CIRCULAR

36 Myeongji ocean city 9-ro,
Gangseo-gu, Busan, 618-814
Republic of Korea

Phone :+82-70-8799-8517
Fax : +82-70-8799-8419
E-mail : jhjung@krs.co.kr
Person in charge: Jung Jaehun

To : All Surveyors and whom it may concern

No : 2023-16-E
Date : 2023.10.11

Subject	**9.184 Notice for Amendments to the KR Technical Rules** **- Rule Pt.4 Ch.10 Shipboard Equipment, Fittings and Supporting Hull structures associated with Towing and Mooring** **- Rule Pt.7 Ch.5 Ships carrying Liquefied Gasses in Bulk -Survival requirements** **- Guidance Pt.8 Ch.7 Containment of Fire** **- Guidance for Approval of Manufacturing Process and Type Approval- Ch3 Sec25 Securing devices**
Application	**Refer to Effective date for each KR Technical Rules specified in Par.1 and the attachment**

1. Please be informed that 2023 Classification Technical Rules have been amended to reflect IACS Resolutions, IMO Circulars and Requests for Establishment/Revision of Classification Technical Rules as below, and you are kindly requested to apply these amendments on the relevant works.

Classification Technical Rules	Effective date	Amendments
Rule Pt.4 Ch.10	On or after 1st January 2024 (Date of contract for ship construction)	MSC.1/Circ.1362 Rev.2 IACS Rec. 10 Rev.5 : addition of supplement with towing and mooring arrangements plan
Rule Pt.7 Ch.5	On or after 1st January 2024 (Date of which the application for survey is submitted)	Pt.7 Ch.5 ships carrying Liquified Gasses in Bulk: Survival requirements - Clarification of watertight door provisions related to closure requirements in stage of flooding
Guidance Pt.8 Ch.7	On or after 5th June 2023	MSC.1/Circ.1276/Rev.1 : clarification of fire protection

	(Date of contract for ship construction)	application scope for trunk/duct contiguous to the enclosed space
Guidance for Approval of Manufacturing Process and Type Approval	On or after 30 October 2023 (Date of which the application for survey is submitted)	Ch.3 Sec.25 Securing Device-Supplemental explanation for the dimension of neck of twistlock

2. Furthermore, please be informed that these amendments will be included in 2024 edition for Rule and Guidance.

Attachments: Circular_ 9.184(K/E) ---------- each 1 copy. (The End)

Amendments of the Rules

(Circular)

Part 4 Hull Equipment

2023.10.

Hull Rule Development Team

Main Amendments

(1) Background of Amendment

1) reflected IACS Rec. 10 Rev. 5 (addition of LDBF definition reflecting MSC.1/Circ.1619)
2) reflected MSC.1/Circ. 1362 Rev.2 (add application details for SOLAS II-1 Reg.3-8.7/8)
   - addition of supplement with towing and mooring arrangements plan

(2) Effective date

1) for which the building contract is placed on or after 1 January 2024; or
2) in the absence of a building contract, the keel of which is laid or which is at a similar stage of construction on or after 1 July 2024; or
3) the delivery of which is on or after 1 January 2027.

Present	Amendment
CHAPTER 10 SHIPBOARD EQUIPMENT, FITTINGS AND SUPPORTING HULL STRUCTURES ASSOCIATED WITH TOWING AND MOORING	**CHAPTER 10 SHIPBOARD EQUIPMENT, FITTINGS AND SUPPORTING HULL STRUCTURES ASSOCIATED WITH TOWING AND MOORING**
Section 1 Definitions and Scope of Application	**Section 1 Definitions and Scope of Application**
101. Application *(2018)* 〈omitted〉	**101. Application** *(2018)* 〈same as the present〉
102. Definitions *(2018)*	**102. Definitions** *(2018)*
1. ~ 6. 〈omitted〉	**1. ~ 6. 〈same as the present〉**
	7. Line design break force(LDBF) means the minimum force at which a new, dry, spliced mooring line will break at. This is for all synthetic cordage material. This value is declared by the manufacturer on each line's mooring line certificate and is stated on a manufacturer's line data sheet. LDBF of a line should be 100%-105% of the ship design minimum breaking load(MBL_{SD}).
Section 2 Towing and Mooring	**Section 2 Towing and Mooring**
201. Towing ~ 202. Mooring 〈omitted〉	**201. Towing ~ 202. Mooring 〈omitted〉**
203. Towing and mooring arrangements plan *(2018)*	**203. Towing and mooring arrangements plan** *(2018)*
1. The SWL and TOW for the intended use for each shipboard fitting is to be noted in the towing and mooring arrangements plan available on board for the guidance of the Master. It is to be noted that TOW is the load limit for towing purpose and SWL that for mooring purpose. If not otherwise chosen, for towing bitts it is to be noted that TOW is the load limit for a towing line attached with eye-splice.	**1.** The SWL and TOW for the intended use for each shipboard fitting is to be noted in the towing and mooring arrangements plan available on board for the guidance of the Master. It is to be noted that TOW is the load limit for towing purpose and SWL that for mooring purpose. If not otherwise chosen, for towing bitts it is to be noted that TOW is the load limit for a towing line attached with eye-splice.
2. Information provided on the plan is to include in respect of each shipboard fitting.	**2.** Information provided on the plan is to include in respect of each shipboard fitting.

