
RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

Part C

Hull Construction and Equipment

RULES

2006 AMENDMENT NO.4

Rule No.55 3rd October 2006

Resolved by Technical Committee on 6th July 2006

Approved by Board of Directors on 25th July 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 C HULL CONSTRUCTION AND EQUIPMENT

Amendment 4-1

Chapter 35 MEANS OF ACCESS

35.2 Special Requirements for Oil Tankers and Bulk Carriers

35.2.3 Means of Access to Spaces

Sub-paragraph -3 has been amended as follows.

- 3** The uppermost entrance section from deck of the ladder providing access to a tank and a cofferdam is to be vertical not less than 2.5 *m* but not exceed 3.0 *m* measured clear of the overhead obstructions in way of tank entrance, and to comprise a ladder linking platform which is to be displaced to one side of a vertical ladder. However, the uppermost section of the vertical ladder may be reduced to 1.6 *m* below the deck head, if the vertical ladder lands on a longitudinal or athwartship permanent means of access fitted within 1.6 *m* and 3 *m* below the deck head.

Sub-paragraphs -4(2), (4) and (5) have been amended as follows.

- (2) Where as specified in **(1)** above, for ladders not required to be of inclined ladder, vertical ladder may be used. In such a case where the vertical distance is more than 6 *m*, vertical ladders are to comprise one or more ladder linking platforms spaced, in general, not more than 6 *m* apart vertically and displaced to one side of the ladder. The uppermost entrance section from deck of the ladder is to be in accordance with the provisions of **-3** above.
- (4) In double hull spaces of less than 2.5 *m* width, the access to the space may be by means of vertical ladders that comprise of one or more ladder linking platforms spaced, in general, not more than 6 *m* apart vertically and displaced to one side of the ladder. Adjacent sections of ladder are to be laterally offset from each other by at least the width of the ladder. The uppermost entrance section from deck of the ladder is to be in accordance with the provisions of **-3** above.
- (5) Access from deck to a double bottom space may be by means of vertical ladders through a trunk. The vertical distance from deck to a resting platform, between resting platforms or a resting platform and the tank bottom is, in general, not be more than 6 *m* unless otherwise approved by the Society.

EFFECTIVE DATE AND APPLICATION (Amendment 4-1)

1. The effective date of the amendments is 3 October 2006.

Chapter 6 DOUBLE BOTTOMS

6.1 General

6.1.1 Application

Sub-paragraph -7 has been amended as follows.

- 7 Double bottom structure of hold is to be subjected to special consideration when the hold is intended to carry heavy cargoes, where the ratio of cargo weight per unit area (kN/m^2) of the inner bottom plating to d is less than 5.40 or where cargo loads can not be treated as even distributed loads. Where the value of cargo weight per unit area is given in t/m^2 , the value in kN/m^2 should be obtained from the product of the value in t/m^2 and 9.81.

Chapter 10 BEAMS

Section 10.10 has been newly added as follows.

10.10 Beams on Deck carrying Unusual Cargoes

10.10.1 Section Modulus of Beams

The section modulus of beams on deck subjected to cargo loads which can not be treated as even distributed loads is to be determined taking account of load distribution for particular cargoes.

Chapter 11 PILLARS

11.2 Scantlings

11.2.2 Deck Load supported by Pillar

Sub-paragraph -4 has been added as follows.

- 4 Where a deck carrying cargoes which loads can not be treated as even distributed loads, deck load supported by a pillar is to be determined taking account of load distribution for particular cargoes. Where cargo loads can be treated as concentrated loads acting on specific points, the provisions of -1 and -2 above may be applied so that such concentrated loads are treated as deck loads supported by the upper tween deck pillar (w_0).

Chapter 12 DECK GIRDERS

12.2 Longitudinal Deck Girders

12.2.1 Section Modulus of Girders

Sub-paragraph -4 has been added as follows.

- 4 Where a deck carrying cargoes which loads can not be treated as even distributed loads, deck load supported by a pillar is to be determined taking account of load distribution for particular cargoes. Where cargo loads can be treated as concentrated loads acting on specific points, the provisions of -1 to -3 above may be applied so that such concentrated loads are treated as deck loads supported by the upper tween deck pillar (w).

