RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

RULES

Part B Class Surveys

2012 AMENDMENT NO.2

Rule No.53 15th November 2012

Resolved by Technical Committee on 27th July 2012

Approved by Board of Directors on 25th September 2012

Rule No.53 15th November 2012
AMENDMENT TO THE RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

"Rules for the survey and construction of steel ships" has been partly amended as follows:

Part B CLASS SURVEYS

Amendment 2-1

Chapter 2 CLASSIFICATION SURVEYS

2.1 Classification Survey During Construction

2.1.4 Presence of Surveyor

Sub-paragraph -1 has been amended as follows.

1 The presence of the Surveyor is required at the following stages of the work in relation to hull and equipment:

(1) When the tests for the materials prescribed in **Part K** and the equipment prescribed in **Part L** are carried out.
(2) When the materials or parts manufactured away from the site are being applied to the ship concerned.
(3) When the tests of welding prescribed in **Part M** are carried out.
(4) When designated by the Society during shop work or sub-assembly.
(5) When each block is assembled.
(6) When hydrostatic tests, watertight tests and non-destructive tests are carried out.
(7) When the hull is completed.
(8) When performance tests are carried out on closing appliances of openings, remote control devices, steering gears, anchoring and mooring equipment, emergency towing arrangements, means of embarkation and disembarkation (specified in **23.8, Part C** or **21.8, Part CS**), fire fighting systems, piping, water level detection and alarm systems (specified in **13.8.5** and **13.8.6, Part D**), dewatering arrangements (specified in **13.5.10, Part D**), etc.
(9) When rudder installation, keel line profiling, measurement of principal dimensions, measurement of hull deflection, etc. are carried out.

(The rest is omitted)

2.4 Loading Tests

Title of paragraph 2.4.1 has been amended as follows.

2.4.1 Ships Carrying Liquefied Gases in Bulk ~~and Ships Carrying Dangerous Chemicals in Bulk~~

Chapter 3 ANNUAL SURVEYS

3.2 Annual Surveys for Hull, Equipment, Fire Extinction and Fittings

3.2.2 General Examination

Table B3.2(1) has been amended as follows.

Table B3.2(1) General Examination

Items	Examination
1 to 6	(Omitted)
7 Watertight bulkhead ~~and~~ , superstructure end bulkhead and deckhouses	・ Confirmation that watertight doors, penetrations and stop valves on watertight bulkheads, and closing appliances of openings in superstructure end bulkheads, deckhouses or companions protecting hatchways giving access to spaces below freeboard deck are in good condition.
8 to 23	(Omitted)

3.2.3 Performance Test

Table B3.3 has been amended as follows.

Table B3.3 Performance Tests

Items	Tests
1 Weathertight hatch covers	(Omitted)
2 Closing appliances of watertight door on watertight bulkheads and openings on superstructure end bulkheads, deckhouses or companions protecting hatchways giving access to spaces below freeboard deck	・ Checking whether the appliances work in good order is to be made as deemed necessary by the Surveyor. ・ Hose tests listed in **Table B2.1** or equivalent tests are to be carried out. Such tests may be dispensed with at the discretion of the Surveyor.
3 to 11	(Omitted)

3.4 Special Requirements for Ships Carrying Liquefied Gases in Bulk

3.4.2 Examinations

Table B3.9(2) has been amended as follows.

Table B3.9(2) Special Requirements for Ships Carrying Liquefied Gases in Bulk

Items	Examinations
8 Miscellaneous	The general condition of the equipment shown in (a) through (j) is to be examined. The contents of items (k) and (l) are to be checked and confirmation that they are kept on board is to be made. (a) Facilities associated with damage stability requirements such as cross flooding equipment and watertight doors, as far as accessible. Where it is difficult to carry out a general examination of cross flooding equipment, alternative examinations considered appropriate by the Society may be carried out instead. (b) Closing devices of windows, doors and other openings of the wheelhouse, superstructures, and deckhouses that are required to be gas/vapour-tight; and the arrangements for the air locks. (c) Venting systems including their spare fans or impellers for enclosed spaces and compartments in cargo area. (d) Fixed or portable trays or insulation that protects the deck located beneath the cargo hose connection against cargo leakage. (e) Gas-tight bulkhead penetrations including gas-tight shaft sealings, as far as accessible. (f) Heating arrangements of structural hull steel, as far as accessible. (g) Type approved cargo hoses. (h) Earthing between hull structures and cargo pipes as far as accessible. (i) Bow and stern loading and unloading arrangements and their related installations, emergency muster station and other equipment required for special cargoes. (j) Electrical installations in gas dangerous spaces or zones. (k) Cargo log book, operational records and manuals related to cargo containment system and cargo handling system. (l) The *IMO Code* for gas carriers or the Rules incorporating the provisions of this *Code*

3.5 Special Requirements for Ships Carrying Dangerous Chemicals in Bulk

3.5.2 Examinations

Table B3.10 has been amended as follows.

