## RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

Part B

**Class Surveys** 

Rules for the Survey and Construction of Steel Ships
Part B 2006 AMENDMENT NO.3
Guidance for the Survey and Construction of Steel Ships
Part B 2006 AMENDMENT NO.3

Rule No.55 / Notice No.67 3rd October 2006 Resolved by Technical Committee on 6th July 2006 Approved by Board of Directors on 25th July 2006



# RULES

## RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

Part B

**Class Surveys** 

#### 2006 AMENDMENT NO.3

Rule No.55 3rd October 2006

Resolved by Technical Committee on 6th July 2006

Approved by Board of Directors on 25th July 2006

Rule No.55 3rd October 2006 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 3-1

## Chapter 1 GENERAL

## 1.1 Surveys

## 1.1.5 Postponement of Periodical Surveys, etc

Sub-paragraph -3 has been renumbered to -4, and sub-paragraph -3 has been newly added as follows.

In addition to -1 above, Boiler Surveys specified in 1.1.3-1(5)(a) and (b) may be postponed up to 3 months, subject to the approval by the Society in advance, in exceptional circumstances such as unavailability of repair facilities, unavailability of essential materials, equipment or spare parts, or delays incurred by action taken to avoid severe weather conditions.

## **Chapter 3 ANNUAL SURVEYS**

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

## **3.2.3** Performance Test

Table B3.3 has been amended as follows.

**Table B3.3** Performance Tests

Items	Tests
1 Weathertight hatch covers	<ul> <li>Hose test listed in Table B2.1 (when deemed necessary by the Surveyor)</li> <li>Random checking of the satisfactory operation of mechanically operated hatch covers</li> </ul>
2 Closing appliances of watertight door on watertight bulkheads and openings on superstructure end bulkheads	• Checking whether the appliances work in good order is to be made as deemed necessary by the Surveyor.
3 Appliances related to fire protection and escape	• Checking whether the appliances work in good order is to be carried out.
4 Fire detection system and fire alarm system including manually operated call points	• Checking whether the systems work in good order, including failure alarm of the system, is to be made.
5 Fire pumps including emergency fire pump, pipings, hydrants, hoses, nozzles etc.	• Performance test of the fire fighting system composed of fire pump, hydrants, etc. is to be carried out. For ships having operating system for periodically unattended machinery space, operation test of remote control system or automatic operation system of one pump is to be carried out.
6 Fixed deck foam system	• Checking whether the system works in good order is to be carried out by delivering water.
7 Ventilation system	Checking whether fans work in good order is to be carried out.
8 Stability Computer	• For computers for stability calculation as a supplement to the stability information booklet, which is on board ships contracted for construction on or after 1 July 2005, a performance test is to be carried out.
9. Water level detection and alarm systems <sup>(1)</sup>	• Checking, at random, whether the systems work in order is to be made.
10. Dewatering arrangements <sup>(2)</sup>	Checking whether the systems work in order is to be made.

#### Notes)

- (1) Water level detection and alarm systems specified in 13.8.5, Part D of the Rules
- (2) Dewatering arrangements specified in 13.5.10, Part D of the Rules

## 3.3 Annual Surveys for Machinery

## **3.3.2** Performance Tests

The line of 7(b) in Table B3.7 has been amended as follows.

**Table B3.7 Performance Tests at Annual Surveys** 

Items	Examinations	
(b)Boilers, thermal oil heaters	Operation tests for the safety devices, alarm devices and pressure indicators	
and incinerators	specified in <b>Chapter 9</b> , <b>Part D</b> are to be carried out and the relieving gears of the	
	safety valves are to be examined and tested to verify satisfactory operation.	
	However, the relief valves provided on the exhaust gas economizers are to be	
	tested by the Chief Engineer at sea prior to the Annual Survey within the period	
	specified in 1.1.3-1(1). This test is to be recorded in the logbook for review by	
	the attending surveyor. Calibration records for the pressure indicators are to be	
	ascertained. Where deemed necessary by the Surveyor, the control records of the	
	boiler water and thermal heater oil are required to be presented for review.	

