

**RULES
FOR THE CLASSIFICATION OF
SHIPS**

*Part 4 – STABILITY
January 2020*

*Amendments No. 3
July 2022*

CROATIAN REGISTER OF SHIPPING

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By the decision of the General Committee of Croatian Register of Shipping,

Amendments No. 3 to the
RULES FOR THE CLASSIFICATION OF SHIPS
Part 4 – STABILITY

have been adopted on 27th June and shall enter into force on 1st July 2022

INTRODUCTORY NOTES

These amendments shall be read together with the requirements in the Rules for the Classification of Ships, Part 4 – Stability, edition January 2020, as amended by Amendments No. 2, edition January 2022.

Table 1 contains review of amendments, where items changed or added in relating to previous edition are given, with short description of each modification or addition. All major changes throughout the text are shaded.

This Part of the Rules includes the requirements of the following international Organisations:

International Maritime Organization (IMO)

Conventions: International Convention for the Safety of Life at Sea 1974 (SOLAS 1974) and all subsequent amendments up to and including the 2017 amendments (MSC.421(98)), and Conference on Bulk Carriers 1997 amendments.
Protocol of 1988 relating to the International Convention for the Safety of Life at Sea 1974, as amended (SOLAS PROT 1988).
International Convention for the Prevention of Pollution from Ships 1973, as modified by the Protocol of 1978 thereto (MARPOL 73/78) and all subsequent amendments up to and including the 2015 amendments (MEPC.248(66)).

Resolutions: MEPC.117(52), MEPC.248(66), MSC.235(82), MSC.398(95), A.715(17), MSC.413(97), MSC.415(97), MSC.421(98), MSC.436(99), MSC.443(99), MSC.444(99)

International Association of Classification Societies (IACS)

Unified Requirements (UR): L2 (Rev.2, 2013), L5 (Rev.4, June 2020)

Unified Interpretations LL80, MPC11 (Corr. 1, 2021), SC161 (Rev. 3, 2022), SC280

TABLE 1 – REVIEW OF AMENDMENTS

This review comprises amendments in relation to the Rules for the Classification of Ships, Part 4 – Stability, edition January 2020, as amended by Amendments No. 2, edition January 2022.

<i>ITEM</i>	<i>DESCRIPTION OF THE AMENDMENTS</i>
SECTION 1 GENERAL	
Head 1.5	Sub-item 1.5.1.7 has been amended
SECTION 3 ADDITIONAL REQUIREMENTS FOR STABILITY	
Head 3.3	Items 3.3.1 and 3.3.11 have been amended

1 GENERAL

■ **Head 1.5 STABILITY INFORMATION FOR THE MASTER**, sub-item 1.5.1.7 has been changed and should be read as follows:

1.5.1.7 **If the damage stability is calculated in accordance with** requirements of Heads 2.4 to 2.8, and, if applicable, of Heads 2.9 and 2.11, of the *Rules, Part 5 – Subdivision*, a stability limit curve is to be determined using linear interpolation between the minimum required GM assumed for each of the three draughts d_s , d_p and d_t . When additional subdivision indices are calculated for different trims, a single envelope curve based on the minimum values from these calculations shall be presented. When it is intended to develop curves of maximum permissible KG it shall be ensured that the resulting maximum KG curves correspond with a linear variation of GM.

3 ADDITIONAL REQUIREMENTS FOR STABILITY

■ **Head 3.3 TIMBER CARRIERS**, item 3.3.1 has been changed and should be read as follows:

3.3.1 The following definitions apply for the purposes of the present Head:

- .1 *timber* is used as a collective expression used for all types of wooden material covered by CODE OF SAFE PRACTICE FOR SHIPS CARRYING TIMBER DECK CARGOES, 2011 (IMO Resolution A.1048(27)), including both round and sawn wood but excluding wood pulp and similar cargo;
- .2 *timber deck cargo* means a cargo of timber carried on an uncovered part of a freeboard or superstructure deck;
- .3 *timber load line* means a special load line assigned to ships complying with certain conditions set out in the International Convention on Load Lines;
- .4 *deepest timber subdivision draught* is the waterline which corresponds to the timber summer draught to be assigned to the ship;
- .5 *partial timber subdivision draught* is the light service draught as defined in Head 2.2 of the Rules for the classification of ships, Part 5 – Subdivision plus 60% of the difference between the light service draught and the deepest timber subdivision draught.

■ **Head 3.3 TIMBER CARRIERS**, item 3.3.11 has been changed and should be read as follows:

3.3.11 For ships carrying timber deck cargoes which have to fulfil the damage stability requirements of the Rules for the classification of ships, Part 5 – Subdivision, stability information, as required in 1.5.1.3.8, 1.5.1.3.10 and 1.5.1.3.11 of this part of the Rules, shall include, among other damage stability related issues, a curve of minimum operating metacentric height (GM) versus draught or maximum allowable vertical centre of gravity (KG) versus draught which covers the requirements in 1.5.1.3.8 of this part of the Rules.

- .1 To ensure the buoyancy of timber deck cargo can be justifiably credited in damage stability calculations, the integrity of the lashed timber deck cargo shall comply with the following:
 - .1 The timber deck cargo is to be stowed in accordance with the requirements of 2.9 of the CODE OF SAFE PRACTICE FOR SHIPS CARRYING TIMBER DECK CARGOES, 2011 (IMO Resolution A.1048(27)).
 - .2 The timber deck cargo is to be secured by lashings and/or uprights.
 - .3 Lashings and uprights are to comply with the requirements of 2.10 of the CODE OF SAFE PRACTICE FOR SHIPS CARRYING TIMBER DECK CARGOES, 2011 (IMO Resolution A.1048(27)).
- .2 The height and extent of the timber deck cargo shall be in accordance with 3.3.5 of this Head and shall be at least stowed to the standard height of one superstructure.
- .3 The permeability of the timber deck cargo is not to be less than 25% of the volume occupied by the cargo up to one standard superstructure.
- .4 Unless instructed otherwise by the Administration, the stability information for ships with timber deck cargoes shall be supplemented by additional curve(s) of limiting GM (or KG) covering the timber draught range.
- .5 The above described curve(s) applicable for conditions with timber deck cargo is/are to be developed as described in 1.5.1.6, and considering timber deck cargo at the deepest timber subdivision draught and at the partial timber subdivision draught only.
- .6 The limiting GM shall be varied linearly between the deepest timber subdivision draught, and between the partial timber subdivision draught and the light service draught respectively. Where timber freeboards are not assigned the deepest and partial draughts shall relate to the summer load line.
- .7 When considering the vertical extent of damage, the upper deck may be regarded as a horizontal subdivision (in accordance with 2.7.7.1 of the Rules for the classification of ships, Part 5 - Subdivision). Thus when calculating damage cases which are limited vertically to the upper deck with the corresponding v -factor, the timber deck cargo may be considered to remain buoyant with an assumed permeability of 0.25 at the deepest and partial draught. For damage extending above the upper deck the timber deck cargo buoyancy in way of the damage zone is to be ignored.