

Preliminary Computation
Side Openings & Stairways Closed.

3.11 (Comp.).

Index. No. 33689
(For London Office only).

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name IMPOPO	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length 170.0 Breadth 30.0 Depth 11.50					Date of Survey 16/10/92
Moulded displacement at moulded draught = 85 per cent. of moulded depth					Surveyor's Signature
Coefficient of fineness for use with Tables .68 (assumed)					Particulars of Classification

Depth for Freeboard (D). Moulded depth 11.50 Ringer plate03 Leathing on exposed deck $T \left(\frac{L-S}{L} \right) = \frac{2.5}{12} \times 2116 =$ Depth for Freeboard (D) = 11.58	Depth correction. (a) Where D is greater than Table depth (D - Table depth) R = + .33 .31 (11.57 - 11.33) $\times 1.307$ (b) Where D is less than Table depth (if allowed) (Table depth - D) R = If restricted by superstructures <input checked="" type="checkbox"/>	Round of Beam correction. Moulded Breadth (B) 30.0 Standard Round of Beam = $\frac{B \times 12}{50} =$ 7.20 Ship's Round of Beam = 7.50 Difference .30 Restricted to Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.30}{4} \times 2116 =$ -.02
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DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	112.33	112.33	8' 0"	✓	112.33
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...					
" overhang aft ...					
" overhang forward ...					
Forecastle enclosed ...	21.70	21.70	8' 0"	✓	21.70
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward ...					
Total ...	134.03	134.03			134.03

Standard Height of Superstructure **7.5 6.0**
" " R.Q.D. ✓
Deduction for complete superstructure **23.00**
Percentage covered $\frac{S}{L} =$
" $\frac{S_1}{L} =$ } **78.84**
" $\frac{E}{L} =$
Percentage from Table, Line A. **73.87**
(corrected for absence of forecastle (if required))
Percentage from Table, Line B.
(corrected for absence of forecastle (if required))
Interpolation for bridge less than .2L (if required)
Deduction = **23 × .7387 = - 16.99**

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	27.00	1					1		
1/2 L from A.P. ...		4					4		
2/2 L " ...		2					2		
Amidships ...		4					4		
2/2 L from F.P. ...		2					2		
1/2 L " ...		4					4		
F.P. ...		1					1		
Total ...				243.00					239.4

Mean actual sheer aft =
Mean standard sheer aft =
Mean actual sheer forward =
Mean standard sheer forward =
Length of enclosed superstructure forward of amidships =
" " aft of " =
Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{3.6 \times (.75 - .3942)}{18} =$ **+.07**
If limited to maximum allowance of 1 1/2 ins. per 100 ft.

Deduction for Tropical Freeboard.
Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **11.585**
Summer freeboard = **.17**
Moulded draught (d) = **11.368**

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = **2.84 = 2 3/4**
Addition for Winter North Atlantic Freeboard (if required) = **4 3/4**

Deduction for Fresh Water.

Displacement in salt water at summer load water line
 $\Delta =$
Tons per inch immersion at summer load water line
T =
Deduction = $\frac{\Delta}{40 T}$ inches = **2 1/2**

TABULAR FREEBOARD corrected for Flush Deck (if required)
Correction for coefficient

Depth Correction
Deduction for superstructures
Sheer correction
Round of Beam correction
Correction for Thickness of Deck amidships
Other corrections, soundings, restriction to
Summer Freeboard = **2.00**

18.30
18.30

18.30
17.10.42

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:

Tropical Fresh Water Line above Centre of Disc **2 1/2**
Fresh Water Line " " **2 1/2**
Tropical Line " " **Nil**
Winter Line below " " **2 3/4**
Winter North Atlantic Line " " **4 3/4**

Tropical Fresh Water Freeboard
Fresh Water " "
Tropical " "
Winter " "
Winter North Atlantic " "

0' - 2" (limited)
0' - 0 1/2"
0' - 0 1/2"
0' - 2" (limited)
0' - 4 3/4"
0' - 6 3/4"