there are multiple control positions for reversing operations to astern runs. (a) While the ship is running ahead at maximum speed, an order for full astern is issued and the reversing operation from ahead run to full astern run is carried out as quickly as possible. (b) Ships unable to perform the test at maximum speed are to run ahead at not less than the speed specified in **An1.1.1-9, Annex 2.3.1-1** "Guidance for the Test of Ship Maneuverability", **Part B of the Rules**. While the ship is at this speed, an order for full astern is issued and the reversing operation from ahead run to full astern run is carried out as quickly as possible. (2) Engines are to be functioning normally while the ship is running astern. Main engines are to be maintain rates of more than 70 % of maximum continuous revolutions, and ships are to keep running astern for the periods specified in the following **(a)** and **(b)** corresponding to engine type. In addition, performance is to satisfy **1.3.2, Part D of the Rules**. (a) For ships with main engines other than steam turbines: Until the astern speed (rotational speed in rpm) stabilises. (b) For ships with steam turbines: A period of at least 15 *minutes*; the astern trial, however, is to be limited to 30 *minutes* or in accordance with manufacturer recommendations to avoid overheating the turbine due to the effects of "windage" and friction. (3) For low pressure (i.e. pressures less than 1 *MPa*) gas-fueled dual fuel engines, the confirmation specified in **(2)(a)** above is to be carried out for all operating modes (i.e. the applicable gas mode, diesel mode, etc.). These tests are to be carried out at the maximum power available in gas mode (**1.4-3, Annex 4, Part GF** or **1.4-3, Annex 4, Part N of the Rules**). (4) For high pressure gas-fueled dual fuel engines, the requirements for low pressure gas-fueled dual fuel engines specified in **(3)** above apply mutatis mutandis.

Table B2.11 Survey – Sea Trials *1

Test Items	Details
3 Turning tests	(1) Turning tests are to be carried out in accordance with the following **(a)** and **(b)**. The turning ability specified in **An1.4.2, Annex 2.3.1-1** "Guidance for the Test of Ship Maneuverability ", **Part B of the Rules** is to be measured and ship stability during turning is to be confirmed. (a) Ships are to be steered to the left or right at maximum rudder angle (normally 35 *degrees*; however, where a special rudder is provided, a different rudder angle considered appropriate by the Society made be maintained instead) while running ahead at maximum speed, and this rudder angle is to be maintained until the ship makes a 360-*degree* turn. (b) Notwithstanding **(1)** above, ships unable to perform the test at maximum speed are to run ahead at not less than the speed specified in **An1.1.1-9, Annex 2.3.1-1** "Guidance for the Test of Ship Maneuverability", **Part B of the Rules**. While at this speed, ship are to be steered to the left or right at maximum rudder angle (normally 35 *degrees*; however, where a special rudder is provided, a different rudder angle considered appropriate by the Society may be maintained instead), and this rudder angle is to be maintained until the ship makes a 360-*degree* turn. (2) The turning tests of an individual ship may be dispensed with, provided that sufficient data is available from the turning test of a sister ship and subject to special approval by the Society.

Table B2.11 Survey – Sea Trials *1 (Continued)

Test Items	Details
4 Steering tests	
-2. 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.

Table B2.11 Survey – Sea Trials *1 (Continued)

Test Items	Details
4 Steering tests	
-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 are to be carried out.
-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.

Table B2.11 Survey – Sea Trials *1 (Continued)