Present	Amendment
(1) Location on the ship (2) Fitting type (3) SWL/TOW (4) Purpose (mooring / harbour towing / other towing) (5) Method of applying load of towing or mooring line including limiting fleet angle i.e. angle of change in direction of a line at the fitting. Item (3) with respect to items (4) and (5), is subject to approval by the Society. *(2022)* Furthermore, information provided on the plan is to include: (1) The arrangement of mooring lines showing number of lines (N) (2) The ship design minimum breaking load (MBL_{SD}) *(2022)* (3) The acceptable environmental conditions refer for minimum conditions to IACS Recommendation No. 10 "Anchoring, Mooring and Towing Equipment" for the recommended ship design minimum breaking load for ships with Equipment Number EN 〉 2000: *(2022)* (A) 30 second mean wind speed from any direction.(v_w or v_w^* according to IACS Recommendation No. 10) (B) Maximum current speed acting on bow or stern (±10°).	(1) Location on the ship (2) Fitting type (3) SWL/TOW (4) Purpose (mooring / harbour towing / other towing) (5) Method of applying load of towing or mooring line including limiting fleet angle i.e. angle of change in direction of a line at the fitting. Item (3) with respect to items (4) and (5), is subject to approval by the Society. *(2022)* Furthermore, information provided on the plan is to include: (1) The arrangement of mooring lines showing number of lines (N) (2) The ship design minimum breaking load (MBL_{SD}) *(2022)* (3) The acceptable environmental conditions refer for minimum conditions to IACS Recommendation No. 10 "Anchoring, Mooring and Towing Equipment" for the recommended ship design minimum breaking load for ships with Equipment Number EN 〉 2000: *(2022)* (A) 30 second mean wind speed from any direction.(v_w or v_w^* according to IACS Recommendation No. 10) (B) Maximum current speed acting on bow or stern (±10°). (4) For ships of less than 3,000 gross tonnage engaged in international voyages and contracted for construction on or after 1 January 2024, the following shall be additionally included on the plan and provided on board; (A) Maximum brake holding load; (B) Technical specification document of the mooring lines (including manufacturers' recommended minimum diameter D of each fitting in contact with the mooring lines and the Line Design Break Force (LDBF) of the mooring lines); and (C) Properties of mooring lines related to LDBF and bend radius (D/d ratio)[(1)](including warning that the wear rate of lines may be higher for lower diameter(ref. Par. 5.6 of MSC.1/Circ.1620) (5) For ships of 3,000 gross tonnage and above engaged in international voyages and contracted for construction on or after 1 January 2024, the following shall be included in addition to those specific under **Par.** (4) and provided on board; (A) A document shall be provided by the designer for information and as a supplement to the towing and mooring arrangements plan, confirming that MSC.1/Circ.1619 has been considered. The document shall explicitly state that the deviations compared to MSC.1/Circ.1619, if any, were unavoidable;