Table B3.10 Special Requirements for Ships Carrying Dangerous Chemicals in bulk

Items	Examinations
1 to 6	(Omitted)
7 Miscellaneous	The general condition of the equipment shown in (a) through (j) is to be examined. The contents of items (k) and (l) are to be checked and confirmation that they are kept on board is to be made. (a) Facilities associated with damage stability requirements such as cross flooding equipment and watertight doors, as far as accessible. Where it is difficult to carry out a general examination of cross flooding equipment, alternative examinations considered appropriate by the Society may be carried out instead. (b) Cargo sample storage arrangements (c) Bow and stern loading/unloading arrangements and their related installations. (d) Fixed or portable trays or insulation that protects the deck located beneath the cargo hose connection against cargo leakage. (e) Identification marks of pipe lines including pumps and valves (f) Cargo tank ventilating system and means for draining its pipes (g) Type approved cargo hoses (h) Special arrangements in accordance with the special requirements for certain cargoes (i) Heating and cooling arrangement for cargoes (j) Electrical installations in gas dangerous spaces or zones. (k) Cargo log book, operational records and manuals related to cargo containment system and cargo handling system. (l) The *IMO Code* for chemical carriers or the Rules incorporating the provisions of this *Code*

Chapter 4 INTERMEDIATE SURVEYS

4.2 Intermediate Surveys for Hull, Equipment, Fire extinction and Fittings

4.2.3 Performance Test

Table B4.1 has been amended as follows.

Table B4.1 Performance Test

Items	Tests
1 Equipment or installations of items in **Table B3.3** (except item 2)	・ Tests for each item specified in **Table B3.3** are to be carried out.
2 Doors on watertight bulkheads and closing appliances on superstructure end bulkheads, deckhouses or companions protecting hatchways giving access to spaces below freeboard deck	・ Confirmation that the doors and closing appliances work in order is to be made. ・ Hose tests listed in **Table B2.1** or equivalent tests are to be carried out. Such tests may be dispensed with at the discretion of the Surveyor.
3 to 10	(Omitted)
11 Fixed Local Application Fire-fighting Systems	・ Confirmation that the piping is to be made by delivering air through pipes. ・ Confirmation that the system alarm works in order is to be made. ・ Confirmation that the feed water pump and starting valve works in order is to be made.
~~11~~12 Closing appliances of openings related to fire fighting in way of cargo holds	・ Confirmation that closing appliances work in order is to be made.
Additional Requirements for Bulk Carriers	
~~12~~13 Mechanically operated hatch covers	・ Confirmation that hatch cover sets within the forward 0.25L_f and at least one additional set work in good order is to be carried out. The method is to be in a way that ensures all sets on the ship are checked at least once every 5 *years* between special surveys. ・ Confirmation that all hatch covers work in good order is to be carried out for ships over 10 years of age.
~~13~~14 Weathertight hatch covers	・ Hose tests listed in **Table B2.1** or equivalent, for all hatch covers for ships over 10 *years* of age.
~~14~~15 Water level detection and alarm systems	・ Confirmation that the systems work in order is to be made for ships over 10 *years* of age.

Chapter 5 SPECIAL SURVEYS

5.2 Special Surveys for Hull, Equipment, Fire Extinction and Fittings

5.2.3 Performance Test

Sub-paragraph -2 has been amended as follows.

2 In addition to **-1** above, the performance tests and operation tests specified in **(1)** to **(9)** below are to be carried out.

(1) Operation test for all mechanically operated hatch covers, including the testing of all hydraulic and power components, wires, chains and link drives

(2) Hose tests listed in **Table 2.1** or equivalent, for all weathertight hatch covers

(3) Performance tests and operation tests for all bilge and ballast piping system

(4) Hose tests or equivalent, for all bow doors, inner doors, side shell doors and stern doors

(5) The hose tests listed in **Table 2.1** or equivalent tests, for the doors of watertight bulkheads and the closing appliances of superstructure end bulkheads, deckhouses or companions protecting hatchways giving access to spaces below freeboard deck

(~~5~~6) For oil tankers and ships carrying dangerous chemical in bulk, performance tests and operation tests of cargo and ballast piping systems within all cargo tanks, all ballast tanks and all tanks and spaces bounding cargo tanks such as pump rooms, pipe tunnels, cofferdams and void spaces, and on the weather deck

(~~6~~7) For ships carrying liquefied gases in bulk, performance test and operation test of cargo and ballast piping systems within all cargo tanks, all ballast tanks and all tanks and spaces bounding cargo tanks such as pump rooms, cargo compressor rooms, pipe tunnels, cofferdams and void spaces, and on weather deck

(~~7~~8) For bulk carriers and general dry cargo ships of 500 *gross tonnage*, performance test and operation test of all piping systems within cargo holds, all ballast tanks and all tanks and spaces bounding cargo holds such as pipe tunnels, cofferdams, void spaces, and other similar spaces bounding cargo holds, and those on weather decks

(~~8~~9) Performance tests listed in item 1 of **Table B4.1,** for all water level detection and alarm systems.

