

Timber
Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.

Index. No. **34397**
~~34379~~
(For London Office only.)

Computation of Freeboard for Steamer, Sailing Ship, Tanker				Port of Survey _____	
having _____				Date of Survey 2. 11. 33.	
(Type of Superstructures.)				Name of Surveyor R. Dunsun	
Ship's Name "HARCALO."	Nationality and Port of Registry British London.	Official Number _____	Gross Tonnage _____	Particulars of Classification + 100 A.I. (Contemplated)	
Moulded Dimensions: Length 415' Breadth 56' Depth 27.26'					
Moulded displacement at moulded draught = 85 per cent. of moulded depth 11373 tons					
Coefficient of fineness for use with Tables .74.					

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth 27.25	(a) Where D is greater than Table depth (D-Table depth) R = ✓	Moulded Breadth (B) _____
Stringer plate05	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = -1.11"	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) = 27.30		Difference _____
		Restricted to _____
		Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right)$ = - .02"

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed						Standard Height of Superstructure _____
" overhang						" " R.Q.D. _____
R.Q.D. enclosed						Deduction for complete superstructure 42"
" overhang						Percentage covered $\frac{S}{L} =$ _____
Bridge enclosed						" " $\frac{S_1}{L} =$ _____
" overhang aft						" " $\frac{E}{L} =$ 84.04%
" overhang forward						Percentage from Table, Line A.
F'cle enclosed						(corrected for absence of forecastle (if required))
" overhang						Percentage from Table, Line B. Timber 90.02%
Trunk aft						(corrected for absence of forecastle (if required))
" forward						Interpolation for bridge less than 2L (if required)
Tonnage opening aft						Deduction = 42 x .9002 = - 37.80"
" " forward						
Total						

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P.		1					1			Mean actual sheer aft =
$\frac{1}{8}$ L from A.P.		4					4			Mean standard sheer aft =
$\frac{3}{8}$ L "		2					2			Mean actual sheer forward =
Amidships		4					4			Mean standard sheer forward =
$\frac{3}{8}$ L from F.P.		2					2			Length of enclosed superstructure forward of amidships =
$\frac{1}{8}$ L "		4					4			" " aft of " =
F.P.		1					1			
Total										

Correction = $\frac{\text{Difference between sums of products}}{18} \left(75 - \frac{S}{2L} \right) =$ **- 2.36"**

If limited on account of midship superstructure. If limited to maximum allowance of 1½ ins. per 100 ft.

Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)
Depth to Freeboard Deck = 27.30	Displacement in salt water at summer load water line $\Delta =$ 12020	Correction for coefficient _____
Summer freeboard = 3.19	Tons per inch immersion at summer load water line $T =$ 46.08	Depth Correction 1.11
Moulded draught (d) = 24.11	Deduction = $\frac{\Delta}{40T}$ inches = 6½"	Deduction for superstructures 37.80
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 6"		Sheer correction 2.36
Addition for Winter North Atlantic Freeboard (if required) = $\frac{d}{3} =$ 8"		Round of Beam correction02
		Correction for Thickness of Deck amidships -
		Other corrections, scantlings, etc. -
		41.29 - 41.29
		Summer Freeboard = 38.28

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

<p>Timber Tropical Fresh Water Line above Centre of Disc ... 16½"</p> <p>" Fresh Water Line " " ... 10½"</p> <p>" Tropical Line " " ... 1.0"</p> <p>" Winter Line below " " ... 4"</p> <p>" Winter North Atlantic Line " " ... 4"</p> <p>" Summer line above Centre of Disc ... 4"</p>	<p>Timber Tropical Fresh Water Freeboard ... 3' 2¼"</p> <p>" Fresh Water " ... 2' 1¾"</p> <p>" Tropical " ... 2' 7¾"</p> <p>" Winter " ... 2' 8¼"</p> <p>" Winter North Atlantic " ... 3' 10¼"</p> <p>" Summer " ... 4' 0¼"</p>
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5m. 9.32.

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