

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having

Port of Survey

(Type of Superstructures.)

Date of Survey 26.5.32.

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

Name of Surveyor

Moulded Dimensions: Length 302.66 Breadth 42.75 Depth 23.00  
 Moulded displacement at moulded draught = 85 per cent. of moulded depth  
 Coefficient of fineness for use with Tables 796

Particulars of Classification +100 A1

## Depth for Freeboard (D)

Moulded depth ...

Stringer plate ...

Sheathing on exposed deck

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

Depth for Freeboard (D) = 23.04

## Depth correction

(a) Where D is greater than Table depth  
(D - Table depth) R = +6.66(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)

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

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

Difference

Restricted to

$$\text{Correction} = \frac{\text{Diff}}{4} \times \left( 1 - \frac{S_1}{L} \right) = -0.06$$

## 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 ...					
Fore enclosed ...					
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" forward ...					
Total ...					

Standard Height of Superstructure 6.527

" " R.Q.D.

Deduction for complete superstructure 35.51

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

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

$$\frac{E}{L} = 48.16\%$$

Percentage from Table, Line A.

(corrected for absence of forecastle (if required))

Percentage from Table, Line B. Timber 68.10%

(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

$$\text{Deduction} = 35.51 \times 0.681 = 24.18$$

## SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...		1				1	
1/4 L from A.P. ...		4				4	
2/4 L " ...		2				2	
Amidships ...		4				4	
3/4 L from F.P. ...		2				2	
1/4 L " ...		4				4	
F.P. ...		1				1	
Total ...							

$$\text{Correction} = \frac{\text{Difference between sums of products}}{18} \left( 0.75 - \frac{S}{2L} \right) = +0.65$$

If limited on account of midship superstructure.

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 = 23.04

Summer freeboard = 2.58

Moulded draught (d) = 20.46

Deduction for Tropical freeboard and addition for

Winter freeboard =  $\frac{d}{4}$  inches = 5.11 = 5Addition for Winter North Atlantic Freeboard (if required) =  $\frac{d}{3} = 6.82 = 6 3/4$ 

## Deduction for Fresh Water.

Displacement in salt water at summer load water line

Tons per inch immersion at summer load water line

T = 26.95

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

$$= \frac{6065}{40 \times 26.95} = 5.62 = 5 1/2$$

## 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, scantlings, etc. ...

+	-
6.66	
	24.18
6.65	
	0.06
7.31	24.24
Summer Freeboard = 30.89	

Timber SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck: 2'-7"

Timber Tropical Fresh Water Line above Centre of Disc ... 20 1/4"

" Fresh Water Line " " ... 15 1/4"

" Tropical Line " " ... 14 3/4"

" Winter Line below above, " " ... 3"

" Winter North Atlantic Line " below, " " ... 8 3/4"

" Summer Line above centre of disc. 9 3/4"

Timber Tropical Fresh Water Freeboard ... 1'-8 1/2"

Fresh Water " " ... 2'-1 1/2"

Tropical " " ... 2'-2"

Winter " " ... 3'-1 3/4"

Winter North Atlantic " " ... 4'-2 1/2"