

RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

Part CS

Hull Construction and Equipment of Small Ships

Rules for the Survey and Construction of Steel Ships

Part CS

2016 AMENDMENT NO.2

Guidance for the Survey and Construction of Steel Ships

Part CS

2016 AMENDMENT NO.2

Rule No.82 / Notice No.83 27th December 2016

Resolved by Technical Committee on 27th July 2016

Approved by Board of Directors on 20th September 2016

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NIPPON KAIJI KYOKAI

An asterisk (*) after the title of a requirement indicates that there is also relevant information in the corresponding Guidance.

RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

RULES

Part CS

**Hull Construction and Equipment of
Small Ships**

2016 AMENDMENT NO.2

Rule No.82 27th December 2016

Resolved by Technical Committee on 27th July 2016

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An asterisk (*) after the title of a requirement indicates that there is also relevant information in the corresponding Guidance.

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 CS HULL CONSTRUCTION AND EQUIPMENT OF SMALL SHIPS

Amendment 2-1

Chapter 6 DOUBLE BOTTOMS

6.1 General

6.1.1 Application

Sub-paragraph -1 has been amended as follows.

1 Ships are to be provided with watertight double bottoms extending from the collision bulkhead to the after peak bulkhead. The longitudinal system of framing is, in general, to be adopted. The inner bottom is to be continued out to the ship’s sides in such a manner as to protect the bottom to the turn of the bilge, and is not lower at any part than a plane parallel with the keel line and which is located not less than a vertical distance h (m) measured from the keel line specified in **2.1.478, Part A of the Rules**.

$$h = B'/20$$

B' : It is specified in **4.1.2(11)**.

However, in no case is the value of h to be less than $0.76 m$, and need not be taken as more than $2.0 m$.

6.1.3 Drainage

Sub-paragraph -4 has been amended as follows.

4 For the wells specified in **-2** and **-3** above, except those at the ends of shaft tunnels, the vertical distance from the bottom of such a well to a plane coinciding with the keel line specified in **2.1.478, Part A of the Rules** is not to be less than $0.5 m$. This requirement may be waived, however, where bilge tanks deemed appropriate by the Society are provided instead of wells for the purpose of complying with **-1** above or where it is ascertained that the ship meets the requirements for the omission of double bottoms given in **6.1.1-2** or **6.1.1-3**.

EFFECTIVE DATE AND APPLICATION (Amendment 2-1)

1. The effective date of the amendments is 1 January 2017.
2. Notwithstanding the amendments to the Rules, the current requirements apply to ships other than ships that fall under the following:
 - (1) for which the building contract is placed on or after the effective date; or
 - (2) in the absence of a building contract, the keels of which are laid or which are at *a similar stage of construction* on or after 1 July 2017; or

(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.

 - (3) the delivery of which is on or after 1 January 2021.
3. Notwithstanding the provision of preceding 2., the amendments to the Rules apply to the ships that fall under the following:
 - (1) which convert to using low-flashpoint fuels on or after the effective date; or
 - (2) which, on or after the effective date, undertake to use low-flashpoint fuels different from those which it was originally approved to use before the effective date.

Chapter 21 BULWARKS, GUARDRAILS, FREEING ARRANGEMENTS, CARGO PORTS AND OTHER SIMILAR OPENINGS, SIDE SCUTTLES, RECTANGULAR WINDOWS, VENTILATORS AND GANGWAYS

21.6 Ventilators

Paragraph 21.6.7 has been amended as follows.

21.6.7 Ventilators for Emergency Generator Room

The coamings of ventilators supplying the emergency generator room is to extend to more than 4.5m above the surface of the deck in Position I, and more than 2.3m above the surface of the deck in Position II specified in 19.1.2. The ventilator openings are not to be fitted with weathertight closing appliances, except for those complying with 1.3.5-2, Part D. However, where due to vessel size and arrangement this requirement is not practicable, the height of ventilator coamings is to be at the discretion of the Society.

EFFECTIVE DATE AND APPLICATION (Amendment 2-2)

1. The effective date of the amendments is 1 January 2017.
2. Notwithstanding the amendments to the Rules, the current requirements apply to ships for which the date of contract for construction* is before the effective date.
* “contract for construction” is defined in the latest version of IACS Procedural Requirement (PR) No.29.

