Clarification of Safety Requirements for Selective Catalytic Reduction Systems

Object of Amendment

Rules for the Survey and Construction of Steel Ships Part D

Reason for Amendment

As a measure to comply with regulation 13 of MARPOL Annex VI which regulates the emission of nitrogen oxides (NOx) from ships, the use of selective catalytic reduction systems (SCR) is permitted. The Society has stipulated safety requirements for SCR systems in Chapter 21, Part D of the Rules for the Survey and Construction of Steel Ships.

Although the safety requirements include ones related to the installation of eyewash stations for the protection of crew members, said requirements did not clearly specify the locations where eyewash stations are to be installed. For this reason, relevant requirements are amended to explicitly specify the installation locations of eyewash stations associated with SCR systems.

Outline of the Amendment

Clarifies requirements related to the installation locations of eyewash stations, in Chapter 21, Part D of the Rules for the Survey and Construction of Steel Ships.

Effective Date and application

Applicable to ships for which the date of contract for construction is on or after 1 January 2026.

ID:DD25-10

Amended-Original Requirements Cor	nparison Table (Clarit	fication of Safety Red	guirements for Selective Cat	alytic Reduction Sy	stems)
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Amended-Original Requirements Comparison Table (Clarification of Safety Requirements for Selective Catalytic Reduction Systems)			
Amended	Original	Remarks	
RULES FOR THE SURVEY AND	RULES FOR THE SURVEY AND		
CONSTRUCTION OF STEEL SHIPS	CONSTRUCTION OF STEEL SHIPS		
Part D MACHINERY INSTALLATIONS	Part D MACHINERY INSTALLATIONS		
Chapter 21 SELECTIVE CATALYTIC REDUCTION SYSTEMS AND ASSOCIATED EQUIPMENT	Chapter 21 SELECTIVE CATALYTIC REDUCTION SYSTEMS AND ASSOCIATED EQUIPMENT		
21.1 General	21.1 General		
21.1.3 Drawings and Data to be Submitted Drawings and data to be submitted are generally as follows:	21.1.3 Drawings and Data to be Submitted Drawings and data to be submitted are generally as follows:		
((1) is omitted.)	((1) is omitted.)		
(2) Plans and documents for reference	(2) Plans and documents for reference	In principle, the	
(a) Operation manual for SCR systems	(a) Operation manual for SCR systems	documents related to	
(b) Operation manual for automatic control and safety systems	(b) Operation manual for automatic control and safety systems	back pressure are required only for	
(c) Documents related to allowable back pressure (where deemed necessary by the Society)	(c) Documents related to allowable back pressure	existing vessels. For newly built vessels, such	
(d) Documents related to any studies and corresponding results explaining cases where bypass pipes are not fitted for SCR systems in accordance with 21.3.1-2(1)	(d) Documents related to any studies and corresponding results explaining cases where bypass pipes are not fitted for SCR systems in accordance with 21.3.1-2(1)	documents are generally not necessary to be submitted, since effect of back pressure caused by the installation of SCR	
(e) Engineering analysis such as Failure Mode Effect Analysis (FMEA)	(e) Engineering analysis such as Failure Mode Effect Analysis (FMEA)	are considered during the design phase.	
(f) Other drawings considered necessary by the Society	(f) Other drawings considered necessary by the Society		

Amended-Original Requirements Comparison Table (Clarification of Safety Requirements for Selective Catalytic Reduction Systems)					
Amended	Original	Remarks			
21.2 Design	21.2 Design				
21.2.1 General Requirements 2 In addition to the requirements in this Chapter, air pipes and sounding pipes are to satisfy the requirements in 13.6 (excluding 13.6.1-6) and 13.8. In such cases, the term "fuel oil" is to be read as "reductant agent".	21.2.1 General Requirements 2 In addition to the requirements in this Chapter, air pipes and sounding pipes are to satisfy the requirements in 13.6 and 13.8. In such cases, the term "fuel oil" is to be read as "reductant agent".	This provision is based on the potential hazards posed by reducing agents in the event of a fire. The requirements of 13.6.1-6 are excluded, since they are not intended for fire			
21.7 Safety and Protective Equipment	21.7 Safety and Protective Equipment	protection purposes.			
 21.7.1 General For the protection of crew members, the ship is to have on board at least the following suitable protective equipment and installations. Locations and numbers of the equipment and installations are to be derived from the detailed installation arrangements. Locations where such equipment is stored or installed are to be clearly marked so as to be easily identifiable. Personnel protective equipment Large apron of chemical-resistant material Special gloves with long sleeves Suitable footwear Suitable protective equipment consisting of coveralls and tight-fitting goggles or face shields or both Self-contained breathing apparatus (capable of functioning for at least 30 minutes) 	For the protection of crew members, the ship is to have on board at least the following suitable protective equipment and installations. Locations and numbers of the equipment and installations are to be derived from the detailed installation arrangements. Locations where such equipment is stored or installed are to be clearly marked so as to be easily identifiable. (1) Personnel protective equipment (a) Large apron of chemical-resistant material (b) Special gloves with long sleeves (c) Suitable footwear (d) Suitable protective equipment consisting of coveralls and tight-fitting goggles or face shields or both (2) Self-contained breathing apparatus (capable of functioning for at least 30 minutes) (3) Eyewash				

Stretcher

(3) Stretcher

Amended-Original Requirements Comparison Table (Clarification of Safety Requirements for Selective Catalytic Reduction Systems)

	arification of Safety Requirements for Sefective Catalytic Reduc	
Amended	Original	Remarks
2 Eyewash is to be provided, and the locations and	(Newly added)	Under the existing rules,
number of eyewash stations are to be derived from the detailed		the regulation regarding
installation arrangements. At a minimum, the following		the installation location
stations are to be provided:		of eye wash stations is
		unclear; therefore, it is
		clarified with reference
		to Chapter 22, Part D of
		the Rules.
(1) In the vicinity of transfer or supply pump locations for		
reductant fluids. If there are multiple transfer or		
supply pump locations on the same deck, then one		
eyewash may be considered for acceptance provided		
that the station is easily accessible from all such pump		
locations on the same deck.		
(2) An eyewash station is to be provided in the vicinity of		
a reductant bunkering station on deck. If the		
bunkering connections are located on both the port		
and starboard sides, then consideration is to be given		
to providing two eyewash stations, one for each side.		
	AND ADDITION	
EFFECTIVE DATE A	AND APPLICATION	
1. The effective date of the amendments is 1 January 202		
<u> </u>	ments apply to ships other than ships for which the application	
for Classification Survey during Construction is submi	tted to the Society on or after the effective date.	