Present	Amendment
3. The information as given in **2.** is to be incorporated into the pilot card in order to provide the pilot proper information on harbour and other towing operations.	(B) Deviations shall be recorded, if any, (Par. 6.1 of MSC.1 Circ./ 1619), justification and suitable safety measures shall be provided (Par. 6.2 of MSC.1/Circ.1619) in the supplement to the towing and mooring arrangements plan. A reference to the supplement shall be included in the towing and mooring arrangements plan (Par. 6.3 of MSC.1/Circ.1619); (C) If deviations are not found necessary, and the supplement is not needed, then this shall be mentioned explicitly in the towing and mooring arrangements plan; and (D) The mooring maximum brake holding load shall be less than 100% of the Ship Design Minimum Breaking Load (MBL_{SD}) (Par. 5.2.3.3 and 5.2.4 of MSC.1/Circ.1619). The winches shall be fitted with brakes that allow for the reliable setting of the brake rendering load. (Notes) (1) Bend radius (D/d ratio) means the diameter, D, of a mooring fitting divided by the diameter, d, of a mooring line that is led around or through the fitting. (ref. Par.2.1 of MSC.1/Circ.1620) **3.** The information as given in **2.** is to be incorporated into the pilot card in order to provide the pilot proper information on harbour and other towing operations.

Amendments of the Rules

(Circular)

Pt. 7 Ships of Special Service

Ch. 5 Ships Carrying Liquefied Gases in Bulk

2023. 10

Hull Rule Development Team

Background and main contents of the amendments

1. Background of amendments

(1) Res. MSC 492(104) /18 Add.1 Annex2, IGC code Ch2 2.7 reflected (effective date 2024. 1. 1, the date of which application for survey is submitted)

-〉 Pt 7 Ch 5 Sec2 207 Survival Requirements revised.

- As mentioned in the SOLAS convention and MSC.1 Circ.1572/Rev.1 (Pt 3 Ch 14 Sec 4 of the Rules), the type of watertight door of a cargo ship's watertight bulkhead depends on the frequency of use of the door during voyage. However, since the current IGC code only mentions 'remotely operated sliding doors', it has been amended to match the requirements of the SOLAS.

2. Main Contents: Refer to the amendments

Current	Amendment
⟨Rules⟩ - Pt 7 Ch 5	⟨Rules⟩ - Pt 7 Ch 5
Section 2 Ship Survival Capability and Location of Cargo Tanks	**Section 2 Ship Survival Capability and Location of Cargo Tanks**
201. ~ 206. ⟨omit⟩	201. ~ 206. ⟨same as current⟩
207. Survival requirements (IGC Code 2.7) 【See Guidance】 Ships subject to this Chapter shall be capable of surviving the assumed damage specified in **203.**, to the standard provided in **206.**, in a condition of stable equilibrium and shall satisfy the following criteria. **1. In any stage of flooding:** (1) the waterline, taking into account sinkage, heel and trim, shall be below the lower edge of any opening through which progressive flooding or downflooding may take place. Such openings shall include air pipes and openings that are closed by means of weathertight doors or hatch covers and may exclude those openings closed by means of watertight manhole covers and watertight flush scuttles, small watertight cargo tank hatch covers that maintain the high integrity of the deck, remotely operated watertight sliding doors and sidescuttles of the non-opening type; (2) the maximum angle of heel due to unsymmetrical flooding shall not exceed 30°; and (3) the residual stability during intermediate stages of flooding shall not be less than that required by **2** (1). **2. At final equilibrium after flooding: ⟨omit⟩**	**207. Survival requirements (IGC Code 2.7) 【See Guidance】*(2022)*** Ships subject to this Chapter shall be capable of surviving the assumed damage specified in **203.**, to the standard provided in **206.**, in a condition of stable equilibrium and shall satisfy the following criteria. **1. In any stage of flooding: *(2023)*** (1) the waterline, taking into account sinkage, heel and trim, should be below the lower edge of any opening through which progressive flooding or downflooding may take place. Such openings should include air pipes and openings that are closed by means of weathertight doors or hatch covers. But the opening that are closed by the following means may be excluded. (A) watertight manhole covers and watertight flush scuttles, (B) small watertight cargo tank hatch covers that maintain the high integrity of the deck, (B) remotely operated sliding watertight doors, (D) hinged watertight access doors with open/closed indication locally and at the navigation bridge, of the quick-acting or single-action type that are normally closed at sea, (E) hinged watertight doors that are permanently closed at sea, and (F) sidescuttles of the non-opening type; (2), (3) ⟨same as current⟩ **2. At final equilibrium after flooding: ⟨same as current⟩**

Amendments of the Guidance relating to the Rules

(Circular)

Part 8 Fire Protection and Fire Extinction

2023.10.

