RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

Part A

General Rules

2015 AMENDMENT NO.3

Rule No.6325th December 2015Resolved by Technical Committee on 28th July 2015 / 19th November 2015Approved by Board of Directors on 14th September 2015 / 14th December 2015

Rule No.63 25th December 2015 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 AGENERAL RULES

Amendment 3-1

Chapter 1 GENERAL

1.1 Application of These Rules

1.1.2 Special consideration for the application to Bulk Carriers and Oil Tankers

Sub-paragraph -6 has been added as follows.

1 Bulk carriers with unrestricted international navigation, having length of 90 *m* or above and contracted for construction on or after 1 April 2006 but before 1 July 2015, are to comply with **Part CSR-B**. Issues other than those specified in **Part CSR-B** are to comply with the provisions of other Parts of the Rules, with appropriate consideration to related provisions of **Part CSR-B**.

2 Double hull oil tankers with unrestricted international navigation, having length of 150 *m* or above and contracted for construction on or after 1 April 2006 but before 1 July 2015, are to comply with **Part CSR-T**. Issues other than those specified in **Part CSR-T** are to comply with the provisions of other Parts of the Rules, with appropriate consideration to related provisions of **Part CSR-T**.

- **3** For the provisions of **-1** and **-2** above, the following definitions are to apply.
- (1) Length of ship is the distance, in *metres*, measured on the summer load waterline, from the forward side of the stem to the after side of the rudder post, or to the centre of the rudder stock where there is no rudder post. This length is to be not less than 96% and need not exceed 97% of the extreme length on the summer load waterline.
- (2) Bulk carrier means a sea going self-propelled ship which is constructed generally with single deck, double bottom, hopper side tanks and topside tanks, and with single or double side skin construction in cargo length area; and intended primarily to carry dry cargoes in bulk, excluding ore carriers and combination carriers. Ships which have at least one cargo hold constructed with hopper tanks and topside tanks as

Ships which have at least one cargo hold constructed with hopper tanks and topside tanks as specified in above, apply **Part CSR-B**. In this case, the structural strength of members in holds constructed without hopper tank and/or topside tank is to comply with the strength criteria specified in **Part CSR-B**.

(3) Oil tanker means a ship constructed or adapted primarily to carry oil in bulk in its cargo spaces and including combination carriers and any chemical tanker when it is carrying a cargo or part cargo of oil in bulk. Double hull oil tanker means an oil tanker which has the cargo tanks protected by a double hull which extends for the entire length of the cargo area, consisting of double sides and double bottom spaces. **4** Bulk carriers having length of 90 *m* or above and double hull oil tankers having length of 150 *m* or above, which are self-propelled ships with unrestricted international navigation and contracted for construction on or after 1 July 2015, are to comply with **Part CSR-B&T**. Issues other than those specified in **Part CSR-B&T** are to comply with the provisions of other Parts of the Rules, with appropriate consideration being given to related provisions of **Part CSR-B&T**.

- 5 For the provisions of -4 above, the following definitions are to apply.
- (1) Length of ship is as defined in 3.1.1, Section 4, Chapter 1, Part 1 of Part CSR-B&T
- (2) Bulk carrier means a ship which is constructed generally with single deck, double bottom, hopper side tanks and topside tanks, and with single or double side skin construction in cargo hold region and intended primarily to carry dry cargoes in bulk.

Ships which have at least one cargo hold constructed with hopper tanks and topside tanks as specified in above, apply **Part CSR-B&T**. In this case, the structural strength of members in holds constructed without hopper tank and/or topside tank is to comply with the strength criteria specified in **Part CSR-B&T**.

However, the following ship types are not required to apply Part CSR-B&T:

- Ore carriers
- Combination carrier
- Woodchip carrier
- Cement, fly ash and sugar carriers provided that loading and unloading is not carried out by grabs heavier than 10 *tons*, power shovels and other means which may damage cargo hold structure
- Ships with inner bottom construction adapted for self-unloading.
- (3) Oil tanker means a ship constructed or adapted primarily to carry oil in bulk in its cargo spaces and including combination carriers and any chemical tanker when it is carrying a cargo or part cargo of oil in bulk. Double hull oil tanker means an oil tanker which has the cargo tanks protected by a double hull which extends for the entire length of the cargo area, consisting of double sides and double bottom spaces.

6 Notwithstanding the provisions of -4 above, Bulk carriers having length of 90 *m* or above which are self-propelled ships with unrestricted international navigation and contracted for construction on or after 1 July 2015 but before 30 June 2016, are to comply with **Part CSR-B&T** and **Section 1**, **Chapter 10**, **Part CSR-B**. Issues other than those specified in **Part CSR-B&T** and **Section 1**, **Chapter 10**, **Part CSR-B** are to comply with the provisions of other Parts of the Rules, with appropriate consideration being given to related provisions of **Part CSR-B&T** and **Section 1**, **Chapter 10**, **Part CSR-B**. Furthermore, the above application is to be in accordance with the definitions specified -5 above.