12.3 Transverse Deck Girders

12.3.1 Section Modulus of Girders

Existing text has been numbered to sub-paragraph -1, and Sub-paragraph -2 has been added as follows.

- 2 Where a deck carrying cargoes which loads can not be treated as even distributed loads, deck load supported by a pillar is to be determined taking account of load distribution for particular cargoes. Where cargo loads can be treated as concentrated loads acting on specific points, the provisions of -1 above may be applied so that such concentrated loads are treated as deck loads supported by the upper tween deck pillar (w).

Chapter 17 DECKS

17.3 Deck Plating

Paragraph 17.3.6 has been amended as follows.

17.3.6 Deck Plating carrying Unusual Cargoes

The thickness of deck plating subjected to cargo loads which can not be treated as even distributed loads is to be determined taking account of load distribution for particular cargoes.

Chapter 32 CONTAINER CARRIERS

32.3 Double Bottom Construction

32.3.1 General

Sub-paragraph -1 has been amended as follows.

- 1 The construction of double bottom in holds which are exclusively loaded with containers is to be in accordance with the requirements in **32.3**. Unless otherwise specified in **32.3**, such construction is also to be in accordance with the requirements in **Chapter 6**.

EFFECTIVE DATE AND APPLICATION (Amendment 4-2)

1. The effective date of the amendments is 3 October 2006.
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 27 EQUIPMENT

27.1 Anchors, Chain Cables and Ropes

27.1.2 Equipment Numbers

Sub-paragraph -1(2) has been amended as follows:

(2) A is the value obtained from the following formula :

$$fL_1 + \Sigma h''l$$

f : Value specified in (1).

L_1 : Length of ship specified in 15.2.1-1. (m)

$\Sigma h''l$: Summing up of the products of the height h'' (m) and length l (m) of superstructures, deckhouses or trunks which are located above the uppermost continuous deck within the L_1 and also have a breadth greater than $B/4$ and a height greater than 1.5 m .

Section 27.2 has been amended as follows:

27.2 Towing and Mooring Fittings

27.2.1 General

- 1 The requirements in this 27.2 apply to shipboard fittings used for the normal towing and the normal mooring (hereinafter referred to as ‘towing fittings’ and ‘mooring fittings’ in this 27.2), and their supporting hull structures (hereinafter referred to as ‘supporting structures’ in this 27.2).
- 2 Ships are to be adequately provided with towing and mooring fittings.
- 3 The scantlings of supporting structures are to be built at least with the gross scantlings obtained by adding the corrosion addition specified in 27.2.2.-5 and 27.2.3.-5 to the net scantlings obtained by applying the criteria specified in this section.
- 4 The scantlings of supporting structures are to be in accordance with the relevant chapters or sections in addition to this section.

27.2.2 Towing Fittings

1 Arrangement of Towing Fittings

- (1) Towing fittings are to be located on longitudinals, beams or girders, which are parts of the deck construction so as to facilitate efficient distribution of the towing load.
- (2) When the towing fittings can not be located as specified in (1), towing fittings are to be arranged on the reinforced members.

2 Design Load

Design load for towing fittings and their supporting structures (hereinafter referred to as “design load on fitting” (see Fig.C27.1) in this paragraph) are to be specified in (1) to (6) as below:

- (1) For normal towing operations (e.g. harbour/manouvring), design load on line (see **Fig.C27.1**) is to be 1.25 times the intended maximum towing load.
- (2) For other towing service (e.g. escort), design load on line (see **Fig.C27.1**) is to be the breaking strength of towing line specified in **Table C27.1** according to **27.1.2** for the ship's corresponding equipment number.
- (3) The method of application of the design load on fitting to towing fittings and supporting structures is to be taken into account all acting load.
- (4) The acting point of the towing force on towing fittings is to be taken at the attachment point of towing line or at a change in its direction.
- (5) Design load on fitting for towing fittings and their supporting structures are to be taken into account the total load of the design load on line (see **Fig.C27.1**), but need not to be more than twice the design load on line.
- (6) For towing fittings and their supporting structures used for towing operation specified in **(2)**, if design load on fitting specified in **(2)** to **(5)** is less than the intended towing load which is expected to be specified in the construction specification, the design load on fitting is to be not less than the intended towing load.

