CIRCULAR

36 Myeongji ocean city 9-ro,
Gangseo-gu, Busan, 46762
Republic of Korea

Phone :+82-70-8799-8795
Fax : +82-70-8799-8419
E-mail : choiws@krs.co.kr
Person in charge: CHOI Wooseok

No : 2023-12-E
Date : 1 Sep. 2023

To : All Surveyors and whom it may concern

Subject	9.180 Notice for Amendment to the KR Technical Rules
Application	Ships constructed on or after 01.01.2024

1. Please be informed that the amendments to the KR Technical Rules have been made to reflect IACS Resolutions and IMO Resolutions, and you are kindly requested to apply the amendments on the relevant works according to effective date.

2. Furthermore, please be informed that the amendments will be included in 2024 edition on Classification Technical Rules which will be published in the first half of 2024.

--------- below ---------

Classification Technical Rules	Effective Date	Main Amendments
Rules for the Classification of Steel Ships Pt 7 Ch 5	ships constructed on or after 01.01.2024	IACS UR G5 (New Dec 2022)
Rules for the Classification of Ships using Low-Flashpoint Fuels	ships constructed on or after 01.01.2024	Res.MSC.458(101)
Guidance for the Classification of Ships using Low-Flashpoint Fuels	ships constructed on or after 01.01.2024	IACS UI GF 13 (Rev.1 May 2023)

Attachments: Amendments for the Classification Technical Rules (K/E) --- each 1 copy.
(The End)

Amendments of Guidance Relating to Rules for the Classification of Steel Ships

(Part 7 Chapter 5 Ships Carrying Liquefied Gases in Bulk)

- Main Amendments -

(1) IACS Res. 〈ships constructed on or after 2024/01/01〉

◉ UR G5 (New Dec 2022) : Fail-close action of Emergency Shut Down (ESD) valve

Present	Amendment
Section 18 Operating Requirements	**Section 18 Operating Requirements**
1809. Cargo sampling 〈omitted〉	**1809. Cargo sampling** 〈omitted〉
1810. Cargo emergency shutdown (ESD) system **1. Emergency shutdown valves 【See Rule】** The emergency shutdown valves specified in **1810. 2** (1) of the Rules are to be in accordance with the following requirements (1) to (4) : (1) The "fail-closed type" referred to in the requirement of the Rules is, for example, one of given in the following (A) and (B) : (A) The type in which the hydraulic or pneumatic pressure is solely used in valve opening motion, and the valve closing motion including the case of fail-closure is effected by spring or weight. (B) Where valve diameter is so large that both opening and closing motions of the valve are hydraulically or pneumatically effected, the operating oil or air in the fail-closure operation is to be supplied from a specially provided accumulator. Alarm is to be given in the event of loss of hydraulic or pneumatic pressure for ordinary valve motion and activation of fail-closure operation. (2) to (4) <omitted>	**1810. Cargo emergency shutdown (ESD) system** **1. Emergency shutdown valves 【See Rule】** The emergency shutdown valves specified in **1810. 2** (1) of the Rules are to be in accordance with the following requirements (1) to (4) : (1) When ESD valve is actuated by hydraulic or pneumatic system, the following is to complied with (A) Audible and visible alarm is to be given in the event of loss of pressure that causes activation of fail-close action. The alarm is to be provided in a normally manned control station (e.g. Cargo Control Room and/or the navigation bridge, etc.). (B) The following conditions are to also be complied to ensure the fail-close action: (a) Failure of hydraulic or pneumatic system is not to lead to loss of fail-close functionality (i.e. activated by spring or weight); or (b) Hydraulic or pneumatic system for fail-close action is to be arranged with stored power and separated from normal valve operation. (2) to (4) <same as the present>

