

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

Index. No.  
(For London Office only.)

25410.

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having

(Type of Superstructures.)

Port of Survey

Date of Survey 1/12/21

Name of Surveyor

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

Moulded Dimensions: Length 529.50 Breadth 66.15 Depth 42.06  
 Moulded displacement at moulded draught = 85 per cent. of moulded depth tons  
 Coefficient of fineness for use with Tables 1.79 assumed at .85 draught 42.06

Particulars of Classification

Shelter on with (hull) Carrying petrol = bulk

## Depth for Freeboard (D)

Moulded depth ... .. 42.06  
 Stringer plate ... .. .08

Sheathing on exposed deck

$$T \left( \frac{L-S}{L} \right) =$$

Depth for Freeboard (D) = 42.14

## Depth correction

(a) Where D is greater than Table depth  
(D-Table depth) R =

$$(42.14 - 35.30) \times 3 = +20.52$$

(b) Where D is less than Table depth (if allowed)  
(Table depth-D) R =

If restricted by superstructures

## Round of Beam correction

Moulded Breadth (B) 66.15

$$\text{Standard Round of Beam} = \frac{B \times 12}{50} = 15.88$$

$$\text{Ship's Round of Beam} = 16.25$$

Difference

Restricted to

$$\text{Correction} = \frac{\text{Diff}}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{.37}{4} \times .93 = -.09$$

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ... ..					
" overhang ... ..					
R.Q.D. enclosed ... ..					
" overhang ... ..					
Bridge enclosed ... ..					
" overhang aft ... ..					
" overhang forward ... ..					
F'cle enclosed ... ..	37.08	37.08	7.5	✓	37.08
" overhang ... ..					
Trunk aft ... ..					
" forward ... ..					
Tonnage opening aft ... ..					
" " forward ... ..					
Total ... ..	37.08	37.08			37.08

Standard Height of Superstructure 7.5

" " R.Q.D.

Deduction for complete superstructure

$$\text{Percentage covered} \frac{S}{L} = 7.00$$

$$\frac{S_1}{L} = 7.00$$

$$\frac{E}{L} = 7.00$$

Percentage from Table, Line A.

(corrected for absence of forecastle (if required))

Percentage from Table, Line B. Tanker 4.92

(corrected for absence of forecastle (if required))

Interpolation for bridge less than .2L (if required)

$$\text{Deduction} = 42 \times .049 = -2.06$$

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ... ..	62.95	1			36.00	36.00	1		36.00
$\frac{1}{4}$ L from A.P. ... ..		4			15.80	15.80	4		63.20
$\frac{2}{4}$ L " ... ..		2			3.95	3.95	2		7.90
Amidships ... ..		4			-	-	4		-
$\frac{2}{4}$ L from F.P. ... ..		2			9.77	9.77	2		19.54
$\frac{1}{4}$ L " ... ..		4			39.10	39.10	4		156.40
F.P. ... ..	125.90	1			125.90	125.90	1		90.00
Total ... ..				566.49					373.04

$$\text{Correction} = \frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{193.45}{18} (.75 - .035) = +7.68$$

If limited on account of midship superstructure.

If limited to maximum allowance of  $1\frac{1}{2}$  ins. per 100 ft.

## Deduction for Tropical Freeboard.

## Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 42.14  
 Summer freeboard = 10.65  
 Moulded draught (d) = 31.49

## Deduction for Tropical freeboard and addition for

Winter freeboard =  $\frac{d}{4}$  inches =

Addition for Winter North Atlantic Freeboard (if required) =

## 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 =  $\frac{\Delta}{40T}$  inches

## TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

	+	-
Depth Correction ... ..	20.52	-
Deduction for superstructures ... ..	-	2.06
Sheer correction ... ..	7.68	-
Round of Beam correction ... ..	-	.09
Correction for Thickness of Deck amidships ... ..		
Other corrections, scantlings, etc. ... ..		
	28.20	2.15

Summer Freeboard = 127.85

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

Tropical Fresh Water Line above Centre of Disc ... ..  
 Fresh Water Line " " ... ..  
 Tropical Line " " ... ..  
 Winter Line below " " ... ..  
 Winter North Atlantic Line " " ... ..

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