

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name <b>KUTUBTARI</b>	Official Number	Nationality and Port of Registry <b>BRITISH BOMBAY</b>	Gross Tonnage <b>APPROX 423</b>	Date of Build <b>NOW BUILDING</b>	Port of Survey <b>VIZAGAPATAM</b>
Moulded Dimensions: Length <b>150.00</b> B.P. Breadth <b>29.0</b> Depth <b>10.25</b> FREEBOARD LENGTH <b>150.21</b>					Date of Survey <b>WHILE BUILDING</b>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <b>691</b> tons					Surveyor's Signature
Coefficient of fineness for use with Tables <b>.68 (ACTUAL .638)</b>					Particulars of Classification <b>+100 AI with Freeboard FOR COASTING SERVICE BETWEEN CHITTAGONG AND NIKLA</b>

DEPTH FOR FREEBOARD (D).		DEPTH CORRECTION.		ROUND OF BEAM CORRECTION.	
Moulded depth	10.25	(a) Where D is greater than Table depth (D - Table depth) R =		Moulded Breadth (B)	29.0
Stringer plate	.26	(10.44 - 10.61) R =	.155	Standard Round of Beam = $\frac{B \times 12}{50}$	6.96
Sheathing on exposed deck		(b) Where D is less than Table depth (if allowed) (Table depth - D) R =		Ship's Round of Beam	7.25
$T \left( \frac{L-S}{L} \right) = .21 \times .8083$	.17			Difference	1.29
Depth for Freeboard (D) =	10.44	If restricted by superstructures		Restricted to	
				Correction = $\frac{\text{Diff}^e}{4} \times \left( 1 - \frac{S_1}{L} \right)$	$\frac{29 \times .8702}{4} = 6.27$

DEDUCTION FOR SUPERSTRUCTURES.					
	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed	4.33	4.54	7'-6"		4.54
" overhang	18.92	9.96	7'-6"		9.96
R.Q.D. enclosed	9				
" overhang					
Bridge enclosed					
" overhang aft					
" overhang forward					
F'cle enclosed OPEN	5.00	5.00	7'-6"		5.00
" overhang					
Trunk aft					
" forward					
Tonnage opening aft					
" " forward					
Total	29.46	19.50			19.50

Standard Height of Superstructure **6.00**  
" " R.Q.D. **✓**  
Deduction for complete superstructure **21.02**  
Percentage covered  $\frac{S}{L} = 19.61$   
" "  $\frac{S_1}{L} = 12.98$   
" "  $\frac{E}{L} =$   
Percentage from Table, Line A. **6.49**  
(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 =  $21.02 \times .0649 = 1.36$

SHEER CORRECTION.							
Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.	25.02	1	25.02	25.000	25.00	1	25.00
$\frac{1}{8}L$ from A.P.	11.135	4	44.54	11.125	11.12	4	44.48
$\frac{2}{8}L$ "	2.75	2	5.50	2.781	2.78	2	5.56
Amidships		4				4	
$\frac{3}{8}L$ from F.P.	5.505	2	11.01	5.562	5.56	2	11.12
$\frac{4}{8}L$ "	22.27	4	89.08	22.218	22.22	4	88.88
F.P.	50.04	1	50.04	50.000	50.00	1	50.00
Total			225.19				225.04

Mean actual sheer aft = **Even**  
Mean standard sheer aft = **Even**  
Mean actual sheer forward = **1.00**  
Mean standard sheer forward = **1.00**  
Length of enclosed superstructure forward of amidships = **Nil.**  
" " aft of " = **Nil.**

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{.15}{18} (.75 - .0980) = +.01$   
If limited on account of midship superstructure. **6.520**  
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.				Correction for coefficient <b>Nil.</b>	
Depth to Freeboard Deck =	10.48	Displacement in salt water at summer load water line $\Delta = 7'-6" 577 625$		Depth Correction	.50
Summer freeboard =	2.48	Tons per inch immersion at summer load water line $T = 7'-6" 8.14 8.03$		Deduction for superstructures	1.36
Moulded draught (d) =	8.00	Deduction = $\frac{\Delta}{40 T}$ inches = 1.95		Sheer correction	.01
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches =	2.00	" 2"		Round of Beam correction	.06
Addition for Winter North Atlantic Freeboard (if required) =				Correction for Thickness of Deck amidships	.48
				Other corrections, scantlings, etc. to correspond to a summer moulded draught of 8'-0"	14.65
				Summer Freeboard =	29.75

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

Tropical Fresh Water Line above Centre of Disc **4.1**  
Fresh Water Line " " **2.1**  
Tropical Line " " **2.1**  
Winter Line below " " **Not assigned**  
Winter North Atlantic Line " " **...**

Tropical Fresh Water Freeboard **2'-5 3/4"**  
Fresh Water " **2'-1 3/4"**  
Tropical " **2'-3 3/4"**  
Winter " **Not assigned**  
Winter North Atlantic " **...**

Subtare.

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.

Sheer Forward :-

Standard.

5.505 / 3  
22.27 / 3  
50.04 / 1

16.515 ✓  
66.810 ✓  
50.040 ✓  
133.365 ✓

Actual.

5.562 / 3  
22.218 / 3  
50.000 / 1

16.686 ✓  
66.654 ✓  
50.000 ✓  
133.340 ✓

Trade of ship .....

Names of sister ships .....

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

Owners .....

Fee £ .....



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