

# **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**

**2007**

**AMENDMENT NO.1**

**Guidance for the Survey and Construction of Steel Ships**

**Part B**

**2007**

**AMENDMENT NO.1**

Rule No.12 / Notice No.10      1st February 2007

Resolved by Technical Committee on 17th November 2006

Approved by Board of Directors on 19th December 2006

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# **RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS**

**RULES**

**Part B**

**Class Surveys**

## **2007      AMENDMENT NO.1**

Rule No.12      1st February 2007

Resolved by Technical Committee on 17th November 2006

Approved by Board of Directors on 19th December 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 1-1**

## **Chapter 1 GENERAL**

### **1.3 Definitions**

#### **1.3.1 Terms**

Sub-paragraph (6) has been amended as follows.

- (6) “Substantial corrosion” is an extent of corrosion such that assessment of corrosion pattern indicates a wastage in excess of 75% of allowable margins, but within acceptable limits. Notwithstanding the above, for the following (a) to (c), “substantial corrosion” is an extent of corrosion such that the assessment of the corrosion pattern indicates a gauged (or measured) thickness between the thickness obtained by adding 0.5(*mm*) to the renewal thickness and the renewal thickness.
- (a) For ships complying with the provisions of **Part CSR-B** and **Part CSR-T**.
  - (b) For hatch covers and hatch coamings for cargo holds of the ships stipulated otherwise by the Society.
  - (c) For transverse watertight bulkheads in cargo hold complying with the provision of **Chapter 31A, Part C** or **Chapter 31B, Part C**.

## Chapter 5 SPECIAL SURVEYS

### 5.2 Special Surveys for Hull, Equipment, Fire extinction and Fittings

#### 5.2.6 Thickness Measurements

Table B5.15 has been amended as follows.

**Table B5.15 Requirements of Thickness Measurements for Bulk Carriers**

Special Surveys	Structural members and so forth subject to thickness measurement
Special Survey for ships up to 5 years of age (Special Survey No.1)	<ol style="list-style-type: none"> <li>1. Suspect area</li> <li>2. At least following structural members for general assessment and recording of corrosion pattern               <ol style="list-style-type: none"> <li>(1) Lower parts of webs and lower end brackets of each three hold frames at a fore/middle/aft part of both sides in each cargo hold of single side skin</li> <li>(2) At least one plate of lowest strake of each transverse bulkhead</li> <li>(3) Other structural members subject to close-up survey</li> </ol> </li> </ol>
Special Survey for ships over 5 years and up to 10 years of age (Special Survey No.2)	<ol style="list-style-type: none"> <li>1. Suspect area</li> <li>2. Structural members within the cargo length area:               <ol style="list-style-type: none"> <li>(1) Two transverse sections of deck plating, outside line of cargo hatch openings</li> <li>(2) All deck plating, where log cargoes or other cargoes being prone to accelerate corrosion are loaded</li> </ol> </li> <li>3. At least following structural members for general assessment and recording of corrosion pattern:               <ol style="list-style-type: none"> <li>(1) All shell frames including their end brackets in the forward cargo hold of single side skin</li> <li>(2) Sufficient number (at least 1/4 of total number for ships less than 100,000DWT, at least 1/2 of total number for ships of 100,000DWT or more) of shell frames including their end brackets at a fore/middle/aft part of both sides in each remaining cargo hold of single side skin</li> <li>(3) Other structural members subject to close-up survey</li> </ol> </li> <li>4. Wind and water strakes in way of the transverse sections considered under the above 2.(1)</li> <li>5. Selected wind and water strakes outside the cargo length area</li> </ol>
Special Survey for ships over 10 years and up to 15 years of age (Special Survey No.3)	<ol style="list-style-type: none"> <li>1. Suspect area</li> <li>2. Structural members within the cargo length area:               <ol style="list-style-type: none"> <li>(1) Each deck plating outside line of cargo hatch openings</li> <li>(2) Two transverse sections, one in the amidship area, outside line of cargo hatch openings</li> </ol> </li> <li>3. At least following structural members for general assessment and recording of corrosion pattern:               <ol style="list-style-type: none"> <li>(1) All shell frames including their end brackets in the forward and one other selected cargo hold of single side skin</li> <li>(2) Sufficient number (at least 1/2 of total number) of shell frames including their end brackets at a fore/middle/aft part of both sides in</li> </ol> </li> </ol>