(~~9~~10) Performance test for the means of embarkation and disembarkation, for ships not less than 500 *gross tonnage* which are engaged on international voyages.

5.2.5 Close-up Surveys

Table B5.6-1(2) has been amended as follows.

Table B5.6-1(2) Requirements of Close-up Surveys for Bulk Carriers(excluding Ore Carriers)

Special Survey	Structural members subject to Close-up Survey
Requirements for Double Skin Bulk Carriers (excluding Ore Carriers)	
Special Survey for ships up to 5 *years* of age (Special Survey No.1)	1. Two selected cargo hold transverse bulkheads and lower part of remaining transverse bulkheads (including stiffeners and girders) (C) 2. One transverse web with associated plating and longitudinals in two representative ballast tanks of each type (this is to include the foremost topside and double side ballast tanks on either side) (B) 3. Air pipes and sounding pipes in cargo holds in way of tank top
Special Survey for ships over 5 *years* and up to 10 *years* of age (Special Survey No.2)	1. One transverse bulkhead in each cargo hold and lower part of remaining transverse bulkheads (including stiffeners and girders) (C) 2. About half of transverse webs with associated plating and longitudinals in a representative ballast tank of each type (topside, bilge hopper or side tank) (B) 3. One transverse web with associated plating and longitudinals in each of the remaining ballast tanks (B) 4. Both forward and aft transverse bulkheads (including stiffeners and girders) in a transverse section including topside, bilge hopper and double side ballast tanks on one side of the ship (B) 5. A sufficient number (at least 1/4 of total number) of stiffeners on side shell and longitudinal bulkhead at forward, middle, and aft parts on both sides of the foremost double side tanks (A) 6. All deck plating and under deck structure inside the line of hatch openings between cargo hold hatches 7. All piping arrangements in cargo holds. If the surveyor considers it necessary, airtight tests are to be carried out.
Special Survey for ships over 10 *years* and up to 15 *years* of age (Special Survey No.3)	1. All transverse bulkheads (including stiffeners and girders) in all cargo holds (C) 2. All transverse webs with associated plating and longitudinals and all transverse bulkheads (including stiffeners and girders) in each ballast tank (B) 3. A sufficient number (at least 1/4 of total number) of stiffeners on side shell and longitudinal bulkhead at forward, middle, and aft parts on both sides of all double side tanks (A) 4. Structural members specified in 6. and 7. of Special Survey No.2 above
Special Survey for ships over 15 *years* of age (Special Survey No.4 and subsequent Special Surveys)	1. All stiffeners on side shell and longitudinal bulkhead in all double side tanks (A) 2. Structural members specified in 1., 2. and 4. of Special Survey No.3 above

Notes:

(Omitted)

5.2.7 Pressure Tests

Table B5.23-1 has been amended as follows.

Table B5.23-1 Requirements of Pressure Tests for Oil Tankers and Ships Carrying Dangerous Chemicals in Bulk

Special Survey	Tanks subject to pressure tests
Special Survey for ships up to 5 *years* of age (Special Survey No.1)	1. Cargo tank boundaries facing ballast tanks, void spaces, pipe tunnels, fuel oil tanks, pump rooms and cofferdams 2. All water tanks Pressure tests of fresh water tanks may be specially considered when deemed appropriate by the Society. 3. All fuel oil tanks Pressure tests may be specially considered when deemed appropriate by the Society. 4. All lubrication oil tanks Pressure tests may be specially considered when deemed appropriate by the Society.
Special Survey for ships over 5 *years* and up to 10 *years* of age (Special Survey No.2)	1. All cargo tank bulkheads 2. For ~~fresh~~ water tanks, fuel oil tanks and lubrication oil tanks, as Special Survey No.1
Special Survey for ships over 10 *years* of age (Special Survey No.3 and subsequent Special Surveys)	1. All cargo tank bulkheads 2. For water tanks, fuel oil tanks and lubrication oil tanks, as Special Survey No.1 3. For ships carrying dangerous chemicals in bulk, selected steel cargo pipes outside cargo tanks and ballast pipes passing through cargo tanks

Table B5.24 has been amended as follows.

Table B5.24 Requirements of Pressure Tests of Bulk Carriers and Dry Cargo Ships of not less than 500 *gross tonnage*

Special Survey	Tanks subject to pressure tests
All Special Surveys	1. All boundaries of ballast tanks, deep tanks and cargo holds used for ballast within the cargo length area 2. Representative fresh water tanks, fuel oil tanks and lubrication oil tanks within the cargo length area. When deemed appropriate by the Society, pressure tests of fuel oil tanks may be specially considered. 3. All water tanks Pressure tests of fresh water tanks outside the cargo length area may be specially considered when deemed appropriate by the Society. 4. All fuel oil tanks outside the cargo length area Pressure tests may be specially considered when deemed appropriate by the Society. 5. All lubrication oil tanks outside the cargo length area Pressure tests may be specially considered when deemed appropriate by the Society.

