

Lloyd's Register of Shipping.  
SURVEYS FOR FREEBOARD.  
(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey.....
					Date of Survey.....
Moulded Dimensions : Length 90.00 Breadth 13.5 Depth 9.0 - 2.286					Surveyor's Signature.....
Moulded displacement at moulded draught = 85 per cent. of moulded depth 5060 tons					Particulars of Classification 100 AT
Coefficient of fineness for use with Tables 1.250					W. Gled.

<b>DEPTH FOR FREEBOARD (D).</b> Moulded depth ... .. 6.714 Stringer plate ... .. 0.09 Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$ Depth for Freeboard (D) = 6.723	<b>DEPTH CORRECTION.</b> (a) Where D is greater than Table depth (D-Table depth) R = $8.33 \times (6.723 - 6.0) 2.273 = +37$ (b) Where D is less than Table depth (if allowed) (Table depth-D) R = If restricted by superstructures	<b>ROUND OF BEAM CORRECTION.</b> Moulded Breadth (B) 13.5 Standard Round of Beam = $\frac{B \times 12}{50} = 270$ Ship's Round of Beam = 280 Difference 10 Restricted to Correction = $\frac{\text{Diff}^\circ}{4} \times \left( 1 - \frac{S_1}{L} \right) = \text{Nil}$
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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'clle enclosed ... ..					
„ overhang ... ..					
Trunk aft ... ..					
„ forward ... ..					
Tonnage opening aft ... ..					
„ „ forward ... ..					
Total ... ..					

Standard Height of Superstructure 19.69
„ „ R.Q.D. 8.90
Deduction for complete superstructure
Percentage covered $\frac{S}{L} =$
„ „ $\frac{S_1}{L} =$
„ „ $\frac{E}{L} =$
Percentage from Table, Line A. (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 = 8.90

SHEER CORRECTION.							
Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ... ..		1		1060	1377	1	1377
$\frac{1}{8}$ L from A.P. ... ..		4		460	613	4	2452
$\frac{2}{8}$ L „ ... ..		2		120	151	2	302
Amidships ... ..		4		-	-	4	-
$\frac{2}{8}$ L from F.P. ... ..		2		240	268	2	536
$\frac{1}{8}$ L „ ... ..		4		920	1085	4	4340
F.P. ... ..		1		2120	2437	1	2437
Total ... ..			9033	311			11444

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{2411}{18} \times .25 = 34$   
If limited on account of midship superstructure.

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 „ =

<b>Deduction for Tropical Freeboard.</b> <b>Addition for Winter and Winter North Atlantic Freeboard.</b> Depth to Freeboard Deck = 6.723 Ft. Summer freeboard = 3.27 Moulded draught (d) = 6.396 Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = Addition for Winter North Atlantic Freeboard (if required) =	<b>Deduction for Fresh Water.</b> 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 =	<b>TABULAR FREEBOARD</b> corrected for Flush Deck (if required) Correction for coefficient $730 + .68 = 1411.36$ 136 Depth Correction ... .. 137 Deduction for superstructures ... .. 890 Sheer correction ... .. 34 Round of Beam correction ... .. Correction for Thickness of Deck amidships ... .. Other corrections, scantlings, etc. ... .. Summer Freeboard = 327
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SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck :-

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



A new form should be prepared if any alterations that affect the freeboard have been made. If no such alterations have been made, the Surveyor should endorse the form on this side with his signature and the date.

6.60  
2.4  
9.0  
2.286  
6.714 7.5/3.2807.

90 x 3.2807 = 29.526.

Trade of ship .....

Names of sister ships .....

Builder's name and yard number .....

Owners .....

Fee £ ..... : .....



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Foundation