

Lloyd's Register of Shipping. SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having POOP Bridge & Forecastle

(Type of Superstructures.)

Ship's Name	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build
BELLASCO	British Hull	146 433	2494	1922/2

Moulded Dimensions: Length 299.0 Breadth 43.5 Depth 24.46

Moulded displacement at moulded draught = 85 per cent. of moulded depth 6065 tons

Coefficient of fineness for use with Tables .785

Port of Survey

Date of Survey

Name of Surveyor

Particulars of Classification

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth ... 24.46	(a) Where D is greater than Table depth (D-Table depth) R = + 10.51	Moulded Breadth (B)
Stringer plate ... .04	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Standard Round of Beam = $\frac{B \times 12}{50} =$
Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$	If restricted by superstructures	Ship's Round of Beam =
Depth for Freeboard (D) = 24.50		Difference
		Restricted to
		Correction = $\frac{\text{Diff}^a}{4} \times \left( 1 - \frac{S_1}{L} \right) = - .04$

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 6.49

„ „ R.Q.D. 35.27

Deduction for complete superstructure 35.27

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

„ „  $\frac{S_1}{L} =$

„ „  $\frac{E}{L} = 47.86$

Percentage from Table, Line A. (corrected for absence of fore-castle (if required))

Percentage from Table, Line B. TIMBER 67.91 (corrected for absence of fore-castle (if required))

Interpolation for bridge less than 2L (if required)

Deduction = - 23.95

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...		1				1	
$\frac{1}{8}L$ from A.P. ...		4				4	
$\frac{2}{8}L$ „ ...		2				2	
Amidships ...		4				4	
$\frac{3}{8}L$ from F.P. ...		2				2	
$\frac{4}{8}L$ „ ...		4				4	
F.P. ...		1				1	
Total ...							

Mean actual sheer aft = Deficient

Mean standard sheer aft =

Mean actual sheer forward = Deficient

Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =

„ „ aft of „ =

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = + 6.55$

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.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient
Depth to Freeboard Deck = <u>24.50</u>	$\Delta = 6280$	Depth Correction ... 10.51
Summer freeboard = <u>3.29</u>	Tons per inch immersion at summer load water line	Deduction for superstructures ... 23.95
Moulded draught (d) = <u>21.21</u>	$T = 26.50$	Sheer correction ... 6.55
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <u>5.30 = 5 1/4</u>	Deduction = $\frac{\Delta}{40 T}$ inches = <u>5.92</u>	Round of Beam correction ... .04
Addition for Winter North Atlantic Freeboard (if required) = $\frac{d}{3} = 7.07 = 7$	= <u>6</u>	Correction for Thickness of Deck amidships
		Other corrections, scantlings, etc. ...
		17.06 23.99 - 6.93
		Summer Freeboard = <u>39.56</u>

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

TIMBER Tropical Fresh Water Line above Centre of Disc ... 23 1/2	Tropical Fresh Water Freeboard ... 2 4 1/4
„ Fresh Water Line „ „ ... 18 1/4	Fresh Water „ „ ... 2 9 1/2
„ Tropical Line „ „ ... 17 1/2	Tropical „ „ ... 2 10 1/4
„ Winter Line „ „ ... 5 1/4	Winter „ „ ... 3 10 1/2
„ Winter North Atlantic Line „ „ ... 6 3/4	Winter North Atlantic „ „ ... 4 10 1/2

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5m, 3.32.

SUMMER ABOVE - 12 1/4

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