Amendments of Rules For The Classification of Ships Using Low-Flashpoint Fuels

- Main Amendments -

(1) Reflecting MSC Res. 〈for ships constructed on or after 2024.01.01〉

◉ Res.MSC.458(101) : Amendments to IGF Code

Present	Amendment
CHAPTER 9 FUEL SUPPLY TO CONSUMERS	**CHAPTER 9 FUEL SUPPLY TO CONSUMERS**
Section 1 to Section 4 **〈omitted〉**	**Section 1 to Section 4** **〈same as the present〉**
Section 5 Fuel Distribution Outside of Machinery Space	**Section 5 Fuel Distribution Outside of Machinery Space**
501. Fuel distribution outside of machinery space	**501. Fuel distribution outside of machinery space**
1. Where fuel pipes pass through enclosed spaces in the ship, they are to be protected by a secondary enclosure. This enclosure can be a ventilated duct or a double wall piping system. The duct or double wall piping system is to be mechanically underpressure ventilated with 30 air changes per hour, and gas detection as required in **Ch 15, 801.** is to be provided. Other solutions providing an equivalent safety level may also be accepted by the Society. **【See Guidance】**	**1.** Where fuel pipes pass through enclosed spaces in the ship, they are to be protected by a secondary enclosure. This enclosure can be a ventilated duct or a double wall piping system. The duct or double wall piping system is to be mechanically underpressure ventilated with 30 air changes per hour, and gas detection as required in **Ch 15, 801.** is to be provided. Other solutions providing an equivalent safety level may also be accepted by the Society. 【See Guidance】
2. The requirement in **1** need not be applied for fully welded fuel gas vent pipes led through mechanically ventilated spaces.	**2.** The requirement in **1** need not be applied for fully welded fuel gas vent pipes led through mechanically ventilated spaces.
〈Newly added〉	**3.** Liquefied fuel pipes are to be protected by a secondary enclosure able to contain leakages. If the piping system is in a fuel preparation room or a tank connection space, the Administration may waive this requirement. Where gas detection as required in **Ch 15, 801.1 (1)** is not fit for purpose, the secondary enclosures around liquefied fuel pipes are to be provided with leakage detection by means of pressure or temperature monitoring systems, or any combination thereof. The secondary enclosure is to be able to withstand the maximum pressure that may build up in the enclosure in case of leakage from the fuel piping. For this purpose, the secondary enclosure may need to be arranged with a pressure relief system that prevents the enclosure from being
〈hereafter omitted〉	〈hereafter same as the present〉

Present	Amendment
CHAPTER 10 POWER GENERATION INCLUDING PROPULSION AND OTHER GAS CONSUMER	**CHAPTER 10 POWER GENERATION INCLUDING PROPULSION AND OTHER GAS CONSUMER**
Section 1 to Section 2 〈omitted〉	**Section 1 to Section 2 〈same as the present〉**
Section 3 Internal Combustion Engines of Piston Type	**Section 3 Internal Combustion Engines of Piston Type**
301. General	**301. General**
1. The exhaust system is to be equipped with explosion relief ventilation sufficiently dimensioned to prevent excessive explosion pressures in the event of ignition failure of one cylinder followed by ignition of the unburned gas in the system.	**1.** The exhaust system is to be equipped with explosion relief ventilation sufficiently dimensioned to prevent excessive explosion pressures in the event of ignition failure of one cylinder followed by ignition of the unburned gas in the system.
〈newly added〉	(1) The exhaust system is to be equipped with explosion relief systems unless designed to accommodate the worst case overpressure due to ignited gas leaks or justified by the safety concept of the engine. A detailed evaluation of the potential for unburnt gas in the exhaust system is to be undertaken covering the complete system from the cylinders up to the open end. This detailed evaluation is to be reflected in the safety concept of the engine."
〈hereafter omitted〉	〈hereafter same as the present〉

Amendments of Guidance Relating To The Rules For The Classification of Ships Using Low-Flashpoint Fuels

- Main Amendments -

(1) Reflecting IACS Res. 〈for ships constructed on or after 2024.01.01〉

◉ UI GF 13 (Rev.1 May 2023) : Fire Protection for FPR

Present	Amendment
# CHAPTER 11 FIRE SAFETY ## Section 3 Fire Protection **301. Fire protection** **1.** In applying **301. 1** of this Rules, fire protection means structural fire protection, not including menas of escape. **2.** In applying **301. 1** of this Rules, enclosed spaces containing equipment for fuel preparation such as pumps or compressors or other potential ignition sources are to be provided with a fixed fire-extinguishing system complying with **Pt 8, Ch 8, 301. 1** of **Rules for the classification of steel ships,** the **FSS Code** and taking into account the necessary concentrations/application rate required for extinguishing gas fires. **【See Rules】** **3.** 〈omitted〉 〈hereafter omitted〉	# CHAPTER 11 FIRE SAFETY ## Section 3 Fire Protection **301. Fire protection** **1.** In applying **301. 1** of this Rules, fire protection means structural fire protection, not including menas of escape. **2.** Notwithstanding paragraph 1, any enclosed spaces containing equipment for fuel preparation such as pumps or compressors orf other potential ignition sources are to comply with **Ch 11 Sec 8 of Rules 【See Rules】** **3.** 〈same as the present〉 〈hereafter same as the present〉