	<p>each remaining cargo hold of single side skin</p> <p>(3) Other structural members subject to close-up survey</p> <p>4. Internals in fore and aft. peak tank</p> <p>5. All wind and water strakes within the cargo length area</p> <p>6. Selected wind and water strakes outside the cargo length area</p>
<p>Special Survey for ships over 15 years of age (Special Survey No.4 and subsequent Special Surveys)</p>	<p>1. Suspect area</p> <p>2. Structural members within the cargo length area:</p> <p>(1) Each deck plating outside line of cargo hatch openings</p> <p>(2) Three transverse sections, one in the amidship area, outside line of cargo hatch openings</p> <p>(3) Each bottom plate</p> <p>3. At least following structural members for general assessment and recording of corrosion pattern:</p> <p>(1) All shell frames including their end brackets in all cargo holds of single side skin</p> <p>(2) Other structural members subject to close-up survey</p> <p>4. Internals in fore and after peak tanks</p> <p>5. All exposed main deck plating outside the cargo length area</p> <p>6. Representative exposed superstructure deck plating (poop, bridge and forecastle deck)</p> <p>7. All keel plates full length. Also, additional bottom plates in way of cofferdams, machinery space, and aft end of tanks</p> <p>8. Plating of sea chests. Shell plating in way of overboard discharges as deemed necessary by the Surveyor</p> <p>9. All wind and water strakes</p>

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

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

## **Chapter 8 PROPELLER SHAFT AND STERN TUBE SHAFT SURVEYS**

In Table B8.1, Examinations of Items 1(3) has been amended as follows;

(3) for shafts having coupling flange at the after end	The flange fillet and coupling bolts are to be examined by an efficient crack detection method. However, the crack detection examination may be dispensed with, provided that the Surveyor is satisfied with the condition of them after an external examination
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### **EFFECTIVE DATE AND APPLICATION (Amendment 1-2)**

1. The effective date of the amendments is 1 July 2007.
2. Notwithstanding the amendments to the Rules, 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 Rules may apply to the surveys for which the application is submitted to the Society before the effective date upon request by the owner.

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# **GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS**

**Part B**

**Class Surveys**

**GUIDANCE**

**2007      AMENDMENT NO.1**

Notice No.10      1st February 2007

Resolved by Technical Committee on 17th November 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

### B1 GENERAL

#### B1.3 Definition

##### B1.3.1 Terms

Sub-paragraphs 3 and 4 have been newly added as follows.

3 The wording “hatch covers and hatch coamings for cargo holds of the ships stipulated otherwise by the Society” in **1.3.1(6)(b), Part B of the Rules** means as specified in the following (1) to (4).

- (1) Hatch covers located forward of  $0.25 L_1$  from the forward end of  $L_1$  of bulk carriers of  $150m$  and above in length for freeboard which are contracted for construction on and after 1 July 1998, and which are at a beginning stage of construction prior to 1 January 2005. In this case, renewal thickness ( $t_{\text{renewal}}$ ) is given by the following formula. If the thickness for voluntary addition is included in the as built thicknesses, the value may be at the discretion of the Society.  $L_1$  means the length of ship specified in **2.1.2, Part A** or  $0.97$  times the length of ship on the designed maximum load line, whichever is smaller ( $m$ ).

$$t_{\text{renewal}} = t_{\text{as-built}} - t_c + 0.5 \text{ (mm)}$$

$t_{\text{as-built}}$  : as built thickness ( $mm$ )