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

1. The date of “contract for construction” of a vessel is the date on which the contract to build the vessel is signed between the prospective owner and the shipbuilder. This date and the construction numbers (i.e. hull numbers) of all the vessels included in the contract are to be declared to the classification society by the party applying for the assignment of class to a newbuilding.
2. The date of “contract for construction” of a series of vessels, including specified optional vessels for which the option is ultimately exercised, is the date on which the contract to build the series is signed between the prospective owner and the shipbuilder.
For the purpose of this Procedural Requirement, vessels built under a single contract for construction are considered a “series of vessels” if they are built to the same approved plans for classification purposes. However, vessels within a series may have design alterations from the original design provided:
 - (1) such alterations do not affect matters related to classification, or
 - (2) If the alterations are subject to classification requirements, these alterations are to comply with the classification requirements in effect on the date on which the alterations are contracted between the prospective owner and the shipbuilder or, in the absence of the alteration contract, comply with the classification requirements in effect on the date on which the alterations are submitted to the Society for approval.The optional vessels will be considered part of the same series of vessels if the option is exercised not later than 1 year after the contract to build the series was signed.
3. If a contract for construction is later amended to include additional vessels or additional options, the date of “contract for construction” for such vessels is the date on which the amendment to the contract, is signed between the prospective owner and the shipbuilder. The amendment to the contract is to be considered as a “new contract” to which 1. and 2. above apply.
4. If a contract for construction is amended to change the ship type, the date of “contract for construction” of this modified vessel, or vessels, is the date on which revised contract or new contract is signed between the Owner, or Owners, and the shipbuilder.

Note:

This Procedural Requirement applies from 1 July 2009.

GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

Part CS

**Hull Construction and Equipment of
Small Ships**

GUIDANCE

2016 AMENDMENT NO.2

Notice No.83 27th December 2016

Resolved by Technical Committee on 27th July 2016

Notice No.83 27th December 2016

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 CS HULL CONSTRUCTION AND EQUIPMENT OF SMALL SHIPS

Amendment 2-1

Appendix 1 APPLICATION OF PART C OF THE GUIDANCE

The **Part C** of the Guidance is to be applied as the Guidance related to the prescriptions in **Part CS** of the Rules, as shown in the **Table CS**.

Table CS has been amended as follows.

Table CS Correspondence Table of Guidance between Part CS and Part C

Part CS	Part C	Part CS	Part C	Part CS	Part C
1.1.3	C1.1.3 [See Note 1]	13.3	C13.3	21.1.2	C23.1.2 [See Note 19 20]
1.3.1	C1.1.7 C1.1.11 and C1.1.12	14.1.3	C14.1.3	21.1.3	C23.1.3 [See Note 20 21]
		14.2.3	C14.2.3	21.2.1	C23.2.1 [See Note 21 22]
		15.1.1	C15.1.1	21.2.2	C23.2.2 [See Note 22 23]
2.1.1	C2.1.1	15.2.1	C15.2.1	21.2.3	C23.2.3
2.2.2	C2.2.2	15.2.3	C15.2.3	21.3	C23.3
2.2.3	C2.2.3	15.3	C15.4.1-2	21.4	C23.4 [See Note 23 24]
2.2.4	C2.2.4	16.3.3	C16.3.3	21.5.1	C23.5.1 [See Note 24 25]
3	C3	16.4.4	C16.4.4	21.5.3	C23.5.3 [See Note 25 26]
4	C4	16.5.3	C16.6.1	21.5.7	C23.5.7 [See Note 26 27]
5	C5	16.6.1	C16.7.1	21.6.5	C23.6.5 [See Note 27 28]
6.1.1	C6.1.1-1 to -3 [See Note 2]	16.6.2	C16.7.2	21.6.7	C23.6.7 [See Note 28 29]
		17.1.1-1	C10.2.1 [See Note 9]	21.6.8	C23.6.8
6.1.3	C6.1.3 [See Note 3]	17.2.1	C17.1.1	21.7.1	C23.7.1 [See Note 29 30]
6.6.2-1	C6.4.3-2	17.2.2	C17.1.2	21.7.2	C23.7.2
6.7.1	C6.5.1-1 and -4	17.2.4	C17.1.4 [See Note 10]	21.8.1	C23.8.1 [See Note 30 31]
6.9	C6.8	17.2.5	C17.1.5	22.2.1	C24.2.1
7.5.2	C7.6.2 [See Note 4]	17.3.2	C17.2.2	22.4.1	C25.2.1 [See Note 31 32]
7.5.3	C7.6.3 [See Note 5]	17.3.4	C17.2.4	22.4.2	C25.2.2
8.3	C7.5.3	17.3.5	C17.2.5	22.4.3	C25.2.3 [See Note 32 33]
9.1.2	C9.1.2 [See Note 6]	17.4.1	C17.3.1	23.1.2	C27.1.2
9.1.3	C9.1.3	17.4.5	C17.3.5	23.1.5	C27.1.5 and C27.1.6 [See Note 33 34]
10.1.2	C10.1.2	18	C18		
10.2.3	C10.3.3 [See Note 7]	19.1.2	C20.1.2 [See Note 11]	23.1.6	C27.1.7
10.3.2	C10.4.2	19.2.4	C20.2.4 [See Note 11 12]	23.2	C27.2
10.7.1	C10.9.1	19.2.5	C20.2.5 [See Note 12 13]	24.1.1	C29.1.1 [See Note 34 35] [See Note 35 36]
11.1.2	C11.1.2	19.2.6	C20.2.6 [See Note 13 14]		
11.2.1	C11.2.1	19.2.10	C20.2.10 [See Note 14 15]	24.1.2	C29.1.2 [See Note 36 37]
12.1.3	C12.1.3	19.2.12	C20.2.12 [See Note 15 16]	24.3.2	C29.4.2
12.1.4	C12.1.4	19.2.13	C20.2.13 [See Note 16 17]	24.9.4	C29.7.4 [See Note 37 38]
12.2.1	C12.2.1 [See Note 8]	19.3.5	C20.3.5 [See Note 17 18]	24.11.5	C29.12.4
13.1.1	C13.1.1	19.4.2	C20.4.2	25.1.2	C34.1.2 [See Note 38 39]
13.1.4	C13.1.4	20.2.2	C21.2.2	26	C35
13.2.3	C13.2.3	21.1.1	C23.1.1 [See Note 18 19]		

