

Regulation 25: Hypothetical outflow of oil

1. The hypothetical outflow of oil in the case of side damage (O_c) and bottom damage (O_s) shall be calculated by the following formulae with respect to compartments breached by damage to all conceivable locations along the length of the ship to the extent as defined in regulation 24 of this Annex.

1. For side damages:

$$O_c = \sum W_i + \sum K_i C_i \quad (\text{I})$$

2. For bottom damages:

$$O_s = \frac{1}{3}(\sum Z_i W_i + \sum Z_i C_i) \quad (\text{II})$$

where:

W_i = volume of a wing tank, in cubic metres, assumed to be breached by the damage as specified in regulation 24 of this Annex; W_i for a segregated ballast tank may be taken equal to zero.

C_i = volume of a centre tank, in cubic metres, assumed to be breached by the damage as specified in regulation 24 of this Annex; C_i for a segregated ballast tank may be taken equal to zero.

$K_i = 1 - \frac{b_i}{t_c}$; when b_i is equal to or greater than t_c , K_i shall be taken equal to zero.

$Z_i = 1 - \frac{h_i}{v_s}$; when h_i is equal to or greater than v_s , Z_i shall be taken equal to zero.

b_i = width of wing tank under consideration, in metres, measured inboard from the ship's side at right angles to the centreline at the level corresponding to the assigned summer freeboard.

h_i = minimum depth of the double bottom under consideration, in metres; where no double bottom is fitted, h_i shall be taken equal to zero.

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

3.1 Credit shall only be given in respect of double bottom tanks which are either empty or carrying clean water when cargo is carried in the tanks above.

4. In the case where bottom damage simultaneously involves four centre tanks, the value of O_s may be calculated according to the formula:

$$O_s = \frac{1}{4}(\sum Z_i W_i + \sum Z_i C_i) \quad (\text{III})$$