3 Selection of Towing Fittings

Towing fittings are generally to be specified according to standards approved by the society.

4 Allowable Stresses of Supporting Structure

Allowable stresses of supporting structure are not to be more than below:

- (1) Normal stress : 100% of the specified yield point for the material used
- (2) Shearing stress : 60% of the specified yield point for the material used

5 Corrosion Addition of Supporting Structures

The corrosion addition of supporting structures is not to be less than the following values:

- (1) For bulk carriers specified in **1.1.2-1, Part A** of the Rule, corrosion addition specified in **Chapter 3 Section 3, Part CSR-B** of the Rule
- (2) For double hull oil tankers specified in **1.1.2-2, Part A** of the Rule, corrosion addition specified in **Section 6/3, Part CSR-T** of the Rule
- (3) For other ships, the value will be considered by the Society, but not to be less than *2mm*.

6 Safe Working Load (*SWL*)

- (1) For towing fittings and their supporting structures used for towing operation specified in **-2(1)**, the *SWL* is not to exceed 80% of the design load on fitting specified in **-2(1)** and **-2(3)** to **(5)**.
- (2) For towing fittings and their supporting structures used for towing operation specified in **-2(2)**, the *SWL* is not to exceed the design load on fitting specified in **-2(2)** to **(6)**.
- (3) For towing fittings and their supporting structures used for towing operations specified in both **-2(1)** and **-2(2)**, the *SWL* is not to exceed the one for the greater of the design load of the both operations.
- (4) The *SWL* of each fitting is to be marked by weld bead or equivalent on the fitting.

27.2.3 Mooring Fittings

1 Arrangement of Mooring Fittings

- (1) Mooring fittings are to be located on longitudinals, beams or girders, which are parts of the deck construction so as to facilitate efficient distribution of the mooring load.
- (2) When the mooring fittings can not be located as specified in **(1)**, mooring fittings are to be arranged on the reinforced members.

2 Design Load

Design load for mooring fittings and their supporting structures (hereinafter referred to as "design load on fitting" (see **Fig.C27.1**) in this paragraph) are to be specified in **(1)** to **(7)** as

below:

- (1) Design load on line (see **Fig.C27.1**) is to be 1.25 times the breaking strength of the mooring line specified in **Table C27.1** according to **27.1.2** for the ship's corresponding equipment number.
- (2) The method of application of the design load on fitting to mooring fittings and supporting structures is to be taken into account all acting load.
- (3) The acting point of the mooring force on mooring fittings is to be taken at the attachment point of mooring line or at a change in its direction.
- (4) Design load on fitting for mooring fittings and their supporting structures are to be taken into account the total load of the design load on line (see **Fig.C27.1**), but need not to be more than twice the design load on line.
- (5) If design load on fitting specified in **(1)** to **(4)** is less than the intended mooring load which is expected to be specified in the construction specification, the design load on the fitting is to be not less than the intended mooring load.
- (6) The design load applied to supporting hull structures for mooring winches, etc. is to be 1.25 times the intended maximum brake holding load.
- (7) The design load applied to supporting hull structures for capstans is to be 1.25 times the intended maximum hauling-in force.

3 Selection of mooring Fittings

Mooring fittings are generally to be specified according to standards approved by the society.

4 Allowable Stresses of Supporting Structure

Allowable stresses of supporting structure are not to be more than below:

- (1) Normal stress : 100% of the specified yield point for the material used
- (2) Shearing stress : 60% of the specified yield point for the material used

5 Corrosion Addition of Supporting Structures

The corrosion addition of supporting structures is not to be less than the following values:

- (1) For bulk carriers specified in **1.1.2-1, Part A** of the Rule, corrosion addition specified in **Chapter 3 Section 3, Part CSR-B** of the Rule
- (2) For double hull oil tankers specified in **1.1.2-2, Part A** of the Rule, corrosion addition specified in **Section 6/3, Part CSR-T** of the Rule
- (3) For other ships, the value will be considered by the Society, but not to be less than *2mm*.