## **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
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Items	Tests
1 Equipment or installations of items in <b>Table</b>	• Tests for each items specified in <b>Table B3.3</b> are to be carried
B3.3 (except item 2)	out.
2 Doors on watertight bulkheads and closing	Checking whether doors and closing appliances work in order
appliances on superstructure end bulkheads	is to be made.
3 Drainage, mooring and anchoring arrangements	• Checking whether arrangements work in order is to be made.
and their accessories	The checking may be dispensed with at the discretion of the
	Surveyor.
4 Fixed dry-chemical powder fire fighting system	Checking whether piping is maintained in good condition is
	made by delivering air. Checking whether a monitor and a hose
	work in order is to be made. Checking whether the remote
	control system and the related automatic valve work in order is
	to be made.
	Checking of quantity of starting or pressuring gases is to be
	made.
5 Water spray system	• Checking whether the system works in order is to be made by
	delivering water. Checking of quantity of delivered water may
	be dispensed with.
6 Carbon dioxide extinguishing medium, halon	<ul> <li>Checking of quantity of those media is to be made.</li> </ul>
extinguishing medium and dry chemical powder	
extinguishing medium	
7 Fixed carbon dioxide fire fighting system and	Checking whether pipings are maintained in good condition is
fixed halon fire fighting system	made by delivering air.
	• Checking whether an alarm of systems works in order is to be
	made.
8 Fixed foam fire fighting system and fixed high	Checking whether pipings are maintained in good condition is
expansion foam fire fighting system	to be carried out by delivering water.
9 Fixed pressure water spraying fire fighting	• Checking whether the system works in order is to be made by
system	delivering water.
	• Checking whether the pump of the system works in order is to
	be made.
10 Automatic sprinkler system	Checking whether the delivery alarm and the pump works in
	order is to be made while fire detecting system is working.
11 Closing appliances of openings related to fire	Checking whether closing appliances work in order is to be
fighting in way of cargo holds	made.
Additional Requirements for Bulk Carriers	
12 Machinery operated hatch covers	• Checking whether the selected hatch covers work in good order
	is to be carried out.
	• Checking whether all hatch covers work in good order is to be
	carried out for ships over 15 years of age.
•	

13 Weathertight hatch covers	• Hose test listed in <b>Table B2.1</b> or equivalent, for all hatch covers for ships over 15 <i>years</i> of age.
14 Water level detection and alarm systems	• Checking whether the systems work in order is to be made for ships over 10 <i>years</i> 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 the above -1, performance tests and operation tests were carried out in specified through (1) to (5) below.
  - (1) Operation test for all mechanically operated hatch covers specified in item 1 in **Table B4.1**
  - (2) Hose test listed in **Table 2.1** or equivalent, for all weathertight hatch covers
  - (3) Performance test and operation test for all bilge and ballast piping system
  - (4) For oil tankers and ships carrying dangerous chemical in bulk, performance test and operation test of cargo and ballast piping systems within all cargo tanks, all tanks and spaces bounding cargo tanks such as ballast tanks, pump rooms, pipe tunnels, cofferdams and void spaces and on weather deck
  - (5) Performance test listed in item 1 in **Table B4.1**, for all water level detection and alarm systems specified in **13.8.5**, **Part D of the Rules**.

#### **5.2.6** Thickness Measurements

Sub-paragraph -1 has been amended as follows.

- 1 At Special Surveys, thickness measurement is to be carried out in accordance with (1) through (5) below.
  - (1) Thickness measurement is to be carried out using an appropriate ultra-sonic gauging machines or other approved means. The accuracy of the equipment is to be proven to the Surveyor as required.
  - (2) Thickness measurement is to be carried out within 12 *months* prior to completion of the survey in question under the attendance of the Surveyor by the firm approved by the Society under the "Rules for Approval of Manufactures and Service Suppliers" or equivalent firm. The surveyor may re-check the measurements as deemed necessary to ensure acceptable accuracy.
  - (3) The extended thickness measurements are to be carried out before the survey is credited as completed.
  - (4) A thickness measurement record is to be prepared and submitted to the Society.
  - (5) Thickness measurements of structures in areas where close-up surveys are required are to be carried out simultaneously with close-up surveys.