Test Items	Details
5 Performance tests of machinery installations	(1) The performance tests of machinery installations are to include the following **(a)** to **(k)** in order to verify that the machinery installations have sufficient normal functions and reliability and are free from detrimental vibration within the numbers of revolutions used. The details of these tests may be found in *JIS F* 0801 "Test Code of Propelling Machinery at Sea Trials" or other documents considered equivalent thereto*3. (a) For reciprocating internal combustion engines, the output tests specified in **Table B2.12**, "Survey – Sea Trials of Reciprocating Internal Combustion Engines", **Part B of the Rules**, are to be used as the standard. For reciprocating internal combustion engines driving generators or auxiliary machinery (excluding auxiliary machinery for specific uses), operation tests may be carried out at an appropriate time after installation on board. (b) For steam turbines and gas turbines used as main propulsion machinery, output tests are to be carried out at 3 or 4 levels of power output selected from normal continuous cruise power run and 4/4, 3/4, 2/4 and 1/4 of the maximum continuous output of the engine. (c) Operating tests for starting devices are to be carried out. It is to be confirmed that the engines start continuously for the number of times required by **2.5.3-2** or **4.4.3-2, Part D of the Rules** during tests. (d) Function tests of the alarms and safety devices required by **2.4**, **3.3** and **4.3, Part D of the Rules** are to be carried out. (e) The suitability of residual and other special fuels for use in engines is to be confirmed. However, such tests may be dispensed with where the suitability has already been demonstrated at shop trials. (f) For reciprocating internal combustion engines driving main sources of electrical power (including reciprocating internal combustion engines driving generators for both propulsion and main power supply), the characteristics for governors specified in **2.4.1-5(1), Part D of the Rules** are to be confirmed. (g) Function tests of the safety devices and alarms of boilers are to be carried out. (h) Function tests of the safety devices and alarms of exhaust gas economisers are to be carried out. (i) Low pressure (i.e. pressures less than 1 *MPa*) gas-fuelled engines are to comply with **(a)** and **(f)** above. For low pressure gas-fuelled dual-fuel engines, output tests and governor tests are to be carried out for all operating modes (i.e. the gas mode, diesel mode, etc.). These tests are to be carried out at the maximum power available in the gas mode (**1.4-3, Annex 4, Part GF** or **1.4-3, Annex 4, Part N of the Rules**). The 110 % load tests are not required for the gas mode. (j) For high pressure gas-fuelled engines, the items for low pressure gas-fuelled engines specified in **(i)** above apply mutatis mutandis. (k) Confirmation tests that crankshaft hot deflection values are within engine manufacturer recommended ranges (confirmation of measuring records is acceptable instead).

Table B2.11 Survey – Sea Trials *1 (Continued)

Test Items	Details
6 Windlass performance tests	(1) The following **(a)** to **(h)** operations tests are to be carried out under working conditions for each windlass to demonstrate satisfactory operation and confirm windlass construction and associated equipment are in good condition. (a) Braking (b) Clutch functioning (c) Lowering and hoisting of the chain cable and the anchor (d) Proper riding of the chain cable over the cable lifter (e) Proper transit of the chain cable through the hawse pipe and the chain pipe (f) Effecting proper stowage of the chain cable and the anchor (g) Proper seating of the anchors in the stored position (h) Proper function of the chain cable stoppers if fitted (2) Initially with 3 *shots* of chain cable (82.5 *m* or 45 *fathoms* in length) and the anchor submerged and hanging free, load tests are to be carried out in accordance with the manner specified in the following **(a)** to **(c)**. For **(a)** and **(b)**, it is to be measured and confirmed that the mean hoisting speed is not less than 0.15 *m/s*. Where it is difficult to have 3 *shots* of chain cable kept submerged due to ship location, an alternative test approved by the Society may carried out instead. (a) Hoisting up 2 *shots* of chain cable on one side (b) Hoisting up 2 *shots* of chain cable on the other side of **(a)** above (c) Hoisting up 1 *shot* of chain cable together on both sides (3) Cable lifter brake capacity tests are to be carried out. Braking capacity is to be tested by intermittently paying out and holding the chain cable by means of the application of the brake at every 1/2 *shot* of chain cable.
7 Boiler accumulation tests	(1) Accumulation tests are to be carried out in accordance with the following **(a)** and **(b)** while the boilers are under maximum firing conditions. However, where data on boiler evaporation submitted to the Society has been approved, the accumulation test specified in **(a)** may be dispensed with. (a) When safety valves of boilers blow with all stop valves closed, except for valves for steam supplies to machinery necessary to operate boilers, the accumulation of pressure in boiler drums is not to exceed 110 % of approved working pressure. However, feed water necessary to maintain safe water levels may be supplied. (b) For boilers with superheaters, where accumulation tests might overheat the superheaters, the operation tests specified in **9.9.3-8, Part D of the Rules** may be carried out as an alternative after shutting off main steam supplies. In such cases, the lift of each safety valve is to be checked beforehand. (2) For boilers which are capable of refiring while using exhaust gas economisers, accumulation tests are, in principle, to be carried out in accordance with the methods specified in **(1)** above, under maximum firing conditions and at main engine maximum continuous outputs. (3) For exhaust gas economisers, accumulation tests are, in principle, to be carried out in accordance with the methods specified in **(1)** above under maximum firing conditions and at main engine maximum continuous outputs.