Notes:

(1. to 10. are omitted.)

11. In Guidance **C20.1.2**, **20.1.2**, **Part C** of the Rules is to be read as **19.1.2**, **Part CS** of the Rules.

~~12~~. (Omitted)

~~13~~. (Omitted)

~~14~~. (Omitted)

~~15~~. (Omitted)

~~16~~. (Omitted)

~~17~~. (Omitted)

~~18~~. (Omitted)

~~19~~. (Omitted)

~~20~~. (Omitted)

~~21~~. (Omitted)

- ~~2122~~. (Omitted)
- ~~2223~~. (Omitted)
- ~~2324~~. (Omitted)
- ~~2425~~. (Omitted)
- ~~2526~~. (Omitted)
- ~~2627~~. (Omitted)
- ~~2728~~. (Omitted)
- ~~2829~~. (Omitted)
- ~~2930~~. (Omitted)
- ~~3031~~. (Omitted)
- ~~3132~~. (Omitted)
- ~~3233~~. (Omitted)
- ~~3334~~. (Omitted)
- ~~3435~~. (Omitted)
- ~~3536~~. (Omitted)
- ~~3637~~. (Omitted)
- ~~3738~~. (Omitted)
- ~~3839~~. (Omitted)

EFFECTIVE DATE AND APPLICATION (Amendment 2-1)

1. The effective date of the amendments is 27 December 2016.
2. Notwithstanding the amendments to the Guidance, the current requirements apply to ships for which the date of contract for construction is before the effective date.

Appendix 1 APPLICATION OF PART C OF THE GUIDANCE

The **Part C** of the Guidance is to be applied as the Guidance related to the prescriptions in **Part CS** of the Rules, as shown in the **Table CS**.

Table CS has been amended as follows.