6 Safe Working Load (SWL)

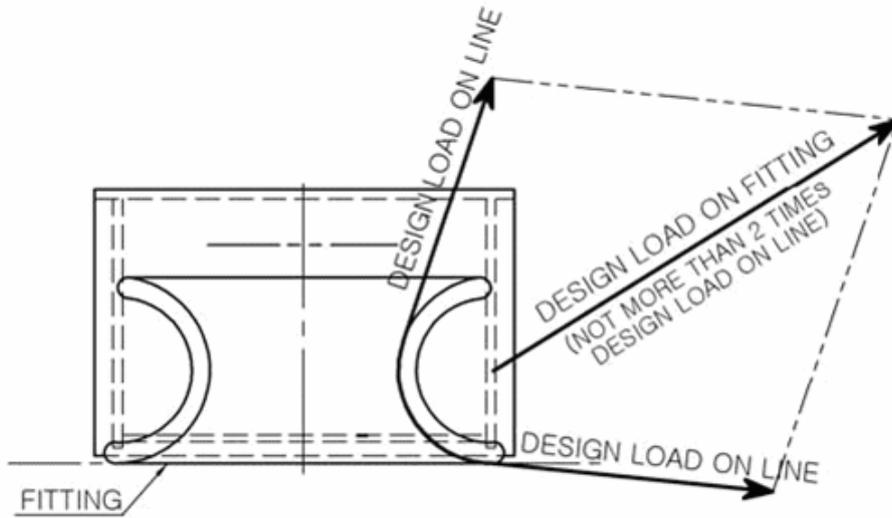
- (1) The *SWL* is not to exceed 80% of the design load on fitting specified in **-2(1) to (5)** or the design load specified in **-2(6)** or **(7)**.
- (2) The *SWL* of each fitting, excluding mooring winches and capstan, is to be marked by weld bead or equivalent on the fitting.

27.2.4 Towing and Mooring Fitting Arrangement Plan

Ships are to be provided Towing and Mooring Fitting Arrangement Plan noted below:

- (1) Approved standard and referenced No. of towing and mooring fittings
- (2) For each towing and mooring fitting, location on the ship, purpose(mooring, harbour towing, escort towing etc.), *SWL* and manner of applying towing or mooring line load including limiting fleet angles

Fig.C27.1 Design Load



EFFECTIVE DATE AND APPLICATION (Amendment 4-3)

1. The effective date of the amendments is 1 January 2007.
2. Notwithstanding the amendments to the Rules, the current requirements may apply to 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.

GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

Part C

Hull Construction and Equipment

GUIDANCE

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 C HULL CONSTRUCTION AND EQUIPMENT

Amendment 3-1

C23 BULWARKS, GURDRAILS, FREEING ARRANGEMENTS, CARGO PORTS AND OTHER SIMILAR OPENINGS, SIDE SCUTTLES, RECTANGLAR WINDOWS, VENTILATORS AND GANGWAYS

C23.4 Side Shell Doors and Stern Doors

C23.4.2 has been newly added as follows.

C23.4.2 Arrangement of Doors

Shipside doors used for pilot transfer are to be in accordance with the Regulation 23.5, Chapter V, SOLAS Convention.

C31A ADDITIONAL REQUIREMENTS FOR NEW BULK CARRIERS

C31A.2 Damage Stability

C31A.2.1 Survivability

The main text of sub-paragraph -1 has been amended as follows.

- 1** The compliance with the requirements of **31A.2.1-2, Part C of the Rules** may be achieved by the following loading condition being able to withstand flooding of any cargo hold, alternative to all conditions loaded to the summer load line being able to withstand such flooding.

EFFECTIVE DATE AND APPLICATION (Amendment 3-1)

- 1.** The effective date of the amendments is 3 October 2006.