$t_c$  : Corrosion addition specified in **Table B1.3.1.-1 (a)**

**Table B1.3.1.-1 (a)**

		Corrosion addition $t_c$ ( $mm$ )	
Steel Hatch Cover	Type of structure	For the top, side and bottom plating	For the internal structures
	Single plating type	2.0	
	Double plating type	2.0	1.5

- (2) Hatch covers and hatch coamings for bulk carriers which are at a beginning stage of construction on and after 1 January 2005 and not complying with the provisions of **Part CSR-B**, and ships other than bulk carries which are at a beginnig stage of construction on and after 1 January 2005 and ships for which application for Classification Survey during

Construction is submitted to the Society prior to 10 June 2005. In this case, renewal thickness ( $t_{\text{renewal}}$ ) is given by the following formula. If the thickness for voluntary addition is included in the as built thicknesses, the value may be at the discretion of the Society.

$$t_{\text{renewal}} = t_{\text{as-built}} - t_c + 0.5 \text{ (mm)}$$

$t_{\text{as-built}}$  : as built thickness (mm)

$t_c$  : Corrosion addition specified in **Table B1.3.1.-1 (b)**

**Table B1.3.1.-1 (b)**

		Corrosion addition $t_c$ (mm)	
Steel Hatch Cover	Type of structure	For the top, side and bottom plating	For the internal structures
	Single plating type	2.0	
	Double plating type	2.0	1.5
Hatch Coaming		1.5	

- (3) Hatch covers and hatch coamings for ships other than bulk carriers for which application for Classification Survey during Construction is submitted to the Society on and after 10 June 2005. In this case, renewal thickness ( $t_{\text{renewal}}$ ) is given by the following formula. If the thickness for voluntary addition is included in the as built thicknesses, the value may be at the discretion of the Society.

$$t_{\text{renewal}} = t_{\text{as-built}} - t_c + 0.5 \text{ (mm)}$$

$t_{\text{as-built}}$  : as built thickness (mm)

$t_c$ : Corrosion addition specified in **Table B1.3.1.-1. (c)**

In case of corrosion addition  $t_c$  is 1.0 (mm), renewal thickness may be given by the formula of  $t_{\text{renewal}} = t_{\text{as-built}} - t_c$  (mm)

**Table B1.3.1.-1 (c)**

		Corrosion addition $t_c$ (mm)	
Steel Hatch Cover	Type of structure	For the top, side and bottom plating	For the internal structures
	Single plating type	2.0(*1)	
	Double plating type	1.5(*1)	1.0
Hatch Coaming		1.5	

(\*1) for the steel hatch covers in way of cellular cargo holds : 1.0(mm)

- (4) Hatch covers and hatch coamings for ships for ships which application for Classification Survey during Construction is submitted to the Society on and after 1 July 2007. In this case, renewal thickness ( $t_{\text{renewal}}$ ) is given by the value indicated in the structural drawings in accordance with the requirements in **20.1.3, Part C of the Rule** and **19.1.3, Part CS of the Rules**.

**4** For transverse watertight bulkheads in cargo hold complying with the provision of **Chapter 31A, specified in 1.3.1(6)(c), Part B of the Rule**, renewal thickness is given by the following **(1)** and **(2)**.

- (1) For ships which application for Classification Survey during Construction is submitted to the Society prior to 1 July 2007, renewal thickness ( $t_{\text{renewal}}$ ) is given by the following formula. If the thickness for voluntary addition is included in the as built thicknesses, the value may be at the discretion of the Society.

$$t_{\text{renewal}} = t_{\text{as-built}} - 3.0 \text{ (mm)}$$

$t_{\text{as-built}}$  : as built thickness (mm)

- (2) For ships which application for Classification Survey during Construction is submitted to the Society on and after 1 July 2007, renewal thickness ( $t_{\text{renewal}}$ ) is given by the value indicated in the structural drawings in accordance with the requirements in **31A.3.6, Part C of the Rule**.

#### EFFECTIVE DATE AND APPLICATION

- 1.** The effective date of the amendments is 1 July 2007.
- 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.