## **Chapter 7 BOILER SURVEYS**

## 7.1 Boiler Surveys

Table B7.1 has been amended as follows.

**Table B7.1** Requirements of Boiler Survey

Table B7.1 Requirements of Boiler Survey		
Items	Examinations	
1 Pressure parts of boilers	To be internally examined with the manholes, cleaning holes and inspection holes dismantled. Where considered to be necessary for external examination by the Surveyor, the parts are to be examined to the Surveyor's satisfaction with the insulation around the parts removed.	
2 Superheaters, economizers and exhaust gas economizers	To be examined internally and externally. For exhaust gas economizers of the shell type, all accessible welded joints are to be subject to a visual examination for cracking and nondestructive testing may be requested where deemed necessary by the Surveyor.	
3 Combustion/combustion gas parts of boilers and thermal oil heaters	The furnaces, combustion chambers, combustion gas chambers, etc. are internally examined with their doors opened.	
4 Valves and cocks	The principal mountings and their fastening bolts or studs are to be opened up and examined.	
5 Thickness of plates and tubes and size of stays	To be measured where deemed necessary by the Surveyor.	
6 Safety valves etc. of boilers, superheaters and thermal oil heaters <sup>(1)</sup>	The safety valves are to be adjusted under steam to a pressure not more than 103 % the approved working pressure after open-up examination. The pressure gauge used for adjustment of safety valves is to be calibrated properly. And the relieving gears of the valves are to be examined and tested to verify satisfactory operation. However, the relief valves provided on the exhaust gas economizers which steam cannot be raised at port may be set by the chief engineer at sea, and the results recorded in the logbook for review by the Society.  The general conditions of relief pipes for thermal oil heaters are to be examined. The popping pressure of safety valves fitted on thermal oil heaters is to be ascertained.	
7 Safety devices, alarm devices and automatic combustion control devices	These devices are to be tested in accordance with the requirements in <b>Chapter 9, Part D</b> of the Rules in order to ascertain that they are in good working conditions after the above examinations.	
8 Review of the records of the	Review of the following records since last boiler survey is to be carried out.	
logbook	(1) Operation	
1 8	(2) Maintenance	
	(3) Repair history	
	(4) Quality control of the feed water or thermal oil	

Note:

<sup>(1)</sup> The survey item is to be applied to thermal oil heaters heated by fire, combustion gas or exhaust gas from machinery.

## EFFECTIVE DATE AND APPLICATION (Amendment 3-1)

- 1.
- The effective date of the amendments is 1 January 2007. Notwithstanding the amendments to the Rules, the current requirements apply to the 2. surveys for which the application is submitted to the Society before the effective date.

#### Amendment 3-2

## **Chapter 2 CLASSIFICATION SURVEYS**

## 2.1 Classification Survey during Construction

#### 2.1.3 Submission of Other Plans and Documents

Sub-paragraph -1(11) has been amended as follows:

(11) Strength calculation seats, noted in the design load, associated with various supporting hull structure of towing and mooring fittings, including towing and mooring fittings which are not selected from standards approved by the society, specified in 27.2, Part C or 23.2, Part CS

Paragraphs 2.1.6 and 2.1.7 have been newly added as follows.