EFFECTIVE DATE AND APPLICATION (Amendment 2-1)

1. The effective date of the amendments is 15 November 2012.

2. Notwithstanding the amendments to the Rules, the current requirements may apply to the surveys for which the application is submitted to the Society before the effective date.

Amendment 2-2

Chapter 12 SURVEYS FOR MOBILE OFFSHORE DRILLING UNITS AND SPECIAL PURPOSE BARGES

12.2 Classification Survey during Construction

12.2.2 Submission of Plans and Documents

Sub-paragraph -1 has been amended as follows.

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.

(1) Hull

((a) to (o) are omitted.)

(p) For mobile offshore drilling units, the following plans and documents:

i) Arrangement of drilling derricks, details of drilling derrick constructions and relevant documents

ii) Arrangement of equipment installed on drill floors

iii) Details of drill floors and substructure constructions

iv) Plans and documents indicating and specifying arrangements, specifications (including type, capacity, etc.), and the number, etc. of the breathing devices specified in **15.2.12, Part P**

(q) (omitted)

(2) (omitted)

Sub-paragraph -2 has been amended as follows.

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**.

((1) to (16) are omitted.)

(17) Operating manual specified in **18~~7~~.1, Part P**

((18) to (22) are omitted.)

Paragraph 12.2.5 has been amended as follows.

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.

((1) and (2) are omitted.)

(3) Operating manual specified in **18~~7~~.1, Part P**

((4) to (7) are omitted.)

12.3 Annual Surveys

12.3.2 Annual Surveys for Hull, Equipment, Fire Extinguishing Systems, and Fittings

Sub-paragraph -1 has been amended as follows.

1 It is to be verified that the following documents and booklets are kept on board and readily available.
((1) and (2) are omitted.)
(3) Operating manual specified in **18~~7~~.1, Part P**
((4) and (5) are omitted.)

Sub-paragraph -6 has been added as follows.

6 For mobile offshore drilling units, a general examination of the breathing devices specified in **15.2.12, Part P** is to be carried out.

12.4 Intermediate Surveys

12.4.2 Intermediate Surveys for Hull, Equipment, Fire Extinguishing Systems and Fittings

Sub-paragraph -2 has been amended as follows.

2 Surveys for hull, equipment, fire extinguishing systems and fittings
At Intermediate surveys, the following survey items are to be examined as far as practicable, in addition to the relevant survey items specified in **4.2.2** through **4.2.7** corresponding to the unit's structure, equipment, etc. and a general examination of hull, equipment, fire extinguishing systems and fittings specified in **12.3.2-2** through **-6~~5~~** is to be carried out.
((1) and (2) are omitted.)

EFFECTIVE DATE AND APPLICATION (Amendment 2-2)

1. The effective date of the amendments is 1 January 2013.

2. Notwithstanding the amendments to the Rules, the current requirements may apply to ships for which the date of contract for construction* is before the effective date.
*"contract for construction" is defined in the latest version of IACS Procedural Requirement (PR) No.29.

IACS PR No.29 (Rev.0, July 2009)

1. The date of "contract for construction" of a vessel is the date on which the contract to build the vessel is signed between the prospective owner and the shipbuilder. This date and the construction numbers (i.e. hull numbers) of all the vessels included in the contract are to be declared to the classification society by the party applying for the assignment of class to a newbuilding.

2. The date of "contract for construction" of a series of vessels, including specified optional vessels for which the option is ultimately exercised, is the date on which the contract to build the series is signed between the prospective owner and the shipbuilder.
For the purpose of this Procedural Requirement, vessels built under a single contract for construction are considered a "series of vessels" if they are built to the same approved plans for classification purposes. However, vessels within a series may have design alterations from the original design provided:
(1) such alterations do not affect matters related to classification, or
(2) If the alterations are subject to classification requirements, these alterations are to comply with the classification requirements in effect on the date on which the alterations are contracted between the prospective owner and the shipbuilder or, in the absence of the alteration contract, comply with the classification requirements in effect on the date on which the alterations are submitted to the Society for approval.
The optional vessels will be considered part of the same series of vessels if the option is exercised not later than 1 year after the contract to build the series was signed.

3. If a contract for construction is later amended to include additional vessels or additional options, the date of "contract for construction" for such vessels is the date on which the amendment to the contract, is signed between the prospective owner and the shipbuilder. The amendment to the contract is to be considered as a "new contract" to which **1.** and **2.** above apply.

4. If a contract for construction is amended to change the ship type, the date of "contract for construction" of this modified vessel, or vessels, is the date on which revised contract or new contract is signed between the Owner, or Owners, and the shipbuilder.

Note:
This Procedural Requirement applies from 1 July 2009.

GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

Part B Class Surveys

GUIDANCE

2012 AMENDMENT NO.2

Notice No.82 15th November 2012

Resolved by Technical Committee on 27th July 2012

Notice No.82 15th November 2012
AMENDMENT TO THE GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

"Guidance for the survey and construction of steel ships" has been partly amended as follows:

Part B CLASS SURVEYS

Amendment 2-1

B2 CLASSIFICATION SURVEYS

B2.3 Sea Trials and Stability Experiments

B2.3.1 Sea Trials

Sub-paragraph -3 has been amended as follows.

3 The Steering test and change-over test from main to auxiliary steering gears required by **2.3.1-1(3), Part B of the Rules** are to be carried out in accordance with the following **(1)** through **(11)**. However, the tests required in **(4)**, **(7)**, **(8)**, **(9)**, **(10)** and **(11)** may be dispensed with where such tests have been carried out either at dockside or in dry dock.

(1) Tests of the steering capabilities specified in **15.2.2** and **15.2.3, Part D of the Rules.** Where the ship cannot be tested in the full load condition, the ship is to be tested ~~in an alternate draught condition deemed appropriate by the Society,~~ in accordance with any of the following except in cases where specially provided for by the flag state. In such cases, ~~and~~ the ship speed at maximum continuous revolutions of the main engine ~~may~~are be used instead of the speed specified in **2.1.8, Part A of the Rules**. If the ship is fitted with a controllable pitch propeller, the main steering gear test is to be carried out at the maximum design pitch approved by the Society for the number of maximum continuous revolutions.

(a) Tests are to be carried out on the condition that the rudder is fully submerged (at zero speed waterline) and the vessel is in an acceptable trim condition.

(b) Tests are to be carried out on the condition that rudder load and torque at the trial loading condition have been reliably predicted and extrapolated to the full load condition.

((2) to (11) are omitted)

EFFECTIVE DATE AND APPLICATION (Amendment 2-1)

1. The effective date of the amendments is 1 July 2012.

2. Notwithstanding the amendments to the Guidance, the current requirements may apply to ships for which the date of contract for construction* is before the effective date.
*"contract for construction" is defined in the latest version of IACS Procedural Requirement (PR) No.29.

IACS PR No.29 (Rev.0, July 2009)

1. The date of "contract for construction" of a vessel is the date on which the contract to build the vessel is signed between the prospective owner and the shipbuilder. This date and the construction numbers (i.e. hull numbers) of all the vessels included in the contract are to be declared to the classification society by the party applying for the assignment of class to a newbuilding.

2. The date of "contract for construction" of a series of vessels, including specified optional vessels for which the option is ultimately exercised, is the date on which the contract to build the series is signed between the prospective owner and the shipbuilder.
For the purpose of this Procedural Requirement, vessels built under a single contract for construction are considered a "series of vessels" if they are built to the same approved plans for classification purposes. However, vessels within a series may have design alterations from the original design provided:
(1) such alterations do not affect matters related to classification, or
(2) If the alterations are subject to classification requirements, these alterations are to comply with the classification requirements in effect on the date on which the alterations are contracted between the prospective owner and the shipbuilder or, in the absence of the alteration contract, comply with the classification requirements in effect on the date on which the alterations are submitted to the Society for approval.
The optional vessels will be considered part of the same series of vessels if the option is exercised not later than 1 year after the contract to build the series was signed.

3. If a contract for construction is later amended to include additional vessels or additional options, the date of "contract for construction" for such vessels is the date on which the amendment to the contract, is signed between the prospective owner and the shipbuilder. The amendment to the contract is to be considered as a "new contract" to which **1.** and **2.** above apply.

4. If a contract for construction is amended to change the ship type, the date of "contract for construction" of this modified vessel, or vessels, is the date on which revised contract or new contract is signed between the Owner, or Owners, and the shipbuilder.

Note:
This Procedural Requirement applies from 1 July 2009.

Amendment 2-2

B1 GENERAL

B1.1 Surveys

B1.1.3 Intervals of Class Maintenance Surveys

Sub-paragraph -5(13) has been amended as follows.

(13) Devices to prevent the passage of flame (Flame screen, Flame arrester, Detonation flame arrester and High velocity device)
For devices to prevent the passage of flame required to ships which had been at the beginning stage of construction before 1 January 2013 and for ships which carry cargos shown as apparatus groups II*B*, II*C* or no apparatus group assigned in the column *i*" of **Table S17.1, Part S of the Rules**, a survey is to be carried out to verify that the devices are in compliance with the requirements of **7.4.2-2**, **Chapter 7**, **Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine use** by the first scheduled dry-docking after 1 January 2013.

B2 CLASSIFICATION SURVEYS

B2.1 Classification Survey during Construction

B2.1.4 Presence of the Surveyor

Sub-paragraph -1(3) has been amended as follows.