Table B2.11 Survey – Sea Trials *1 (Continued)

Test Items	Details
8 Measurements of torsional vibration for the shafting systems	(1) Measurements are to be carried out in accordance with **8.1.3, Part D of the Rules**. In cases where the confirmation of engine running conditions specified in **8.1.3-2, Part D of the Rules** is performed at the estimated upper and lower borders by calculation, it is recommended that the fuel index around the estimated borders also be confirmed with consideration given to differences between estimated borders and actual borders confirmed through measurements. (2) For low pressure (i.e. pressures less than 1 *MPa*) gas-fuelled dual fuel engines, the measurements specified in **(1)** above are to be carried out for both diesel and gas modes. However, measurements in either the diesel mode or gas mode (but not both modes) may be omitted where considered appropriate by the Society based upon relevant torsional vibration calculation sheets for the diesel and gas modes. (3) For high pressure gas-fuelled dual fuel engines, the items for low pressure gas-fuelled dual fuel engines specified in **(2)** above apply mutatis mutandis.
9 Measurements of the sound pressure levels of fixed fire detection and fire alarm systems	(1) The sound levels specified in **29.2.5-1(9), Part R of the Rules** are to be measured using suitable instruments.
10 Noise measurements	(1) Noise measurements are to be in accordance with **Annex 2.3.1-2 "Procedures for on board Noise Measurements", Part B of the Rules.**
11 Verification of Total Harmonic Distortion (THD) calculation reports and harmonic filter operation guides	(1) Total Harmonic Distortion (THD) values of main busbars are to be measured to confirm that said values do not exceed the acceptable limits given in reports.

Table B2.11 Survey – Sea Trials *1 (Continued)

Test Items	Details
12 Performance tests for automatic and remote control systems for main propulsion machinery, controllable pitch propellers, boilers and electric generating sets *4	(1) For the control systems of main propulsion machinery and controllable pitch propellers, the tests specified in the following **(a)** to **(d)** are to be carried out. (a) Main propulsion machinery or controllable pitch propellers are to be subjected to starting tests, ahead-astern tests and running tests in the whole range of output, by means of remote control devices in main control stations or the main control stations on the bridge. (b) In addition to output increase and decrease tests, operation tests of main propulsion machinery or the controllable pitch propellers using the bridge control devices are to be carried out. Where operation tests were carried out for the entire output range by the bridge control devices, consideration may be given to reduction of the test items with the exception of the starting tests specified in **(a)** above. (c) Where there are two or more control stations for main propulsion machinery or controllable pitch propellers, tests on transfer of control are to be carried out while the ship is running ahead and while it is running astern. Where the remote devices for main propulsion machinery or controllable pitch propellers are in accordance with **18.3.2-2(3)(b), Part D of the Rules**, the above tests may be carried out while the main propulsion machinery is stopped. (d) After completion of the tests specified in **(c)** above, demonstrations that main propulsion machinery or controllable pitch propellers can be smoothly operated from the respective control stations are to be carried out. (2) Function tests of boiler control systems are to be carried out in accordance with the following **(a)** to **(c)**. (a) Devices for feed water control, combustion, etc. are to operate stably in response to the load variations of main boilers, and the main boilers can supply steam stably to main propulsion machinery, electric generating sets and auxiliary machinery essential for main propulsion of the ship without local manual operation. (b) Essential auxiliary boilers are to supply steam stably to auxiliary machinery essential for main propulsion of the ship without manual operation. (c) Where exhaust gas economisers are used as sources of steam for driving generators and boilers supply extra steam automatically during power loss, operation tests of the automatic control devices for such systems are to be carried out. (3) Where generators supply electrical power to the loads necessary for ship propulsion and their motive power relies upon propulsion systems, tests of the functioning of the automatic or remote control systems for electric generating sets are to be carried out. (4) For the electric generating sets specified in **3.2.1-3, Part H of the Rules**, the following **(a)** to **(c)** items are to be satisfied while main propulsion machinery is operating at normal continuous cruise output. However, in cases where main propulsion machinery is operating at outputs other than normal continuous cruising output, such tests may be carried out while main propulsion machinery is operating at said output on the condition that all active peripheral equipment is operating at outputs that are the same as the normal continuous cruising output of the main propulsion machinery. (a) Where only one electric generating set is normally used, standby generators, air circuit breakers, and important auxiliary machinery start up automatically when the main source of electrical power is stopped by tripping a circuit breaker. (b) Where two electric generating sets are normally used, preference tripping of unnecessary loads is performed and propulsion and steering of the ship are maintained, when the circuit breaker of one of the sets is tripped. (c) Emergency sources of electrical power are automatically started and connected upon the failure of any main sources of electrical power. (5) The "electric generating sets specified in **3.2.1-3, Part H of the Rules**" specified in **(4)** above refers to the application of **6.2.11-1** to **-3, Part H of the Rules** for the ships specified in **6.1.1, Part H of the Rules**.