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1.3.1	C1.1.7 C1.1.11 and C1.1.12	14.1.3	C14.1.3	21.2.1	C23.2.1 [See Note 21 22]
		14.2.3	C14.2.3	21.2.2	C23.2.2 [See Note 22 23]
		15.1.1	C15.1.1	21.2.3	C23.2.3
2.1.1	C2.1.1	15.2.1	C15.2.1	21.3	C23.3
2.2.2	C2.2.2	15.2.3	C15.2.3	21.4	C23.4 [See Note 23 24]
2.2.3	C2.2.3	15.3	C15.4.1-2	21.5.1	C23.5.1 [See Note 24 25]
2.2.4	C2.2.4	16.3.3	C16.3.3	21.5.3	C23.5.3 [See Note 25 26]
3	C3	16.4.4	C16.4.4	21.5.7	C23.5.7 [See Note 26 27]
4	C4 [See Note 2]	16.5.3	C16.6.1	21.6.5	C23.6.5 [See Note 27 28]
5	C5	16.6.1	C16.7.1	21.6.7	C23.6.7 [See Note 28 29]
6.1.1	C6.1.1-1 to -3 [See Note 3 3]	16.6.2	C16.7.2	21.6.8	C23.6.8
		17.1.1-1	C10.2.1 [See Note 9 10]	21.7.1	C23.7.1 [See Note 29 30]
6.1.3	C6.1.3 [See Note 4 4]	17.2.1	C17.1.1	21.7.2	C23.7.2
6.6.2-1	C6.4.3-2	17.2.2	C17.1.2	21.8.1	C23.8.1 [See Note 30 31]
6.7.1	C6.5.1-1 and -4	17.2.4	C17.1.4 [See Note 10 11]	22.2.1	C24.2.1
6.9	C6.8	17.2.5	C17.1.5	22.4.1	C25.2.1 [See Note 31 32]
7.5.2	C7.6.2 [See Note 4 5]	17.3.2	C17.2.2	22.4.2	C25.2.2
7.5.3	C7.6.3 [See Note 5 6]	17.3.4	C17.2.4	22.4.3	C25.2.3 [See Note 32 33]
8.3	C7.5.3	17.3.5	C17.2.5	23.1.2	C27.1.2
9.1.2	C9.1.2 [See Note 6 7]	17.4.1	C17.3.1	23.1.5	C27.1.5 and C27.1.6 [See Note 33 34]
9.1.3	C9.1.3	17.4.5	C17.3.5		
10.1.2	C10.1.2	18	C18	23.1.6	C27.1.7
10.2.3	C10.3.3 [See Note 7 8]	19.2.4	C20.2.4 [See Note 11 12]	23.2	C27.2
10.3.2	C10.4.2	19.2.5	C20.2.5 [See Note 12 13]	24.1.1	C29.1.1 [See Note 34 35] [See Note 35 36]
10.7.1	C10.9.1	19.2.6	C20.2.6 [See Note 13 14]		
11.1.2	C11.1.2	19.2.10	C20.2.10 [See Note 14 15]		
11.2.1	C11.2.1	19.2.12	C20.2.12 [See Note 15 16]	24.1.2	C29.1.2 [See Note 36 37]
12.1.3	C12.1.3	19.2.13	C20.2.13 [See Note 16 17]	24.3.2	C29.4.2
12.1.4	C12.1.4	19.3.5	C20.3.5 [See Note 17 18]	24.9.4	C29.7.4 [See Note 37 38]
12.2.1	C12.2.1 [See Note 8 9]	19.4.2	C20.4.2	24.11.5	C29.12.4
13.1.1	C13.1.1	20.2.2	C21.2.2	25.1.2	C34.1.2 [See Note 38 39]
13.1.4	C13.1.4	21.1.1	C23.1.1 [See Note 18 19]	26	C35
13.2.3	C13.2.3	21.1.2	C23.1.2 [See Note 19 20]		

Notes:

1. (Omitted)
2. In Guidance **C4.2.3-2**, **23.6.5-2**, **Part C** of the Rules is to be read as **21.6.5-2**, **Part CS** of the Rules.
- ~~3~~. (Omitted)

~~34~~. (Omitted)
~~45~~. (Omitted)
~~56~~. (Omitted)
~~67~~. (Omitted)
~~78~~. (Omitted)
~~89~~. (Omitted)
~~910~~. (Omitted)
~~1011~~. (Omitted)
~~1112~~. (Omitted)
~~1213~~. (Omitted)
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~~3536~~. (Omitted)
~~3637~~. (Omitted)
~~3738~~. (Omitted)
~~3839~~. (Omitted)

EFFECTIVE DATE AND APPLICATION (Amendment 2-2)

1. The effective date of the amendments is 1 January 2017.
2. Notwithstanding the amendments to the Guidance, the current requirements apply to ships for which the date of contract for construction* is before the effective date.
* “contract for construction” is defined in the latest version of IACS Procedural Requirement (PR) No.29.

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

1. The date of “contract for construction” of a vessel is the date on which the contract to build the vessel is signed between the prospective owner and the shipbuilder. This date and the construction numbers (i.e. hull numbers) of all the vessels included in the contract are to be declared to the classification society by the party applying for the assignment of class to a newbuilding.
2. The date of “contract for construction” of a series of vessels, including specified optional vessels for which the option is ultimately exercised, is the date on which the contract to build the series is signed between the prospective owner and the shipbuilder. For the purpose of this Procedural Requirement, vessels built under a single contract for construction are considered a “series of vessels” if they are built to the same approved plans for classification purposes. However, vessels within a series may have design alterations from the original design provided:
 - (1) such alterations do not affect matters related to classification, or
 - (2) If the alterations are subject to classification requirements, these alterations are to comply with the classification requirements in effect on the date on which the alterations are contracted between the prospective owner and the shipbuilder or, in the absence of the alteration contract, comply with the classification requirements in effect on the date on which the alterations are submitted to the Society for approval.The optional vessels will be considered part of the same series of vessels if the option is exercised not later than 1 year after the contract to build the series was signed.
3. If a contract for construction is later amended to include additional vessels or additional options, the date of “contract for construction” for such vessels is the date on which the amendment to the contract, is signed between the prospective owner and the shipbuilder. The amendment to the contract is to be considered as a “new contract” to which 1. and 2. above apply.
4. If a contract for construction is amended to change the ship type, the date of “contract for construction” of this modified vessel, or vessels, is the date on which revised contract or new contract is signed between the Owner, or Owners, and the shipbuilder.

Note:

This Procedural Requirement applies from 1 July 2009.