

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
FUJI MARU.	63992	JAPAN Tokio	3628.52	July 1949.	
Moulded Dimensions: Length 105.24 Breadth 15.5 Depth 8.0 CR OF RUDDER STOCK.					Date of Survey 29/6/50.
Moulded displacement at moulded draught = 85 per cent. of moulded depth 79.58 M <sup>3</sup> tons					Surveyor's Signature
Coefficient of fineness for use with Tables 718					Particulars of Classification

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth ... .. 8.000	(a) Where D is greater than Table depth (D-Table depth) R = 8.33(8.016-7.016)26.58 = + 221 m/m.	Moulded Breadth (B) 15.500
Stringer plate ... .. .016	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = ✓	Standard Round of Beam = $\frac{B \times 12}{50} = 310$
Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$	If restricted by superstructures ✓	Ship's Round of Beam = 310
Depth for Freeboard (D) = 8.016		Difference NIL.
		Restricted to
		Correction = $\frac{\text{Diff}^*}{4} \times \left( 1 - \frac{S_1}{L} \right) = \text{NIL.}$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ... ..	5.730	5.730	2.150	2122	5.730
"  overhang ... ..					
R.Q.D. enclosed ... ..					
"  overhang ... ..					
Bridge enclosed Equid. 46.666	46.666	46.666	2.400	2122	46.666
"  overhang aft ... ..					
"  overhang forward ...					
Fore enclosed ... ..	8.600	8.600	2.100	2100	8.511
"  overhang ... ..					
Trunk aft ... ..					
"  forward ... ..					
Tonnage opening aft ...					
"  "  forward ... ..					
Total ... ..	60.996	60.996			60.907

Standard Height of Superstructure 2122.

" " R.Q.D. ✓

Deduction for complete superstructure 974.

Percentage covered  $\frac{S}{L} =$  } 57.96.

" "  $\frac{S_1}{L} =$

" "  $\frac{E}{L} = 57.88$

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

Percentage from Table, Line B. 43.88.  
(corrected for absence of forecastle (if required))

Interpolation for bridge less than .2L (if required)

Deduction =  $974 \times .4388 = -427 \text{ m/m.}$

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ... ..	1131	1		1131	1150	1131	1		1131
$\frac{1}{4}L$ from A.P. ... ..	502	4		2008	512	502	4		2008
$\frac{1}{2}L$ " ... ..	126	2		252	122	126	2		252
Amidships ... ..	✓	4		✓	✓	✓	4		✓
$\frac{3}{4}L$ from F.P. ... ..	251	2		502	253	253	2		506
$\frac{1}{2}L$ " ... ..	1005	4		4020	1020	1020	4		4080
F.P. ... ..	2261	1		2261	2040	2040	1		2040
Total ... ..				10174					10017

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{157}{18} (.75 - .2898) = + 4 \text{ m/m.}$   
If limited on account of midship superstructure. 4602 If limited to maximum allowance of 1½ ins. per 100 ft.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 8016  
Summer freeboard = 1238  
Moulded draught (d) = 6.778.

Deduction for Tropical freeboard and addition for

Winter freeboard =  $\frac{d}{4}$  inches = 141 m/m

Addition for Winter North Atlantic Freeboard (if required) = ✓

Deduction for Fresh Water.

Displacement in salt water at summer load water line

Δ =  
Tons per inch immersion at summer load water line  
T =

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

147 m/m

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

Depth Correction

Deduction for superstructures

Sheer correction

Round of Beam correction

Correction for Thickness of Deck amidships

Other corrections, scantlings, etc.

14.01	14.40
+	-
221	✓
✓	427
4	✓
✓	✓
✓	✓
✓	✓
225	427
Summer Freeboard = 1238 ✓	

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

Tropical Fresh Water Line above Centre of Disc	288 m/m
Fresh Water Line " "	147 m/m
Tropical Line " "	141 m/m
Winter Line below " "	141 m/m
Winter North Atlantic Line " "	✓

Tropical Fresh Water Freeboard	1238 m/m
Fresh Water " "	1091 m/m
Tropical " "	1097 m/m
Winter " "	1379 m/m
Winter North Atlantic " "	✓