(3) For fire extinguishing systems, fire detecting systems and manually operated call points:
((a) to (g) are omitted)
(h) Fixed local application fire-fighting system
i) Airtight tests of piping with a pressure not less than maximum working pressure
ii) Testing piping by delivering air
iii) A performance test of the alarm system
iv) For ships with periodically unattended machinery spaces, a performance test of the feed water pump and starting valve by automatic and manual operation. For other ships, a performance test of the feed water pump and starting valve by manual operation
(~~h~~i) Fire detecting system
(Omitted)
(~~i~~j) Manually operated call points
(Omitted)

B2.1.8 Verification of Coating Application

Sub-paragraph -2 has been amended as follows.

2 The "certificate deemed appropriate by the Society" stipulated in **2.1.8-1(1)**, **Part B of the Rules** refers to one of the following **(1)** to **(3)**:

(1) 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**

(2) Statement of Compliance issued by the Research Institute of Marine Engineering, Japan (*RIME*), the Japan Paint Inspection and testing Association or MARINTEK

(3) Other documents approved by the Society

EFFECTIVE DATE AND APPLICATION (Amendment 2-2)

1. The effective date of the amendments is 15 November 2012.

Amendment 2-3

B2 CLASSIFICATION SURVEYS

B2.5 Alterations

B2.5.1 Examination of Altered Parts

Sub-paragraph -2 has been amended as follows.

2 In applying the requirements specified in **2.5.1, Part B of the Rules**, in cases where single hull oil tankers are converted to double hull oil tanker or bulk carriers ~~(including ore carriers)~~, except where specified by the Society or Administration, in addition the above requirement **-1**, the following requirements are to be complied with:

(1) With respect to the requirements on subdivision specified in **Chapter 4, Part C of the Rules**, the requirements in accordance with ship's type after conversion are to be complied with.

(2) With respect to the requirements on 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)** is to be applied.

(3) The requirements on protective coating in seawater ballast tank, etc. specified in **25.2.2-1, 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 are newly made. However, the requirements specified in **25.2.2-2, Part C of the Rules** are to be applied.

(4) ~~With respect to the~~ The requirements on towing and mooring equipment specified in **27.2, Part C of the Rules**~~, the following~~ are to be ~~complied with:~~ applied.

~~(a) In cases where existing equipment or fittings are only relocated, this regulation applies only to their supporting structures.~~

~~(b) Except in cases where equipment and fittings for mooring and towing are totally replaced or modified, the indication of Safe Work Loads and the provisions of towing and mooring arrangement plans are not required.~~

(5) In the case of conversion to a bulk carrier, the requirements specified in **31A and 34.2, Part C of the Rules** are to be applied. However, the requirements on permanent means of access are to comply with **(6)**.

(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). Additionally, 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** are to be applied.

(8) The requirements on navigation bridge visibility specified in **2.1, Part W of the Rules** ~~is~~

are to be applied ~~only in cases where a fore end structural is altered.~~ 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** are to be applied when the parameters used to determine the minimum freeboard are different before and after conversion or when there is a decrease in magnitude of freeboard assigned after the conversion.

(11) The requirements specified in **18.3, 19.2.3, Chapter 20, 23.1, 23.2, 23.4, 23.5, 23.6, 23.7, 27.1.7 and 34.1.1-1, Part C and 13.4 and 13.6, Part D of the Rules** are to be applied when structures or equipment are newly added, replaced or modified.

EFFECTIVE DATE AND APPLICATION (Amendment 2-3)

1. The effective date of the amendments is 15 November 2012.

2. Notwithstanding the amendments to the Guidance, the current requirements may apply to ships for which the date of contract for conversion is before the effective date.

Amendment 2-4

B3 ANNUAL SURVEYS

B3.4 Special Requirements for Ships Carrying Liquefied Gases in Bulk

B3.4.2 Examinations

Sub-paragraph -4 has been added as follows.

4 "Alternative examinations considered appropriate by the Society" stipulated in item 8 of **Table B3.9(2), Part B of the Rules** refers to performance tests of cross flooding equipment to confirm whether the equipment is in good working order.

Section B3.5 has been added as follows.

B3.5 Special Requirements for Ships Carrying Dangerous Chemicals in Bulk

B3.5.2 Examinations

1 "Alternative examinations considered appropriate by the Society" stipulated in item 7 of **Table B3.10, Part B of the Rules** refers to performance tests of cross flooding equipment to confirm whether the equipment is in good working order.

B5 SPECIAL SURVEYS

B5.2 Special Surveys for Hull, Equipment, Fire extinction and Fittings

Paragraph B5.2.5 has been amended as follows.

