

Estimated Freeboard

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Index No. _____
(For London Office only).

Ship's Name SINGKEP	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
					Date of Survey 4-11-42
Moulded Dimensions: Length 420' Breadth 54.5' Depth 36'-0" TO U.D. 28'-0" TO 2nd OK.					Surveyor's Signature
Moulded displacement at moulded draught = 85 per cent. of moulded depth tons					Particulars of Classification
Coefficient of fineness for use with Tables .78 (Assumed)					

Depth for Freeboard (D).	Depth correction.	Round of Beam correction.
Moulded depth ... 36.00	(a) Where D is greater than Table depth (D - Table depth) R = (36.23 - 28) x 3 = +24.69	Moulded Breadth (B) 54.5
Stringer plate U.D.69	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = 8.23	Standard Round of Beam = $\frac{B \times 12}{50} = 13.08$
Sheathing on exposed deck (2 3/4") $T \left(\frac{L-S}{L} \right) = .23 \left(\frac{420-110.5}{420} \right)$	If restricted by superstructures <input checked="" type="checkbox"/>	Ship's Round of Beam = 13
Depth for Freeboard (D) = 36.23		Difference = .08
		Restricted to
		Correction = $\frac{\text{Diff}^a}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.08}{4} \times .7369 = +.01$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	40.5	40.5	7.5'		40.5
„ overhang ...					
R.Q.D. enclosed ...					
„ overhang ...					
Bridge enclosed ...	29.0	29.0	7.5'		29.0
„ overhang aft ...					
„ overhang forward ...					
Fore enclosed ...	41.0	41.0	7.5'		41.0
„ overhang ...					
Trunk aft ...					
„ forward ...					
Tonnage opening aft ...					
„ forward ...					
Total ...	110.5	110.5			110.5

Standard Height of Superstructure **7.5'**

„ „ R.Q.D. ☒

Deduction for complete superstructure **42**

Percentage covered $\frac{S}{L} =$ **26.31**

„ „ $\frac{S_1}{L} =$

„ „ $\frac{E}{L} =$

Percentage from Table, Line A. (corrected for absence of forecastle (if required)) **13.15**

Percentage from Table, Line B. (corrected for absence of forecastle (if required)) **16.68**

Interpolation for bridge less than 2L (if required) **14.37**

Deduction = $42 \times .1437 = -6.04$

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	52.00	1		52.00	42.00	42.00	1		42.00
1/4 L from A.P. ...	23.14	4		92.56	18.69	18.69	4		74.76
2/4 L „ ...	5.72	2		11.44	4.62	4.62	2		9.24
Amidships ...	-	4		-	-	-	4		-
3/4 L from F.P. ...	11.44	2		22.88	12.87	12.87	2		25.74
1/4 L „ ...	46.28	4		185.12	52.06	52.06	4		208.24
F.P. ...	104.00	1		104.00	117	117.00	1		117.00
Total ...				468.00					476.98

Mean actual sheer aft = **deficient bar > 75% standard.**

Mean standard sheer aft =

Mean actual sheer forward = **Excess.**

Mean standard sheer forward =

Length of enclosed superstructure forward of amidships = **L**

„ „ aft of „ = **< 1 L.**

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{8.98}{18} (.75 - .1316) = .31$

If limited on account of midship superstructure. **Yes, no allowance.**

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 = **36.29**

Summer freeboard = **8.52**

Moulded draught (d) = **27.77**

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches =

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta =$

Tons per inch immersion at summer load water line

T =

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

TABULAR FREEBOARD corrected for Fresh Deck (if required)

Correction for coefficient $\frac{.78 + .68}{1.36} = 1.46/1.36$

	+	-
Depth Correction ...	24.69	
Deduction for superstructures ...		6.04
Sheer correction ...		
Round of Beam correction01	
Correction for Thickness of Deck amidships72	
Other corrections, scantlings, etc. ...		
Summer Freeboard	102.23	

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

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

Tropical Fresh Water Freeboard	...
Fresh Water	...
Tropical	...
Winter	...
Winter North Atlantic	...