#### 2.1.6 Documents to be maintained on board

- 1 At the completion of a classification survey, the Surveyor confirms that the following drawings, plans, manuals, lists, etc., as applicable, of finished version are on board.
  - (1) Documents approved by the Society or their copies
    - (a) Operating and maintenance manuals for the door and inner door (23.3.10 and 23.4.9, Part C or 21.3.10 and 21.4.9, Part CS)
    - (b) Damage control plans (33.3.1, Part C)
    - (c) Loading manuals (Chapter 34, Part C or Chapter 25, Part CS)
    - (d) Ship structure access manuals (35.2.6, Part C or 26.2.6, Part CS)
    - (e) Stability information booklets (1.2.1, Part U, 2.2.2, Part N and 2.2.2, Part S)
    - (f) Operation manuals for ships carrying liquefied gases in bulk (18.1, Part N)
    - (g) Operation manuals for ships carrying dangerous chemicals in bulk (16.1.1, Part S)
    - (h) Cargo handling plans (17.20.13-2 and 17.22.12-10, Part N and 15.3.2-15 and 15.8.32, Part S)
    - (i) Lists of loading/filling limits (15.2.2 and 17.20.14, Part N and 15.3.2-12, 15.8.33-3 and 15.14.7-3, Part S)
    - (j) Programs for the non-destructive test for independent tank of Type B (**Table B5.27**)
    - (k) Programs for the examination and testing for membrane and semi-membrane tanks and internal insulation tanks (Note (\*1) to **Table B5.27**)
  - (2) Other manuals, etc.
    - (a) Towing and mooring fitting arrangement plans (27.2.6, Part C or 23.2.6, Part CS)
    - (b) Operation manuals for the emergency towing arrangement (27.3, Part C)
    - (c) Booklets for the damage control (33.3.2, Part C)
    - (d) Operation manuals for the loading computer (34.1.3-3, Part C or Chapter 25, Part CS)
    - (e) Plans for means of access (35.1.5, Part C or 26.1.5, Part CS)
    - (f) Operation manuals for the stability computer (1.2.2, Part U)
    - (g) Operating and maintenance instructions for ship machinery and equipment (1.3.9, Part D)

- (h) Manuals for the water level detection and alarm systems (13.8.5-4 or 13.8.6-3, Part D)
- (i) Maintenance records of batteries (1.1.8, Part H)
- (j) Instruction manuals for the cargo tank venting systems (4.5.3, Part R)
- (k) Fire Control Plans, Fire Safety Operational Booklets, Training manuals and Maintenance plans (Chapters 14, 15 and 16, Part R)
- (l) Operation manuals for the helicopter facilities (18.8, Part R)
- (m) Instruction manuals for the inert gas systems (35.2.11, Part R)
- (n) A copy of the *IGC* Code or national regulations incorporating the provisions of the *IGC* Code (18.2.2-3, Part N)
- (o) A copy of the *IBC* Code or national regulations incorporating the provisions of the *IBC* Code (16.2.3-1, Part S)
- (p) Operating Booklets (1.1.7, Part P)
- 3) Finished plans specified in **2.1.7**
- 2 Where deemed necessary by the Society considering the purpose, characteristics, etc. of the ship, the submission of additional documents may be required.
- **3** For ships of not less than 500 *gross tonnage* engaged on international voyages, it is recommended that all documents listed in **-1** above are marked with the *IMO* ship identification number.

#### 2.1.7 Finished Plans

At the completion of a classification survey, an applicant of the classification of the ship is to prepare finished plans regarding the following drawings, etc., and submit to the Society.

- (1) General arrangement
- (2) Midship section, scantling plans (construction profile), deck plans, shell expansion, transverse bulkheads, plans for rudder and rudder stock, and plans for cargo hatch covers
- (3) Bilge, ballast and cargo piping diagrams
- (4) Fire protection plans
- (5) Fire extinguishing appliances arrangement
- (6) Plans and data showing the navigation bridge visibilities

## 2.2 Classification Survey of Ships not Built under Survey

Paragraph 2.2.3 has been added as follows.

#### 2.2.3 Documents to be maintained on board

At the completion of a classification survey, the Surveyor confirms that documents specified in **2.1.6** are on board the ship.

## **Chapter 3** ANNUAL SURVEYS

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

## 3.2.1 Examination of Plans and Documents

In Table B3.1, the column of "7 Towing and Mooring Fitting Arrangement Plan" has been amended as follows:

7 Towing and Mooring Fitting Arrangement Plan	Checking whether Towing and Mooring Fitting Arrangement Plan
	specified in 27.2, Part C or 23.2, Part CS is kept on board is to be made.

