

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name "RUNMARO"	Official Number	Nationality and Port of Registry <i>Swedish Stockholm</i>	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length 314.0 Breadth 46.33 Depth 23.46					Date of Survey 8.10.42
Moulded displacement at moulded draught = 85 per cent. of moulded depth 6615 tons					Surveyor's Signature
Coefficient of fineness for use with Tables .798 ✓					Particulars of Classification

<p>Depth for Freeboard (D).</p> <p>Moulded depth</p> <p>Stringer plate</p> <p>Sheathing on exposed deck</p> $T \left(\frac{L-S}{L} \right) =$ <p>Depth for Freeboard (D) = 23.50 ✓</p>	<p>Depth correction.</p> <p>(a) Where D is greater than Table depth (D-Table depth) R = +6.21 ✓</p> <p>(b) Where D is less than Table depth (if allowed) (Table depth-D) R =</p> <p>If restricted by superstructures</p>	<p>Round of Beam correction.</p> <p>Moulded Breadth (B)</p> <p>Standard Round of Beam = $\frac{B \times 12}{50} =$</p> <p>Ship's Round of Beam =</p> <p>Difference</p> <p>Restricted to</p> <p>Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right) =$ -0.05 ✓</p>
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DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed	24.5	24.5	7.5		
» overhang					
R.Q.D. enclosed					
» overhang					
Bridge enclosed	97.92	97.92	7.5		
» overhang aft					
» overhang forward					
F'cle enclosed	35.08	35.08	7.5		
» overhang					
Trunk aft					
» forward					
Tonnage opening aft					
» forward					
Total	157.5	157.5			

Standard Height of Superstructure **6.64**

» » R.Q.D.

Deduction for complete superstructure **36.27**

Percentage covered $\frac{S}{L} = 50.16$

» » $\frac{S_1}{L} = 50.16$

» » $\frac{E}{L} = 50.16$

Percentage from Table, Line A. (corrected for absence of forecastle [if required])

Percentage from Table, ~~Line B~~ **TIMBER** **69.35** ✓

Interpolation for bridge less than 2L (if required)

Deduction = $36.27 \times .6935 = -25.15$ ✓

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.		1					1		
1/6 L from A.P.		4					4		
2/6 L »		2					2		
Amidships		4					4		
2/6 L from F.P.		2					2		
1/6 L »		4					4		
F.P.		1					1		
Total									

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

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 » =

-0.76 ✓

If limited to maximum allowance of 1 1/2 ins. per 100 ft.

<p>Deduction for Tropical Freeboard.</p> <p>Addition for Winter and Winter North Atlantic Freeboard.</p> <p>Depth to Freeboard Deck = 23.50 Ft.</p> <p>Summer freeboard = 2.60</p> <p>Moulded draught (d) = 20.90</p> <p>Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 5.23 = 133% ✓</p> <p>Addition for Winter North Atlantic Freeboard (if required) = $\frac{d}{3} = 6.97$ = 177% ✓</p>	<p>Deduction for Fresh Water.</p> <p>Displacement in salt water at summer load water line</p> <p>$\Delta = 7001$ ✓</p> <p>Tons per inch immersion at summer load water line</p> <p>$T = 30.47$ ✓</p> <p>Deduction = $\frac{\Delta}{40 T}$ inches = 5.75 ✓</p> <p>= 146% ✓</p>	<p>TABULAR FREEBOARD corrected for Flush Deck (if required)</p> <p>Correction for coefficient</p> <p>Depth Correction</p> <p>Deduction for superstructures</p> <p>Sheer correction</p> <p>Round of Beam correction</p> <p>Correction for Thickness of Deck amidships</p> <p>Other corrections, scantlings, etc.</p> <p>Summer Freeboard = 31.23 ✓</p>
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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	5.72	TIMBER Tropical Fresh Water Freeboard	5.14
» Fresh Water Line	4.39	» Fresh Water	6.47
» Tropical Line	4.26	» Tropical	6.60
» Winter Line	1.16	» Winter	9.70
» Winter North Atlantic Line	1.90	» Winter North Atlantic	12.76
SUMMER	ABOVE		
	2.93		