

No. 24 Intact Stability

(1988)
(Rev.1
1989)
(Rev.2
1994)
(Rev.3
June
2000)
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2002)
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May
2004)
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In UR L2 the proof of adequate intact stability is required without setting definite values except for postulating an absolute lowest level.

In case the Administration concerned has not laid down criteria applicable for the particular ship, it is recommended that the ship is accepted as having adequate stability, if at least the requirements included in IMO Res. MSC.267(85) (2008 Intact Stability Code) or their equivalents are met:

- For offshore supply vessels of all sizes the following criteria should be met:
 - The intact stability requirements of IMO Res. MSC.267(85), Part A Chapter 2.3 and Part B Chapter 2.4.
- For special purpose ships of all sizes the following criteria should be met:
 - The intact stability requirements of IMO Res. MSC.267(85), Part A Chapter 2.3 and Part B Chapter 2.5.
- For towing vessels the following criteria should be met:
 - The intact stability requirement of IMO Res. MSC.267(85), Part A Chapter 2.2,
 - alternatively, if applicable:
the intact stability requirement of IMO Res. MSC.267(85), Part B Chapter 2.4.
 - Additionally:
 - The residual area between a righting lever curve and a heeling lever curve developed from 70% of the maximum bollard pull force acting in 90° to the ship-length direction should not be less than 0,09 mrad. The area has to be determined between the first interception of the two curves and the second interception or the angle of down flooding whichever is less.
 - alternatively, the area under a righting lever curve should not be less than 1.4 times the area under a heeling lever curve developed from 70% of the maximum bollard pull force acting in 90° to ship-length direction. The areas to be determined between 0° and the 2nd interception or the angle of down flooding whichever is less.

The heeling lever curve should be derived by using the following formula:

$$b_h = 0.7 TH \cos\theta / 9.81\Delta$$

where:

b_h = heeling arm, in m

T = maximum bollard pull, in kN

H = vertical distance, in m, between the towing hook and the centre of the propeller

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(cont)

Δ = loading condition displacement, in t.

Ships other than those covered by the 2008 Intact Stability Code are not covered by this recommendation.

Note:

While UR L2 and this Recommendation refer to intact stability, for vessels to which requirements governing subdivision and damage stability are applicable, the intact stability shall be sufficient to meet such requirements in all prescribed damage conditions.

Openings required to be fitted with weathertight closing devices under the ICLL but, for operational reasons, are required to be kept open should be considered as downflooding points in stability calculation.

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