## 3.2.2 General Examination

In Table B3.2, the column of "17 Towing and mooring fittings" has been amended as follows:

17 Towing and mooring fittings	• General condition of the mark of Safe Working Load (SWL) on
	towing and mooring fittings specified in 27.2.2, 27.2.3, Part C or
	<b>23.2.2, 23.2.3, Part CS</b> is to be examined.

## **Chapter 10 SURVEYS FOR STEEL BARGES**

## 10.2 Classification Survey during Construction

Paragraph 10.2.6 has been renumbered to 10.2.7, and paragraph 10.2.6 has been added as follows.

#### 10.2.6 Finished Plans

At the completion of a classification survey, an applicant of the classification of the ship is to prepare finished plans regarding the following drawings, etc., and submit to the Society.

- (1) General arrangement
- (2) Midship section, scantling plans (construction profile), deck plans, shell expansion, transverse bulkheads, plans for rudder and rudder stock, and plans for cargo hatch covers
- (3) Bilge, ballast and cargo piping diagrams

#### EFFECTIVE DATE AND APPLICATION (Amendment 3-2)

- **1.** The effective date of the amendments is 1 January 2007.
- **2.** Notwithstanding the amendments to the Rules, the current requirements may apply to ships the keels of which were laid or which were at *a similar stage of construction* before the effective date.
  - (Note) The term "a similar stage of construction" means the stage at which the construction identifiable with a specific ship begins and the assembly of that ship has commenced comprising at least 50 tonnes or 1% of the estimated mass of all structural material, whichever is the less.

## Amendment 3-3

## **Chapter 4 INTERMEDIATE SURVEYS**

## 4.3 Intermediate Surveys for Machinery

#### **4.3.1** General Examinations

Table B4.5 has been amended as follows.

 Table B4.5
 Additional Requirements at Intermediate Surveys

	riddional requirements at intermediate but veys	
Items	Examinations	
1 Refrigerating Machinery	The general condition of the safety devices are to be examined.	
	Requirements for Tankers	
1 Earthing	The earthing between cargo oil tanks/cargo piping systems (cargo oil pipes, vent pipes, tank washing pipelines, etc.) and hull structures is to be examined visually as far as accessible.	
2 Electrical installations in hazardous areas	<ul> <li>(a) Electrical installations in hazardous areas are to be examined in detail and conformed to the requirement in 4.2.7, Part H. In addition, their insulation resistance is to be measured and confirmed in good condition. However, this measurement may be omitted at the discretion of the Surveyor, if the insulation resistance is verified by the recent measurement record.</li> <li>(b) Performance test of interlock devices associated with pressurized protected type electrical equipment and electrical equipment installed in pressurized or ventilated areas are to be carried out.</li> </ul>	

## 4.4 Special Requirements for Ships Carrying Liquefied Gases in Bulk

#### 4.4.2 Examinations

In table B4.6, the third row has been amended as follows.

3 Electrical installations in	Examinations specified in item 2 for tankers of <b>Table B4.5</b> are to be carried out.
hazardous areas	

## 4.5 Special Requirements for Ships Carrying Dangerous Chemicals in Bulk

#### 4.5.2 Examinations

In table B4.7, the first row has been amended as follows.

1 Electrical installations in	Examinations specified in item 2 for tankers of <b>Table B4.5</b> are to be carried out.
hazardous areas	

## **Chapter 5 SPECIAL SURVEYS**

## 5.3 Special Surveys for Machinery

#### **5.3.1** General Examinations

In table B5.25, the examinations specified in item 2(c) has been deleted.

In table B5.25, the second row in the requirements for tankers has been added.