Table B2.11 Survey – Sea Trials *1 (Continued)

Test Items	Details
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 B.2.12, 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.

Notes

*1: These tests may be dispensed with where such tests have been conducted while the ships are anchored or at dockside.

*2: In applying the requirements, the items specified in **(1)** or **(2)** are to be applied. Alternatively, designers or builders may use computational fluid dynamic (CFD) studies or experimental investigations to predict the rudder stock moment (torque in the rudder stock) under the full load condition and at the service speed.

(1) The rudder torque in the full load condition and at the speed of ship defined in **2.1.8, Part A of the Rules** is to be predicted using the following extrapolation formula. There is, however, no need for extrapolation where A_T is greater than $0.95A_F$.

Q_F: the rudder stock moment (torque in the rudder stock) for the full load condition and the speed of ship defined in **2.1.8, Part A of the Rules**

Q_T: the rudder stock moment (torque in the rudder stock) for the trial condition

α : the extrapolation factor in accordance with the following formula:

$$\alpha = 1.25\left(\frac{A_F}{A_T}\right)\left(\frac{V_F}{V_T}\right)^2$$

A_F: the total immersed projected area of the movable part of the rudder in the full load condition

A_T: the total immersed projected area of the movable part of the rudder in the trial condition

V_F: the contractual design speed of the vessel corresponding to the maximum continuous revolutions of the main engine in the full load condition

V_T: the measured speed of the vessel (considering current) in the trial condition

(2) Where rudder actuator system pressure is shown to have a linear relationship to rudder stock torque, **(1)** above can be taken in accordance with the following formula. Where constant volume fixed displacement pumps are utilised, **15.2.2(1)** or **15.2.3(1), Part D of the Rules** can be deemed satisfied if the estimated steering actuator hydraulic pressure in the full load condition is less than the specified maximum working pressure of the rudder actuator. Where a variable delivery pump is utilised, pump data are to be supplied and interpreted to estimate the delivered flow rate corresponds to the full load condition in order to calculate the steering time and allow it to be compared to the required time.

$P_F = P_T\alpha$

P_F: the estimated steering actuator hydraulic pressure in the full load condition

P_T: the maximum measured actuator hydraulic pressure in the trial condition

*3: The following preparations are to be made before carrying out tests.

(1) All relevant equipment for the safety of attending personnel such as oil mist detection arrangements, overspeed protective devices

and any other shut down functions are to be made available and are to be operational.

(2) The overspeed protective device is to be set to a value which is not higher than the allowable overspeed value. This set point is to be confirmed by surveyors.

(3) The engines are to be run as prescribed by the engine manufacturer.

(4) All fluids used for testing purposes (fuel oils, lubrication oils, cooling water, etc., including all fluids used temporarily or repeatedly for testing purposes only) are to be suitable for their intended purposes (i.e., they are to be clean, preheated if necessary and cause no harm to engine parts).

*4: Where these tests have been carried out when the ship was anchored or at dockside, some of these tests may be dispensed with at sea trials.

Table B2.12 Survey – Sea Trials of Reciprocating Internal Combustion Engines

Test items		Use of engines		
		Main engines of ships in which reciprocating internal combustion engines are used as main propulsion machinery (excluding electric propulsion ships) (1)	Reciprocating internal combustion engines driving generators (including main engines of electric propulsion ships) (2)	Reciprocating internal combustion engines driving auxiliaries (excluding auxiliary machinery for specific use etc.)
Load test	110% power run	—	10 *minutes* at n_0 (n_0 is the rated engine speed.) (3)	—
	100% power (rated power) run	4 *hours* at engine speed in accordance with propeller curve (4) (5) (6)	1 *hour* at n_0 (3)	30 *minutes* at n_0
Overspeed run		30 *minutes* at $1.032n_0$ or more (7) (8)	—	—
Minimum revolution test of main engine (9)		○(7)	—	—
Intermittent overload (10)		○		○

Notes:

(1) After testing has been completed, the fuel delivery system is to be blocked so as to limit the engines to run at not more than 100% power, excluding propulsion engines for which intermittent overload is approved as well as propulsion engines also driving generators.