C6 DOUBLE BOTTOMS

C6.1 General

C6.1.1 Application

Sub-paragraph -6 has been amended as follows.

- 6 With respect to the provisions of **6.1.1-7, Part C of the Rules**, where the ratio of cargo weight per unit area (kN/m^2) of the inner bottom plating to d is less than 5.40, double bottom structures are to be in accordance with **C6.2.3-1, C6.3.2-1, C6.5.1-2 and C6.5.6-1**. Where cargo loads can not be treated as even distributed loads, scantlings of double bottom structures are to be determined taking account of load distribution for particular cargoes. Where concentrated loads act on specific points of double bottoms, scantlings of center girders, side girders, floors, inner bottom plat and bottom plate and their stiffeners are to be determined by an appropriate strength assessment such as direct calculations.

EFFECTIVE DATE AND APPLICATION (Amendment 3-2)

1. The effective date of the amendments is 3 October 2006.
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.

C35 MEANS OF ACCESS

C35.1 General Rules

C35.1.3 Means of Access within Spaces

Sub-paragraph -2(4) has been deleted, and sub-paragraphs -2(5) and (6) have been renumbered to -2(4) and (5) respectively.

C35.2 Special Requirements for Oil Tankers and Bulk Carriers

C35.2.1 Application

Sub-paragraph -2 has been deleted.

C35.2.3 Means of Access to Spaces

Sub-paragraph -3 has been added as follows.

- 3 With respect to the provisions of **35.2.3-4, Part C of the Rules**, where deemed necessary for aligning resting platform arrangements with hull structures, the vertical distance from deck to such platform, between such platforms or such platform and the tank bottom may be not more than 6.6 *m*.

C35.2.5 Specifications for Means of Access and Ladders

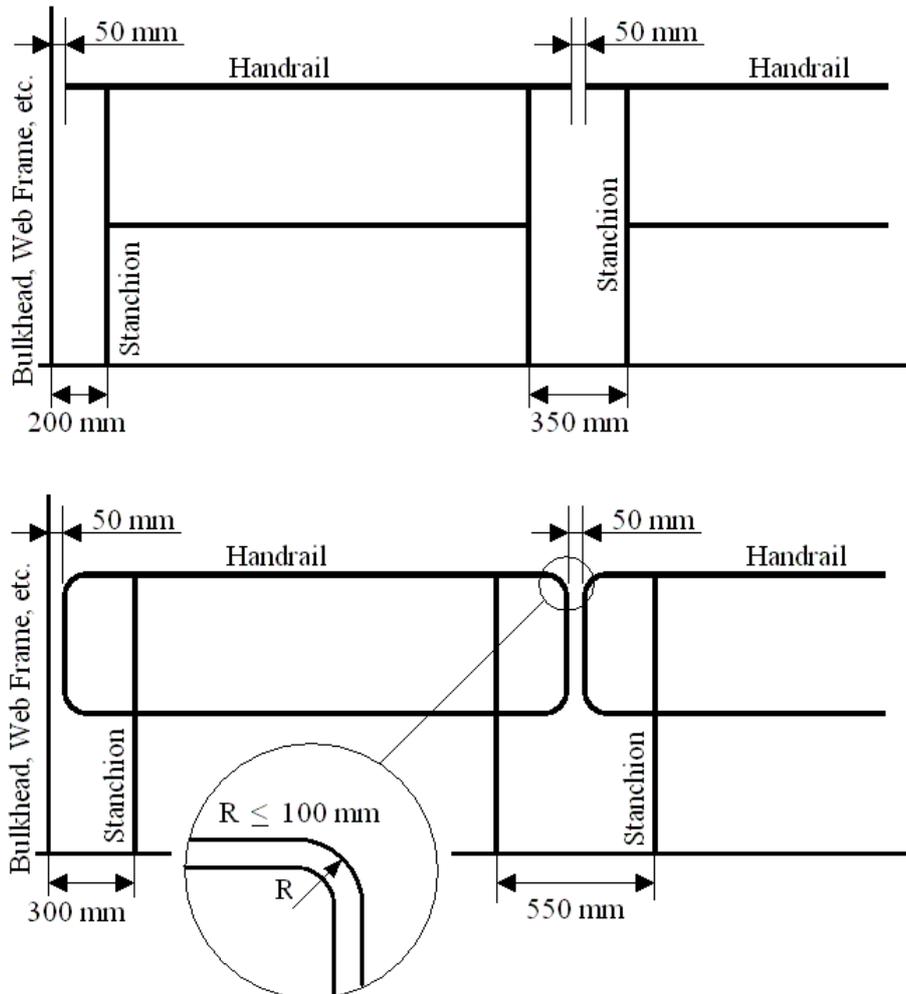
Sub-paragraph -3 has been amended as follows.