Hull Rule Development Team

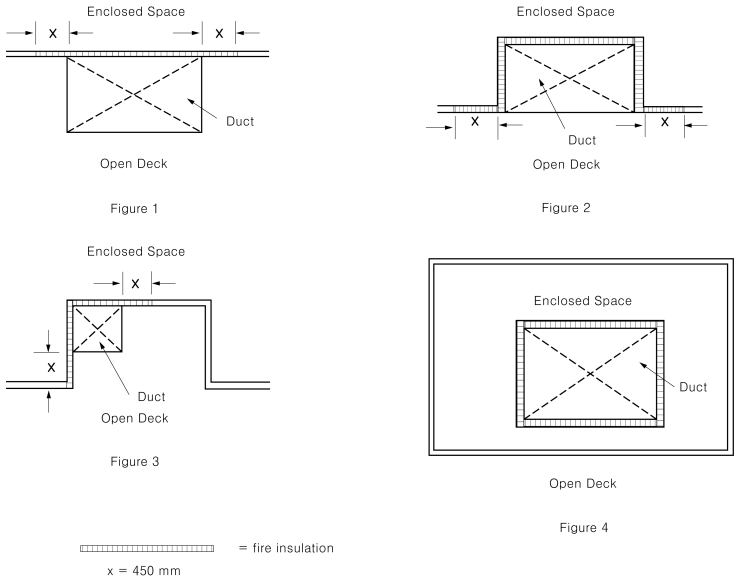
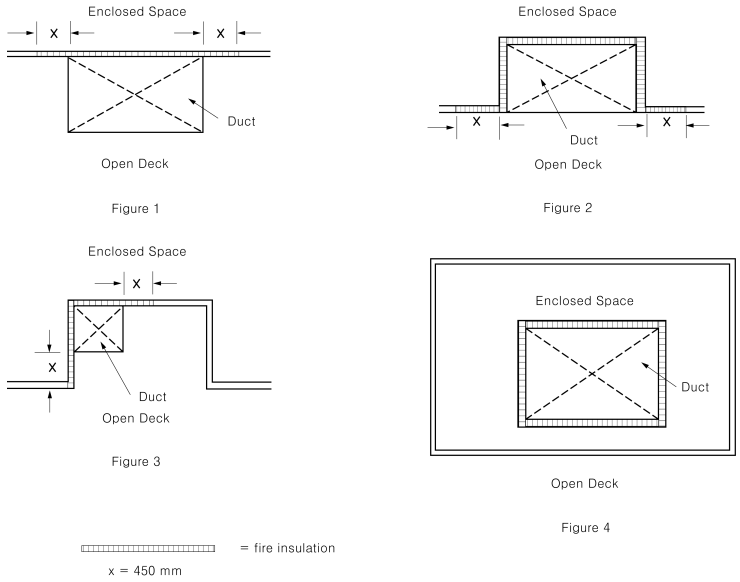
Main Amendments

(1) Background of Amendment

- MSC.1/Circ.1276/Rev.1 reflected (clarification of fire protection application scope for trunk/duct contiguous to the enclosed space)

(2) Effective date : ships contracted for construction on or after 05 June 2023[1)]

[1)] MSC.1/Circ.1276/Rev.1 reflected (published on 27 June 2023)

Present	Amendment
# CHAPTER 7 CONTAINMENT OF FIRE ## Section 1 ~ Section 5 〈omitted〉 ## Section 6 Ventilation Systems [See Rule] **601. General 〈omitted〉** **602. Arrangement of ducts** **1.** In applying **602. 4** of the Rules, "A-60" class insulation" is, as a standard, to be an insulation with rock-wool approved as non-combustible material, or insulation approved as "A-60" class standard and arrangement of ducts are to be in accordance with **Fig 8.7.5** of the Guidance. **2.** In applying **602. 2 & 3** of the Rules for determining fire insulation for trunks and ducts which pass through an enclosed space, the term "pass through" means the part of the trunk/duct contiguous to the enclosed space. (see **Fig 8.7.6** of the Guidance.)  **Fig 8.7.6 Examples of ducts contiguous to enclosed space**	# CHAPTER 7 CONTAINMENT OF FIRE ## Section 1 ~ Section 5 〈same as the present〉 ## Section 6 Ventilation Systems [See Rule] **601. General 〈same as the present〉** **602. Arrangement of ducts** **1.** In applying **602. 4** of the Rules, "A-60" class insulation" is, as a standard, to be an insulation with rock-wool approved as non-combustible material, or insulation approved as "A-60" class standard and arrangement of ducts are to be in accordance with **Fig 8.7.5** of the Guidance. **2.** In applying **602. and 605.** of the Rules for determining fire insulation for trunks and ducts which pass through an enclosed space, the term "pass through" means the part of the trunk/duct contiguous to the enclosed space. (see **Fig 8.7.6** of the Guidance.)  **Fig 8.7.6 Examples of ducts contiguous to enclosed space**