EFFECTIVE DATE AND APPLICATION (Amendment 3-1)

1. The effective date of the amendments is 25 December 2015.

Amendment 3-2

Chapter 1 GENERAL

1.2 Class Notations

1.2.1 General

Sub-paragraph -2 has been amended as follows.

2 For bulk carriers subject to the application of **Part CSR-B** or **Part CSR-B&T** as required in the provisions of **1.1.2**, notations related to hull construction and equipment are affixed to the Classification Characters in accordance with the provisions in **Part CSR-B** or **Part CSR-B&T** respectively, substituting for the provisions of **1.2.4-6** and $-\frac{2922}{2}$. In this case, the notation of "*CSR*" is affixed at the head of the related notations (e.g. *CSR*, *BC-A*).

1.2.4 Hull Construction and Equipment

Sub-paragraph -17 has been amended as follows.

17 For ships equipped for the carriage of motor vehicles with fuel in their tanks <u>for their own</u> <u>propulsion</u> in accordance with the provisions of **Chapter 20**, **Part R** and **4.8.1**, **Part H**, the notation of "*Equipped for Carriage of Vehicles*" (abbreviated to $EQ \ C \ V$) is affixed to the Classification Characters.

Sub-paragraphs -18 to -25 have been renumbered to Sub-paragraphs -20 to -27, and Sub-paragraphs -18 and -19 have been added as follows.

18 For vehicle carriers, as defined in **3.2.54**, **Part R**, equipped for the carriage of motor vehicles with compressed natural gas in their tanks for their own propulsion in accordance with the provisions of **Chapter 20A**, **Part R** and **4.8.2**, **Part H**, the notation of "*Equipped for Carriage of Compressed Natural Gas Powered Motor Vehicles*" (abbreviated to *EQ C CNGPMV*) is affixed to the Classification Characters.

19 For vehicle carriers, as defined in **3.2.54**, **Part R**, equipped for the carriage of motor vehicles with compressed hydrogen in their tanks for their own propulsion in accordance with the provisions of **Chapter 20A**, **Part R** and **4.8.3**, **Part H**, the notation of "*Equipped for Carriage of Compressed Hydrogen Powered Motor Vehicles*" (abbreviated to *EQ C CHPMV*) is affixed to the Classification Characters.

EFFECTIVE DATE AND APPLICATION (Amendment 3-2)

- **1.** The effective date of the amendments is 1 January 2016.
- 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 1 GENERAL

1.2 Class Notations

1.2.7 Application of Special Survey Scheme

Sub-paragraph -3 has been amended as follows.

3 For ships for which surveys based on the preventive maintenance system are carried out on the propeller shaft in accordance with the provisions of **8.1.3**, **Part B**, **t**<u>T</u>he notation of "*Propeller Shaft Condition Monitoring System*" (abbreviated to *PSCM*) is affixed to the \bigcirc classification \bigcirc characters of ships whose propeller shafts surveys are carried out based upon the preventive maintenance system specified in the provisions of **8.1.3(1)**, **Part B**.

Sub-paragraphs -4 to -6 have been added as follows.

4 The notation "*Propeller Shaft Condition Monitoring System* $\cdot A$ " (abbreviated as *PSCM* $\cdot A$) is affixed to the classification characters of ships whose propeller shafts surveys are carried out based upon the preventive maintenance system specified in the provisions of **8.1.3(2)**, **Part B**.

5 The notation "Alternative Propeller Shaft Survey \cdot Oil" (abbreviated as APSS \cdot O) is affixed to the classification characters of ships having oil lubricated stern tube bearings (excluding those affixed with the notation "PSCM" or "PSCM \cdot A") whose propeller shaft surveys use the alternative survey methods specified in **1.1.3-1(6)(h)**, **Part B**.

6 The notation of "Alternative Propeller Shaft Survey · Water" (abbreviated as $APSS \cdot W$) is affixed to the classification characters, of ships having freshwater lubricated stern tube bearings utilising inboard freshwater (excluding those affixed with the notation "PSCM" or "PSCM · A") whose propeller shaft surveys use the alternative surveys methods specified in 1.1.3-1(6)(h), Part B.

Chapter 2 DEFINITIONS

2.1 Application and Definitions

Paragraph 2.1.25 has been amended as follows.

2.1.25 Propeller Shaft Kind 1 and Propeller Shaft Kind 2

1 Propeller shaft Kind 1 is a propeller shaft which is effectively protected against corrosion by <u>water (sea water, outboard freshwater and inboard freshwater)</u> with a means approved by the Society or which is made of corrosion resistant materials approved by the Society. Of these The shafts which comply with the following (1), (2), (3) or (3)(4) are categorized respectively as in propeller shaft Kind 1A, propeller shaft Kind 1B, and propeller shaft Kind 1C or propeller shaft Kind 1W.