B5.2.5 Close-up Surveys

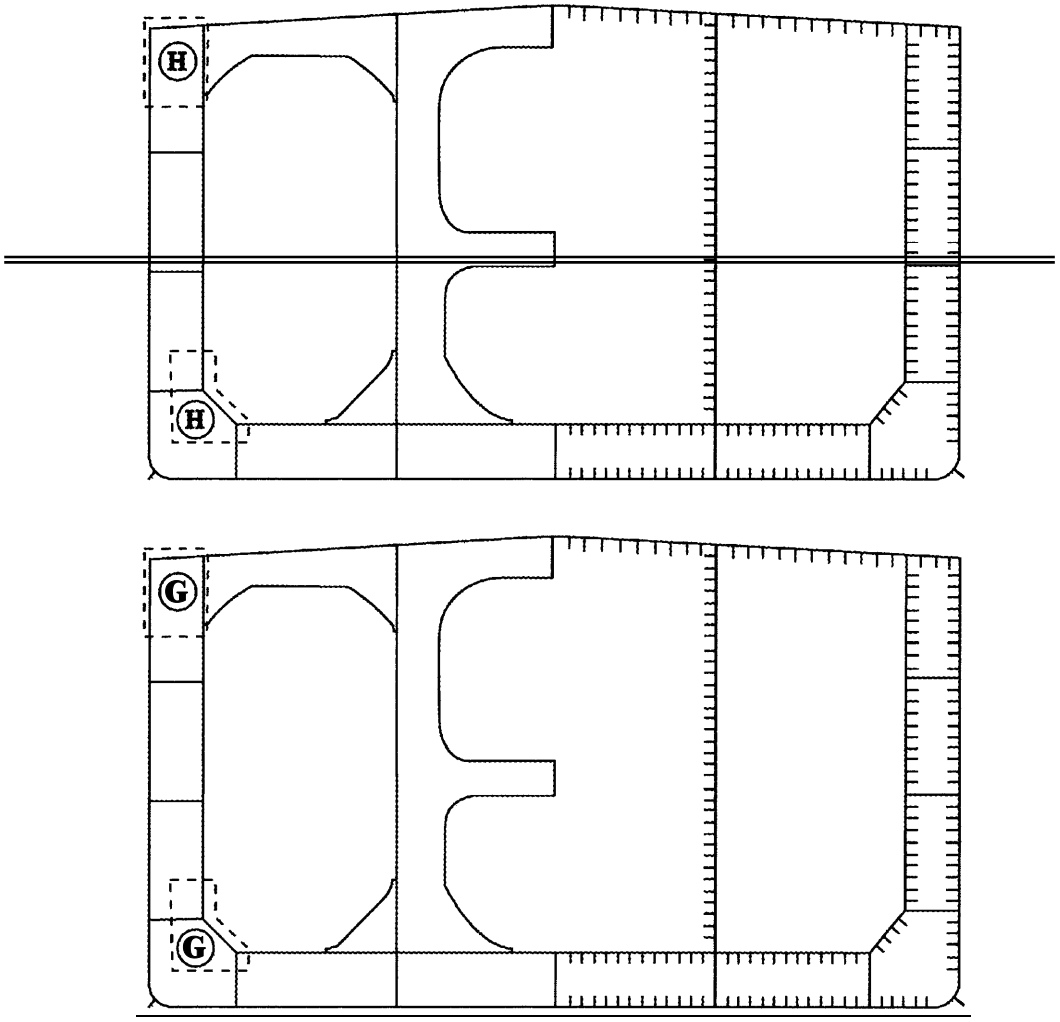
1 Non-destructive testing may be required to detect fractures when deemed necessary by the Surveyor.

2 Thickness measurements are to be carried out on the securing, supporting and locking devices of bow doors, inner doors, side shell doors and stern doors to the extent considered necessary by the Surveyor. The maximum thickness diminution of such securing, supporting and locking devices is not to be more than 15% of the as-built thickness.

3 For the areas described in (~~H~~G) in **Table B5.5, Part B of the Rules**, refer to **Fig.B5.2.5**.

Fig.B5.2.5 has been amended as follows.

Fig.B5.2.5 The knuckle area and the top part of wing ballast tanks of double hull oil tankers



EFFECTIVE DATE AND APPLICATION (Amendment 2-4)

1. The effective date of the amendments is 15 November 2012.

2. Notwithstanding the amendments to the Guidance, the current requirements may apply to the surveys for which the application is submitted to the Society before the effective date.

Amendment 2-5

B9 PLANNED MACHINERY SURVEYS

B9.1 Planned Machinery Surveys

B9.1.2 Continuous Machinery Surveys (CMS)

Sub-paragraph -6 has been amended as follows.

6 Confirmatory Survey

In ships deemed by the Society as maintaining their machinery and equipment well, overhaul inspections by the shipowner (or the ship management company) may forgo the open-up examination performed in the presence of Surveyors by conducting the following confirmatory surveys, provided that the machinery and equipment are overhauled as part of the ship's maintenance practices and the records from such overhauls are kept in good order. In this case, the date of the next open-up examination is to be within a 5-*year* period from the date of its last overhaul and inspection.