Amendments of the Guidance

(Circular)

Guidance for Approval of Manufacturing Process and Type Approval, Etc.

2023. 10.

Hull Rule Development Team

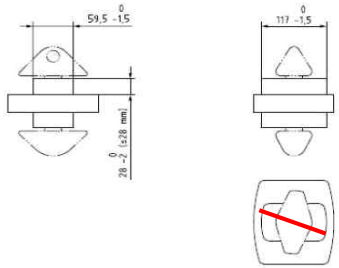
Background and main contents of the amendments

1. Background of amendments

■ Request (HUC4100-1795-2023) (effective date 2023. 10. 30 the date of which application for survey is submitted)

(1) For twistlock of HHS (High Hold Securing) / HHT (High Holding Twistlock) notation, dimensions of the twistlock neck part required by ISO 3874 (ISO1161) are shown as example pictures in Ch.3, Sec.25 of Guidance for Approval and of Manufacturing Process and Type Approval. This is to limit the clearance between twistlock and corner casting.

(2) In the figure(left), the entire twistlock neck is illustrated in a rectangular shape, but some manufacturers develop and present optimal designs that satisfy equal clearance. See picture(right)

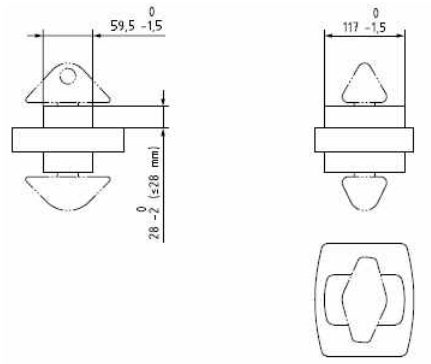
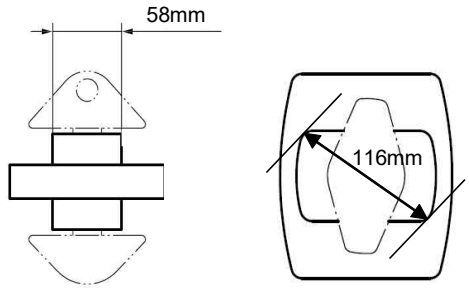


2. Main Contents: Refer to the amendments

(1) ‘ the dimension of the neck of the twistlock should be equal to or greater than the value according to **Fig. 3.25.5**. ’

→ ‘ The dimensions of the neck of the twistlock should be equal to or greater than the value according to **Fig. 3.25.5**. In this case, the neck of the twistlock should be symmetrical in the length/width direction.’

- In figure 3.25.5, a mark indicating the diagonal distance has been added.

Current	Amendment
Ch. 3 TYPE APPROVAL **Section 25 Securing Device** **2501.~ 2503. 〈omit〉** **2504. Test requirements of additional special feature notation HHS(High Holding Securing)** 1. ~ 5. 〈omit〉 6. The twistlock housing should be fastened with at least one bolt each at the top and bottom. Also the dimension of the neck of the twist lock should be equal to or greater than the value according to **Fig. 3.25.5**. *(2023)*  **Fig. 3.25.5** 7. 〈omit〉 **2505. 〈omit〉**	**Ch. 3 TYPE APPROVAL** **Section 25 Securing Device** **2501.~ 2503. 〈osame as current〉** **2504. Test requirements of additional special feature notation HHS(High Holding Securing)** 1. ~ 5. 〈same as current〉 6. The twistlock housing should be fastened with at least one bolt each at the top and bottom. Also the dimension of the neck of the twistlock should be equal to or greater than the value according to **Fig. 3.25.5**. In this case, the neck of the twistlock should be symmetrical in the length/width direction. *(2023)*  **Fig. 3.25.5** 7. 〈same as current〉 **2505. 〈same as current〉**