- (1) Propeller shaft Kind 1*A* is a propeller shaft<u>, at the after end</u>, with/without a keyed propeller attachment (hereinafter referred to "keyed connection"), with a keyless propeller attachment (hereinafter referred to "keyless connection") or with a coupling flange (hereinafter referred to "flanged connection") at the after end; to which a seawater-lubricated stern tube bearing (includinges shaft bracket bearing for all references to the water-lubricated stern tube bearing, hereinafter the same in this Chapter) or stern tube bearing, utilising outboard freshwater, is attached.
- (2) Propeller shaft Kind 1B is a propeller shaft of keyed connection, keyless connection or flanged connection with/without a keyed propeller attachment or with a coupling flange at the after end; to which an oil-lubricated stern tube bearing is attached except for the shafts complying with (3).
- (3) Propeller shaft Kind 1*C* is a propeller shaft satisfying the conditions in (2) and the requirements in 6.2.11, Part D.
- (4) Propeller shaft Kind 1W is a propeller shaft of keyed connection, keyless connection or flanged connection; to which a freshwater lubricated stern tube bearing, utilising inboard freshwater, is attached.
- 2 Propeller shaft Kind 2 is a propeller shaft other than those specified in -1.

Paragraph 2.1.27 has been amended as follows.

2.1.27 Stern Tube Shaft Kind 1 and Stern Tube Shaft Kind 2

1 Stern tube shaft Kind 1 is a stern tube shaft which is effectively protected against corrosion by sea water with a means approved by the Society or which is made of corrosion resistant materials approved by the Society. Of (1) corectly (2) or (3) the water-lubricated bearing is adopted are categorized respectively as in stern tube shaft Kind 1A and such shafts to which the oil-lubricated bearing is adopted are categorized are categorized in tube shaft Kind 1B or stern tube shaft Kind 1W:

- (1) Stern tube shafts to which a seawater lubricated stern tube bearing or freshwater lubricated stern tube bearing, utilising outboard freshwater, is adopted;
- (2) Stern tube shafts to which an oil lubricated stern tube bearing is adopted; or
- (3) Stern tube shafts to which a freshwater lubricated stern tube bearing, utilising inboard freshwater, is adopted.
- 2 Stern tube shaft Kind 2 is a stern tube shaft other than those specified in -1.

EFFECTIVE DATE AND APPLICATION (Amendment 3-3)

- 1. The effective date of the amendments is 1 January 2016.
- 2. Notwithstanding the amendments to the Rules, the current requirements apply to ships other than ships the delivery of which is on or after 1 January 2016 (hereinafter, referred to as "existing ships") until the first propeller shaft and stern tube shaft survey scheduled on or after 1 January 2016.
- 3. Notwithstanding the provision of preceding 2., the amendments to the Rules may apply to existing ships upon request by the owner.

Amendment 3-4

Chapter 1 GENERAL

1.2 Class Notations

Paragraph 1.2.6 has been amended as follows.

1.2.6 Application of Hull Structural Analysis

The class notations indicated below in (1) to (3)(4) are added to classification characters, for ships that have had direct strength analysis and/or fatigue strength assessment carried out in a way approved by the Society for determining its structural scantlings or structural details.

 Where structural scantlings are determined by direct strength analysis in accordance with 1.1.22, Part C, and the yielding strength assessment and buckling strength assessment are carried out using scantlings obtained by subtracting the deduction amount due to corrosion during service voyages;

(PS-DA) = (PrimeShip - Direct Assessment)

(2) Where the fatigue strength assessment of structural details that are deemed necessary to assess by the Society are carried out in accordance with **1.1.23**, **Part C**;

(PS-FA) = (PrimeShip - Fatigue Assessment)

(3) Where structural scantlings and structural details are determined in accordance with **1.1.23-4**, **Part C**, and the yielding strength assessment, the buckling strength assessment and comprehensive fatigue strength assessment are carried out using design loads obtained by direct load analysis and scantlings obtained by subtracting the deduction amount due to corrosion during service voyages;

(PS-TA) = (PrimeShip - Total Assessment)

(4) Where the yielding strength assessment and buckling strength assessment are carried out in accordance with **32.9**, **Part C**;

(PS-DA-CNC) = (PrimeShip - Direct Assessment - Container Carrier)

EFFECTIVE DATE AND APPLICATION (Amendment 3-4)

- **1.** The effective date of the amendments is 1 April 2016.
- 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.

GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

Part A

General Rules

2015 AMENDMENT NO.2

Notice No.8225th December 2015Resolved by Technical Committee on 28th July 2015

Notice No.82 25th December 2015 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 A GENERAL RULES

A1 GENERAL

A1.2 Class Notations

A1.2.4 Hull Construction and Equipment

Sub-paragraphs -2 and -9 have been amended as follows.

2 For ships complying with the provisions of 1.2.4-1, -2, -3, and $-\frac{23}{25}$, Part A of the Rules that are designed for the carriage of specific cargoes, the details are to be entered as descriptive notes in the Classification Register for the ship.

9 For ships complying with the provisions of **1.2.4-7** and **1.2.4-<u>2922</u>**, **Part A of the Rules**, the notation "*GRAB*" is to be affixed as in the following example: "*BC-XII*, *GRAB*"

EFFECTIVE DATE AND APPLICATION

- **1.** The effective date of the amendments is 1 January 2016.
- 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.