2 Electrical installations in	(a)	Electrical installations in hazardous areas are to be examined in detail and conformed to
hazardous areas		the requirement in 4.2.7, Part H. In addition, their insulation resistance is to be
		measured and confirmed in good condition. However, this measurement may be omitted
		at the discretion of the Surveyor, if the insulation resistance is verified by the recent
		measurement record.
	(b)	Performance test of interlock devices associated with pressurized protected type
		electrical equipment and electrical equipment installed in pressurized or ventilated areas
		are to be carried out.

## 5.4 Special Requirements for Ships Carrying Liquefied Gases in Bulk

#### **5.4.2** Examinations

In table B5.27, the sixth row has been added.

6 Electrical installations in	Examinations specified in item 2 for tankers of <b>Table B5.25</b> are to be carried out.
hazardous areas	

## 5.5 Special Requirements for Ships Carrying Dangerous Chemicals in Bulk

#### **5.5.2** Examinations

In table B5.28, the fifth row has been added.

5 Electrical installations in	Examinations specified in item 2 for tankers of <b>Table B5.25</b> are to be carried out.
hazardous areas	

## EFFECTIVE DATE AND APPLICATION (Amendment 3-3)

1. The effective date of the amendments is 1 January 2007.

## GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

Part B

**Class Surveys** 

2006 AMENDMENT NO.3

Notice No.67 3rd October 2006

Resolved by Technical Committee on 6th July 2006

Notice No.67 3rd October 2006 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 3-1

#### **B1 GENERAL**

## **B1.1** Surveys

## **B1.1.2** Class Maintenance Surveys

Existing text has been numbered to sub-paragraph -1 and amended as follows.

- 1 Modifications or conversions referred to in 1.1.2-2(3), Part B of the Rules are as specified in (1) through (5) below:
  - (1) Change of the purpose of combined deep water tank/oil tank/cargo hold When the dual purposed holds are intended to be used for cargoes exclusively, the Owner is to submit application for the change of purpose of the holds to the Society. A part of oil/ballast suction line is to be removed and blank flanges are to be fitted at the end of the line. Hydrostatic tests for the holds need not be carried out after the change.
  - (2) Change of the purpose of tanks
    When purpose of each tank is changed for ships complying with the Rules in editions since 1964, the Owner is to submit application for the change of the purpose to the Society and the longitudinal strength is to be verified again, suitable reinforcement being provided if necessary.
  - (3) Change of the loading conditions
    When ships are loaded in an extremely different way from the conditions specified in the approved plans, the longitudinal strength, shearing force and local strength in the conditions are to be verified and approved by the Society.
  - (4) Change in the loading manuals
    When conversions accompanying a change in principal data of the ship are intended, the new loading manual is to be prepared based on the changed data and approved by the Society.
  - (5) Other modifications or conversions
    Regarding to the other modifications or conversions, since the necessity of the approval
    by the Society may be considered case by case basis, the owner is to offer such
    modifications or conversions. In general, modifications or conversions on the main hull
    structures are required the approval by the Society. Reference is made to the provisions
    of 2.5.1, Part B of the Rules.

Sub-paragraph -2 has been added as follows.

In the necessity of changing the documents listed in **2.1.6** and **2.2.3**, **Part B of the Rules**, as a result of modifications or conversions specified in **-1** above, relevant documents are to be renewed and then confirmed/approved by the Surveyor. However, small changes of the contents of such documents due to repair works based on the principle pf the restoration to its original state or localized reinforcement (*e.g.* changes of welding lines due to the replacement of plate structure, addition of local stiffeners for the limited deck cargoes) need not require such renewal and confirmation/approval.

## EFFECTIVE DATE AND APPLICATION (Amendment 3-1)

- 1. The effective date of the amendments is 1 January 2007.
- 2. Notwithstanding the amendments to the Guidance, the current requirements may apply to ships the keels of which were laid or which were at *a similar stage of construction* before the effective date.
  - (Note) The term "a similar stage of construction" means the stage at which the construction identifiable with a specific ship begins and the assembly of that ship has commenced comprising at least 50 tonnes or 1% of the estimated mass of all structural material, whichever is the less.

