Amendments to NR612

The following table specifies the sections and appendices which have been amended with respect to the March 2023 edition of the Rules for the Classification of Harbour Equipment (NR612).

Other editorial corrections are not described in this document.

Reference	Part	Chapter	Section / Appendix
NR612 DT R01 March 2023	Part D	Chapter 1 Chapter 3 Chapter 8	Sec 2 Sec 2 Sec 3, Sec 4

Pt D, Ch 1, Sec 2, [5.3]

Replace requirements [5.3.2] by:

5.3.2 Net hull girder section modulus within 0,4L amidships

Modify the first paragraph as follows:

The net section moduli Z_{AB} and Z_{AD} within 0,4L amidships are to be not less than the value obtained, in m^3, from the following formulae:

$Z_{R,MIN} = 0,9\ n_1\ C_1\ L^2\ B\ (C_B + 0,7)\ k\ 10^{-6}$

where

n_1 : Operation area coefficient

$n_1 = 0,06$

C_B : Block coefficient, defined in Pt B, Ch 1, Sec 2, [2.1.1]

C_1 : Parameter defined as:

$$C_1 = (10,7 - 0,023L) \quad \text{for } L \leq 135\,m$$

$$C_1 = 10,75 - \left(\frac{300 - L}{100}\right)^{1,5} \quad \text{for } 135\,m < L < 300\,m$$

$$C_1 = 10,75 \quad \text{for } 300\,m \leq L \leq 350\,m$$

$$C_1 = 10,75 - \left(\frac{L - 350}{150}\right)^{1,5} \quad \text{for } L > 350\,m$$

Pt D, Ch 3, Sec 2, [3.1]

Replace requirements [3.1.1] by:

3.1.1 Loading conditions

The following loading conditions are to be considered:

a) Light floating door, no ballast, navigation

b) 50%, and 75% ballast conditions

c) 100% ballast condition, floating door in sealing position

d) Any other special loading condition to be specified by the Designer.

Pt D, Ch 3, Sec 2, [3.2]

Replace requirements [3.2.3] by:

3.2.3 Internal pressure

For capacities intended to contain liquids (ballast or supplies), the internal design pressure p_{In} induced at any point of the hull, in kN/m^2, is given by the following formulae, as applicable:

$$p_{In} = \rho_L \, g \, (z_{TOP} - z) + d_{AP}$$

$$p_{In} = \rho_L \, g \, (z_{TOP} - z) + p_1$$

where:

p_1 : Parameter defined as follows:

- in general, $p_1 = 1{,}15 p_{PV}$
- for ballast capacities intended to be de-ballasted by means of compressed air, p_1 is to be defined by the Designer and is to be taken not less than 200 kPa.

Pt D, Ch 8, Sec 3, [4.2]

Replace requirements [4.2.3] by:

4.2.3 Flexible connections

Where the values of connection forces are not available, they may be determined considering:

- the worst combination of forces F_i induced by each single module, to be taken not less than the values obtained from Tab 1, for harbour equipment assigned a service notation other than **Floating dock**
- the elastic characteristics of the connection system
- the specificity of the harbour equipment configuration.

Pt D, Ch 8, Sec 3, Table 1

Add the following Note 2 at the end of Table 1.

Table 1: Force induced by a single module

Force coefficient C	F_i , in kN
Note 2: Not applicable to harbour equipment assigned the service notation **Floating dock**	

Pt D, Ch 8, Sec 4, Symbols

Replace definition of C by:

C : Wave parameter:

$$C = (10{,}7 - 0{,}023\,L)n \quad \text{for } L \le 135\,m$$

$$C = \left(10{,}75 - \left(\frac{300 - L}{100}\right)^{1{,}5}\right)n \quad \text{for } 135\,m \le L < 300\,m$$

$$C = 10{,}75\,n \quad \text{for } 300\,m \le L \le 350\,m$$

$$C = \left(10{,}75 - \left(\frac{L - 350}{150}\right)^{1{,}5}\right)n \quad \text{for } L > 350\,m$$