(1) Procedure of the confirmatory survey

(a) In the case of any machinery and equipment specified in **(2)** below overhauled and inspected by the Chief Engineer as routine maintenance work, one copy of the inspection report including the items mentioned below is to be submitted to, and reviewed by the attending Surveyor. Also, the Chief Engineer's profile is to be confirmed by the attending Surveyor.

i) Signature of the Chief Engineer and license number
ii) Date and place of the inspection
iii) Inspection items and their results
iv) Operating conditions before and after the inspection

(b) Parts replaced with spares or repaired are to be verified by visual examinations on by photographs.

(c) Visual examinations are to be carried out for main propulsion machinery, and examinations under operating conditions as well as visual <u>examinations</u> ~~inspections~~ are to be carried out for other machinery <u>and auxiliary machinery, etc</u>.

(d) Visual examinations of lubricating oil conditions are to be carried out through open-up inspections, etc. of the lubricating oil filters of crankshafts, main bearings, crankpin bearings, crankpin bolts as well as the camshafts and camshaft driving devices of main diesel engines.

<u>(e) Visual examinations to confirm the current conditions and the lubricating oil maintenance conditions of intermediate shafts, thrust shafts and bearings are to be carried out as far as possible.</u>

<u>(f) Confirmation of the open-up inspection and adjustment records of safety valves (excluding fusible plugs) is to be carried out for air reservoirs.</u>

(~~e~~<u>g</u>) As a result of the confirmatory survey stipulated in **(a)** to **(~~d~~<u>f</u>)** above, open-up examinations and/or re-examinations may be required when deemed necessary by the Surveyor.

(2) Items applicable to the confirmatory survey

Items of machinery and equipment applicable to the confirmatory surveys are as follows.

(a) Main diesel engines
(b) Diesel engines used for driving generators, auxiliary machinery essential for main propulsion or auxiliary machinery for manoeuvring and safety of the ship
~~However, an open-up examination of the diesel engine for driving the main generator is to be carried out in the presence of the Surveyor in cases where a single unit of such engines is fitted on ship.~~
(c) Intermediate shafts, thrust shafts and bearings
(~~e~~d) Auxiliary machinery (air compressors, pumps, heat exchangers, air reservoirs, deck machinery and distilling plants)

(3) Timing of the confirmatory survey
A confirmatory survey is to be carried out by the time of next periodical survey from the day the item of the machinery and equipment intended for the confirmatory survey was overhauled and inspected at sea.

B9.1.3 Planned Machinery Maintenance Scheme (PMS)

Sub-paragraph -4 has been amended as follows.

4 Approval of PMS
Conditions for approval of PMS are as follows:
((1) and (2) are omitted)
(3) Survey Schedule Table
Survey intervals of the survey items are not to exceed those specified in the machinery maintenance scheme. The following items are to be generally opened and examined in the presence of the Surveyor. Where the condition monitoring maintenance method is applied, the items are to be opened and examined only when an abnormal condition is observed.
(a) Rotors, casings, main bearings, couplings between turbine and reduction gear, nozzle valves and manoeuvring valves for main steam turbine
(b) Auxiliary steam turbine for main generator
~~(c) Thrust shaft and the bearings for main propulsion~~
(~~d~~c) Reduction gears for main propulsion
(~~e~~d) Flexible couplings for main propulsion
(~~f~~e) Other items deemed necessary by the Society.
When this survey schedule table is amended, the amended survey schedule table is to be submitted to the Society for approval.

(4) Machinery Maintenance Records
Machinery maintenance records are to include at least the following items. These records are to be retained on board the ship at all times.
(a) Date of maintenance work
(b) Signature by the Chief Engineer
(c) Details of maintenance work and results
(d) Total running hours (parts replacement intervals and overhaul intervals)
(e) Names of parts replaced
(f) Measuring data (including original design dimensions and allowable tolerance)
(g) The condition of damage and repair method
(h) ~~Results of visual examinations of lubricating oil conditions carried out through open-up examinations of the lubricating oil filters, etc. of crankshafts, main bearings, crankpin bearings, crankpin bolts as well as camshafts and camshaft driving devices of main~~

~~diesel engines (in cases where the principle components of such engines were inspected through independent open-up surveys conducted by chief engineers)~~

Results of visual examinations of lubricating oil conditions carried out through open-up examinations of the lubricating oil filters, etc. of crankpins, crank journals, thrust shafts and bearings of main diesel engines (in cases where the principle components of such engines were inspected through independent open-up surveys conducted by chief engineers)

((5) to (7) are omitted)

EFFECTIVE DATE AND APPLICATION (Amendment 2-5)

1. The effective date of the amendments is 15 November 2012.

2. Notwithstanding the amendments to the Guidance, the current requirements apply to the surveys for which the application is submitted to the Society before the effective date.

3. Notwithstanding the provision of preceding **2.**, the amendments to the Guidance may apply to the surveys for which the application is submitted to the Society before the effective date upon request by the owner.