

- where: PA_c = the side shell area in square metres for each segregated ballast tank or space other than an oil tank based on projected moulded dimensions,
 PA_s = the bottom shell area in square metres for each such tank or space based on projected moulded dimensions,
 L_t = length in metres between the forward and after extremities of the cargo tanks,
 B = maximum breadth of the ship in metres as defined in Regulation 1(21) of this Annex,
 D = moulded depth in metres measured vertically from the top of the keel to the top of the freeboard deck beam at side amidships. In ships having rounded gunwales, the moulded depth shall be measured to the point of intersection of the moulded lines of the deck and side shell plating, the lines extending as though the gunwale were of angular design,
 J = 0.45 for oil tankers of 20,000 tons deadweight
 0.30 for oil tankers of 200,000 tons deadweight and above, subject to the provisions of paragraph (3) of this Regulation.
 For intermediate values of deadweight the value of "J" shall be determined by linear interpolation.

Whenever symbols given in this paragraph appear in this Regulation, they have the meaning as defined in this paragraph.

(3) For tankers of 200,000 tons deadweight and above the value of "J" may be reduced as follows:

$$J \text{ reduced} = \left[J - \left(a - \frac{0_c + 0_s}{4 O_A} \right) \right] \text{ or } 0.2 \text{ whichever is greater}$$

where: $a = 0.25$ for oil tankers of 200,000 tons deadweight

$a = 0.40$ for oil tankers of 300,000 tons deadweight

$a = 0.50$ for oil tankers of 420,000 tons deadweight and above,

For intermediate values of deadweight the value of "a" shall be determined by linear interpolation.

0_c = as defined in Regulation 23(1)(a) of this Annex,

0_s = as defined in Regulation 23(1)(b) of this Annex,

O_A = the allowable oil outflow as required by Regulation 24(2) of this Annex.

(4) In the determination of " PA_c " and " PA_s " for segregated ballast tanks and spaces other than oil tanks the following shall apply:

- (a) the minimum width of each wing tank or space either of which extends for the full depth of the ship's side or from the deck to the top of the double bottom shall be not less than 2 metres. The width shall be measured inboard from the ship's side at right angles to the centre line. Where a lesser width is provided the wing tank or space shall not be taken into account when calculating the protecting area " PA_c "; and
- (b) the minimum vertical depth of each double bottom tank or space shall be $B/15$ or 2 metres, whichever is the lesser. Where a lesser depth is provided the bottom tank or space shall not be taken into account when calculating the protecting area " PA_s ".

The minimum width and depth of wing tanks and double bottom tanks shall be measured clear of the bilge area and, in the case of minimum width, shall be measured clear of any rounded gunwale area.