#### Amendment 3-2

#### **B1 GENERAL**

## **B1.1** Surveys

## **B1.1.3** Intervals of Class Maintenance Surveys

Sub-paragraphs -5(10) and (11) have been newly added as follows:

- (10) Water Level Detection and Alarm Systems on Single Hold Cargo Ships
  For cargo ships having a single cargo hold below the freeboard deck or cargo holds
  below the freeboard deck which are not separated by at least one bulkhead made
  watertight up to that deck, a survey is to be carried out for verification that water level
  detection and alarm systems specified in 13.8.6, Part D of the Rules are to be provided
  not later than the date of the first intermediate or special survey of the ship to be carried
  out after 1 January 2007. Notwithstanding the above, the following ships need not to
  provide with such system.
  - (a) ships of less than 500 gross tonnage;
  - (b) ships not engaged on international voyage;
  - (c) bulk carriers as defined in **1.3.1(13)**, **Part B of the Rules**, for ships which had been at beginning stage of construction before 1 July 2006;
  - (d) bulk carriers as defined in **31A.1.2(1)**, **Part C of the Rules**, for ships which had been at such stage on or after 1 July 2006;
  - (e) ships having a length  $(L_f)$  of not less than:
    - i) 80 m, for ships which had been at such stage on or after 1 July 1998; or
    - ii) 100 m, for ships which had been at such stage before 1 July 1998;
  - (f) ships complying with the requirements of 13.8.5, Part D of the Rules; and
  - (g) ships having watertight side compartments each side of the cargo hold length extending vertically at least from inner bottom to freeboard deck and breadth of which are not to be less than 760 mm measured perpendicular to the side shell.
- (11) Secondary Means of pressure/vacuum relief for Controlled Tank Venting System for small chemical bulker
  - For ships carrying dangerous chemicals in bulk less than 500 *gross tonnage* which had been at beginning stage of construction before 1 July 2002, a survey is to be carried out for verification of the compliance with the requirements of **8.2.3**, **Part S of the Rules** by the date of 1 January 2007.

#### **B4** INTERMEDIATE SURVEYS

## **B4.3** Intermediate Surveys for Machinery

#### **B4.3.1** General Examinations

Sub-paragraph -2 has been amended as follows.

2 The wording "hazardous areas" in the item No.2 of Requirements for Tankers in **Table B4.5**, **Part B of the Rules** means the hazardous areas specified in **4.2.3-1**, **-4** and **-5**, **Part H of the Rules**.

## **B4.4** Special Requirements for Ships Carrying Liquefied Gases in Bulk

#### **B4.4.2** Examinations

Sub-paragraph -2 has been amended as follows.

2 The wording "hazardous areas" in the item No.3 in **Table B4.6**, **Part B of the Rules** means the hazardous areas specified in **4.2.3-3**, **-4** and **-5**, **Part H of the Rules**.

## **B4.5** Special Requirements for Ships Carrying Dangerous Chemicals in Bulk

#### **B4.5.2** Examinations

Sub-paragraph -1 has been amended as follows.

1 The wording "hazardous areas" in the item No.1 in **Table B4.7**, **Part B of the Rules** means the hazardous areas specified in **4.2.3-2**, **-4** and **-5**, **Part H of the Rules**.

#### **B5** SPECIAL SURVEYS

## **B5.3** Special Surveys for Machinery

#### **B5.3.1** General Examinations

Sub-paragraph -2 has been amended as follows.

2 The wording "hazardous areas" in the item No.2 of Requirements for Tankers in **Table B5.25**, **Part B of the Rules** means the hazardous areas specified in **4.2.3-1**, **-4** and **-5**, **Part H of the Rules**.

Section B5.4 and B5.5 have been added.

## **B5.4** Special Requirements for Ships Carrying Liquefied Gases in Bulk

#### **B5.4.2** Examinations

The wording "hazardous areas" in the item No.6 in **Table B5.27**, **Part B of the Rules** means the hazardous areas specified in **4.2.3-3**, **-4** and **-5**, **Part H of the Rules**.