(2) The tests are to be performed based on the rated electrical powers of the driven generators.

(3) This may, if possible, be done during the electrical propulsion plant test, which is tested at 100% propulsion power (i.e., total electric motor capacity for propulsion) by distributing the power on as few generators as possible. The duration of this test is to be sufficient to reach the stable operating temperatures of all rotating machines or for at least 4 hours. When some of the generator set(s) cannot be tested due to insufficient time during the propulsion system test mentioned above, those required tests are to be carried out separately.

(4) In the case of controllable pitch propellers, the test is to be performed at rated engine speed n_0 at a propeller pitch leading to 100% power, or to the maximum achievable power if 100% power cannot be reached.

(5) In the case of propulsion engines also driving generators, tests are to be also carried out for 2 hours at 100% propeller branch power (unless already covered in the test at 100% power) and 1 hour with 100% power take off branch power at rated engine speed n_0 in addition to the test for 4 hours at 100% power.

(6) For ships in which the tests specified in **2.2.5-2(1) Rules for Automatic and Remote Control Systems** are performed for not less than 4 hours at 100% power, the 100% power test specified in this table may be omitted.

(7) Only for engines driving fixed pitch propellers.

(8) The test may be omitted if a 100% power test is performed at $1.032n_0$ or more. In cases where engine speed cannot reach the specified speed due to the planned propeller curve, etc., an overspeed test may be performed at maximum achievable continuous revolution (i.e., maximum engine speed within the range of torque limit, etc.).

(9) The test is to be carried out to identify the minimum working revolution of the main engine when the ship is steered to the maximum rudder angle.

(10) Only for engines for which intermittent overload is approved. The test is to be performed for the duration agreed upon with the manufacturer.

Table B2.13 Necessity for Re-inclidng Tests and Amending Stability Information

Result of lightweight calculation	Need for inclining test	Need for an amendment to stability information
Lightweight change > 2 %	Yes	Yes, using new inclining test result
LCG change > 1 % of ship length for freeboard (L_f), either forward or aft (For ships other than those of 500 gross tonnage and above engaged on international voyages, 1 % of length of ship (L) can be applied.)	Yes	Yes, using new inclining test result
VCG change > 1 %	Yes	Yes, using new inclining test result
1 % < Lightweight change ≤ 2 %	No	Yes, using the calculated lightweight
0.5 % of ship length for freeboard (L_f) < *LCG* change ≤ 1 % of ship length for freeboard (L_f), either forward or aft (For ships other than those of 500 gross tonnage and above engaged on international voyages, 0.5 % of length of ship (L) can be applied.)	No	Yes, using the calculated lightweight
0.5 % < *VCG* change ≤ 1 %	No	Yes, using the calculated lightweight
Lightweight change ≤ 1 %	No	No
LCG change ≤ 0.5 % of ship length for freeboard (L_f), either forward or aft (For ships other than those of 500 gross tonnage and above engaged on international voyages, 0.5 % of length of ship (L) can be applied.)	No	No
VCG change ≤ 0.5 %	No	No

(Notes)

(1) Longitudinal centre of gravity is abbreviated as "*LCG*" and vertical centre of gravity is abbreviated as "*VCG*".

(2) When multiple alterations are made to a ship in service over a period of time and each alternation is within the deviation limits specified in the table above, the cumulative total changes to the principal data from the most recent inclining test or lightweight calculation are to be used.

(3) Both upward and downward changes to the vertical centre of gravity are to be considered.

(4) When the differences in the original values for draught, still water bending moment and shear force and the values calculated after conversion exceed 2 %, the stability information are to be amended using the altered principal data of the ship and then be approved by the Society.

(5) Lightship properties are to be consistent in all documents which use them (e.g. loading manual, stability manual, computer data).

(6) A change in lightweight will result in a change in deadweight unless there is an associated change in freeboard. The consequences of the change could have an impact on compliance with other regulations (e.g. MARPOL Annex VI).

(7) "Stability information" in this table means any document (whether on paper or electronic) or electronic means of calculation of stability which includes lightship properties. This may include, but is not limited to, approved stability books, computer software for onboard calculations of stability, approved strength books and loading instruments.