Amendments of the Rules

Part 15

Corrigenda 2 to Jan 2021 of Part 15

2022. 1. 06.

Hull Rule Development Team

Amendment	Note
Chapter 1 General principles **Section 2 - Rule Principles** **5. Rule design method** **5.3 Load-capacity based requirements**	
Table 1 : Load scenarios and corresponding rule requirements	Sloshing loads for scantling(refer to **Ch 6, Sec 4, [2.7.2]** below) contains static pressure and impact pressure itself, acceptance criteria is modified to be correct as **AC-SD**. The proposal of this corrigenda is to avoid unintentional and too conservative consequence effect for the current designs.

Operation	Load type	Design load scenario	Acceptance criteria
Seagoing operations			
Transit	Static and dynamic loads in heavy weather	S+D	AC-SD
	Impact loads in heavy weather	Impact (I)	AC-I
	Internal sloshing loads	Sloshing (SL)	AC-SD
	Cyclic wave loads	Fatigue (F)	-
[omitted]	[omitted]	[omitted]	[omitted]

Chapter 6 Hull Local Scantling **Section 4 - Plating** **2. Special requirements** **2.7 Plating in cargo tank boundary** **2.7.2 By sloshing pressure**	Refer to **Ch 1, Sec 2, [5.3] Table 1** above.

The net thickness of plating, t in mm, subjected to sloshing pressures is not to be less than:

$$t = 0.0158\,\alpha_p\, b\,\sqrt{\frac{P_{slh} + P_{ls}}{C_{a-slh}\,R_{eH}}}$$

[omitted]

β : Coefficient of AC-SD as defined in **Table 1**.

α : Coefficient of AC-SD as defined in **Table 1**.

$C_{a-\max}$: Maximum permissible bending stress coefficient of AC-SD as defined in **Table 1**.

Amendment	Note
Section 5 - Stiffener **2. Special requirements** **2.1 Section modulus of stiffener attached on cargo tank boundary** **2.7.2 By sloshing pressure in cargo tanks** The net section modulus Z in cm^3, of stiffeners subject to sloshing pressure is not to be taken less than: $$Z = \frac{\left| P_{slh} + P_{ls} \right| s \, \ell_{bdg}^2}{f_{bdg} \, C_{s-slh} \, R_{eH}}$$ [omitted] β_s : Coefficient of AC-SD as defined in **Table 2**. α_s : Coefficient of AC-SD as defined in **Table 2**. $C_{s-\max}$: Maximum permissible bending stress coefficient of AC-SD as defined in **Table 2**.	Refer to **Ch 1, Sec 2, [5.3] Table 1** above.
Chapter 3 Structural Design Principles **Section 7 - Structural Idealisation** **1. Strucutral idealisation of stiffeners and primary support members** **1.3 Effective breadth** **1.3.1 Stiffeners** The effective breadth, b_{eff}, in mm, of the attached plating to be considered in the actual net section modulus for the yielding check of stiffeners is to be obtained from the following formulae: a) Where the plating extends on both sides of the stiffener: ~~$b_{eff} = 100\ell$~~ $b_{eff} = 200\ell$, or ~~$b_{eff} = 30\ell + 0.42s$~~ $b_{eff} = s$ whichever is lesser. b) Where the plating extends on one side of the stiffener (i.e. stiffeners bounding openings): ~~$b_{eff} = 50\ell$~~ $b_{eff} = 100\ell$, or ~~$b_{eff} = 0.15\ell + 0.21s$~~ $b_{eff} = 0.5s$	Current rule text regarding the effective breadth is found different from other KR Rules and CSR. It need to be in line with other Classification Societies' Rule including CSR.

Amendment	Note
whichever is lesser. [omitted]	