- 3 Detail of the guard rails required in **35.2.5-4, Part C of the Rules** are to be in accordance with the followings.
 - (1) Where guard rails are divided to several parts, the gaps of discontinuous top handrail are not to exceed 50 *mm*. When the top and mid handrails are connected by a bent rail, the outside radius of the bent part is not to exceed 100 *mm* (see **Fig. C35.2.5-1**).
 - (2) The gaps between the top handrail and other structural members are not to exceed 50 *mm*.
 - (3) Where guard rails are divided to several parts, the maximum distance between the adjacent stanchions across the handrail gaps is to be 350 *mm*. However, when the top and mid handrails are connected together, such maximum distance may be 550 *mm* (see **Fig. C35.2.5-1**).
 - (4) The maximum distance between the stanchion and other structural members is not to

exceed 200 mm. However, when the top and mid handrails are connected together, such maximum distance may be 300 mm (see Fig. C35.2.5-1).

Fig. C35.2.5 has been renumbered to Fig. C35.2.5-2, and Fig. C35.2.5-1 has been added as follows.

Fig. C35.2.5-1 Detail of handrails



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

- (1) Permanent inclined ladders are to be inclined at an angle of less than 70 degrees. There is to be no obstructions within 750 mm of the face of the inclined ladder, except that in way of an opening this clearance may be reduced to 600 mm. Such clearance is to be measured perpendicular to the face of the ladder. A minimum climbing clearance in width is to be 600 mm. For this purpose, handrails may be provided within such climbing clearance. Resting platforms of adequate dimensions are to be provided, normally at a maximum of 6 m vertical height. Where deemed necessary for aligning resting platform arrangements with hull structures, the vertical distance from deck to such platform, between such platforms or such platform and the tank bottom may be not more than 6.6 m. In this case, the flights of inclined ladders are not to be more than 9 m in actual length. Ladders and handrails are to be constructed of steel or equivalent material of adequate

strength and stiffness and securely attached to the structure by stays. The method of support and length of stay is to be such that vibration is reduced to a practical minimum. In cargo holds, ladders are to be designed and arranged so that cargo handling difficulties are not increased and the risk of damage from cargo handling gear is minimized.

Annex C35.2.4 GUIDANCE FOR DECISION OF ALTERNATIVE MEANS OF ACCESS

2 Alternative Means of Access

2.6 Portable Ladders

2.6.1 Application

Sub-paragraph -2(2) has been amended as follows.

- (2) Non-self supporting and self-supporting portable ladders not according to preceding (1), should support at least four times the maximum intended load.

EFFECTIVE DATE AND APPLICATION (Amendment 3-3)

1. The effective date of the amendments is 3 October 2006.
2. Notwithstanding the amendments to C35.2.5-3 of the Guidance, the current requirements may apply to ships for which the date of contract for construction* is before 1 October 2006.
*“contract for construction” is defined in IACS Procedural Requirement(PR) No.29 (Rev.2).

IACS PR No.29 (Rev.2)

Unless specified otherwise:

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 sister 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, a “series of sister vessels” is a series of vessels built to the same approved plans for classification purposes, under a single contract for construction. The optional vessels will be considered part of the same series of sister 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.