## **B5.5** Special Requirements for Ships Carrying Dangerous Chemicals in Bulk

#### **B5.5.2** Examinations

The wording "hazardous areas" in the item No.5 in **Table B5.28**, **Part B of the Rules** means the hazardous areas specified in **4.2.3-2**, **-4** and **-5**, **Part H of the Rules**.

#### EFFECTIVE DATE AND APPLICATION (Amendment 3-2)

**1.** The effective date of the amendments is 1 January 2007.

#### Amendment 3-3

#### **B1 GENERAL**

#### **B1.1** Surveys

#### **B1.1.5** Postponement of Special Surveys

Sub-paragraph (2)(c) has been newly added as follows.

- (c) Postponement of the Boiler surveys specified in **1.1.5-2 of the Rules** are to be approved by the Society after the following is satisfactorily carried out.
  - i) External examination
  - ii) Operation test of the relieving gear of the safety valve or the relief valve
  - iii) Operation tests for the safety devices, alarm devices and pressure indicators
  - iv) Review of the following records since the last Boiler Survey
    - 1) Operation
    - 2) Maintenance
    - 3) Repair history
    - 4) Quality control of the feed water or thermal oil

#### **B1.4** Preparation for Survey and Others

#### **B1.4.2** Preparation for Surveys

Sub-paragraph -9 has been renumbered to -10. Sub-paragraph -9 has been newly added as follows.

- 9 For Bulk Carriers specified in 1.3.1(13), Part B of the Rules, "provisions of an easy and safe access" referred to in 1.4.2-1, Part B of the Rules are as specified in (1) through (3).
  - (1) For close-up surveys of the hull structure, other than cargo hold shell frames:
    - (a) Permanent staging and passages through structures
    - (b) Temporary staging and passages through structures
    - (c) Lifts and movable platforms
    - (d) Boats or rafts provided the structural capacity of the tank is sufficient to withstand static loads at all levels of water
    - (e) Portable ladders
    - (f) Other equivalent means
  - (2) For close-up surveys of the cargo hold shell frames of bulk carriers less than 100,000DWT:
    - (a) Permanent staging and passages through structures
    - (b) Temporary staging and passages through structures
    - (c) Portable ladder restricted to not more than 5m in length may be accepted for surveys of lower section of a shell frame including bracket

- (d) Hydraulic arm vehicles such as conventional cherry pickers, lifts and movable platforms
- (e) Boats or rafts provided the structural capacity of the hold is sufficient to withstand static loads at all levels of water
- (f) Other equivalent means
- (3) For close-up surveys of the cargo hold shell frames of bulk carriers of 100,000DWT or more:
  - (a) For Annual surveys, Intermediate surveys under 10 years of age and Special survey No.1:
    - i) Permanent staging and passages through structures
    - ii) Temporary staging and passages through structures
    - iii) Hydraulic arm vehicles such as conventional cherry pickers, lifts and movable platforms
    - iv) Boats or rafts provided the structural capacity of the hold is sufficient to withstand static loads at all levels of water
    - v) Other equivalent means

Notwithstanding the above, the use of a portable ladder fitted with a mechanical device to secure the upper end of the ladder is acceptable for the close-up survey of side frames at Annual surveys. However, it is not acceptable for the close-up survey of suspect area identified at the previous survey or the ongoing survey.

- (b) For Subsequent Intermediate Surveys and Special surveys:
  - i) Permanent staging and passages through structures
  - ii) Temporary staging and passages through structures
  - iii) Hydraulic arm vehicles such as conventional cherry pickers for surveys of lower and middle part of side frames
  - iv) Lifts and movable platforms
  - v) Boats or rafts provided the structural capacity of the hold is sufficient to withstand static loads at all levels of water
  - vi) Other equivalent means

## **B5** SPECIAL SURVEYS

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

## **B5.2.6** Thickness Measurements

Sub-paragraph -6 has been deleted.

## EFFECTIVE DATE AND APPLICATION (Amendment 3-3)

- 1. The effective date of the amendments is 1 January 2007.
- 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.