Notes:

1. This Procedural Requirement applies to all IACS Members and Associates.
2. This Procedural Requirement is effective for ships “contracted for construction” on or after 1 January 2005.
3. Sister vessels may have minor design alterations provided such alterations do not affect matters related to classification.
4. Revision 2 of this Procedural Requirement is effective for ships “contracted for construction” on or after 1 April 2006.

C27 EQUIPMENT

C27.1 Anchors, Chain Cables and Ropes

C27.1.2 Equipment Number

In “Example” of sub-paragraph -1, the symbol “*L*” has been amended to “*L*₁”.

Paragraph C27.2 has been amended as follows:

C27.2 Towing and Mooring Fittings

C27.2.1 General

- 1 “Towing fittings” and “mooring fittings” as prescribed in **27.2, Part C** of the Rules, mean bollards, bits, fairleads, stand rollers, chocks, etc. and are not intended for running capstans, winches, etc.
- 2 Beds, seats and other equivalent facilities beneath towing and mooring fittings may include towing and mooring fittings specified in **27.2, Part C** of the Rules.

C27.2.2 Towing Fittings

- 1 For the requirements of “the ship’s corresponding equipment number” as prescribed in **27.2.2-2(2), Part C** of the Rules, side projected area including maximum stacks of deck cargoes is to be taken into account for selection of tow lines.
- 2 The requirements in **27.2.3-2(5), Part C** of the Rules, are anticipated to the load of a single post basis (no more than one turn of one cable). When it is assumed to use the load more than these load, appropriate adjustments are to be necessary for each case.
- 3 “Standards approved by the society” as prescribed in **27.2.2-3, Part C** of the Rules, means international standards, national standards or equivalent standards issued by shipyards or manufacturers. When the towing fittings are not selected from the above standards, each design of the towing fittings is to be examined in consideration of each design of the supporting structures.
- 4 “Normal stress” as prescribed in **27.2.2-4, Part C** of the Rules, means bending stress in general. When towing fittings are given the axial stress for direction of towing force, this stress is to be taken into account for normal stress.

C27.2.2 Mooring Fittings

- 1 For the requirements of “the ship’s corresponding equipment number” as prescribed in **27.2.3-2(1), Part C** of the Rules, side projected area including maximum stacks of deck cargoes is to be taken into account for selection of mooring lines.
- 2 The breaking strength of the mooring line specified in **27.2.3-2(1), Part C** of the Rules, may be taken into account the requirements in **27.1.5-3, Part C** of the Rules.
- 3 The requirements in **27.2, Part C** are to apply to additional mooring fittings and their supporting structures. However, the design load of these fittings and their supporting structures

may be 1.25 times intended maximum mooring load instead of requirements in **27.2.3-2(1) to (4), Part C** of the Rules. In this case, this information is to be incorporated into the Towing and Mooring Fitting Arrangement Plan specified in **27.2.4, Part C** of the Rules.

- 4 The requirements in **27.2.3-2(4), Part C** of the Rules, are anticipated to the load of a single post basis (no more than one turn of one cable). When it is assumed to use the load more than these load, appropriate adjustments are to be necessary for each case.
- 5 “The intended maximum brake holding load” as prescribed in **27.2.3-2(6), Part C** of the Rules, means the rated brake holding load or the rated hauling load specified in manufacturers’ standards of the mooring winch.
- 6 “Standards approved by the society” as prescribed in **27.2.2-3, Part C** of the Rules, means international standards, national standards or equivalent standards issued by shipyards or manufacturers. When the mooring fittings are not selected from the above standards, each design of the mooring fittings is to be examined in consideration of each design of the supporting structures.
- 7 “Normal stress” as prescribed in **27.2.3-4, Part C** of the Rules, means bending stress in general. When mooring fittings are given the axial stress for direction of mooring force, this stress is to be taken into account for normal stress.

C27.2.4 Towing and Mooring Fitting Arrangement Plan

The information related to safe towing and mooring operation in the Towing and Mooring Fitting Arrangement Plan specified in **27.2.4, Part C** of the Rules, are recommended to incorporate into the pilot card in order to provide the pilot proper information on harbour/escorting operations.

EFFECTIVE DATE AND APPLICATION (Amendment 3-4)

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.