

SCANTLINGS

Index No. _____
(For London Office only.)

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name BUNYO MARU	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length 347.80 ✓ Breadth 50.86 ✓ Depth 27.56 ✓	Moulded displacement at moulded draught = 85 per cent. of moulded depth _____ tons				Date of Survey 20.6.50
Coefficient of fineness for use with Tables 74 (assumed)				Surveyor's Signature E.T.	
				Particulars of Classification	

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth 27.56 ✓	(a) Where D is greater than Table depth (D - Table depth) R = (27.60 - 23.19) 4.41 ✓	Moulded Breadth (B) 50.86
Stringer plate04 ✓	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = 2.675 + 11.80 ✓	Standard Round of Beam = $\frac{B \times 12}{50} =$ 12.20
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures ✓	Ship's Round of Beam = 12.20
Depth for Freeboard (D) = 27.60 ✓		Difference N.L.
		Restricted to
		Correction = $\frac{\text{Diff}^{\circ}}{4} \times \left(1 - \frac{S_1}{L} \right) =$ N.L.

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S _i)	Height	Height Correction	Effective Length (E)	
Poop enclosed	21.00 ✓	21.00 ✓	7.5	✓	21.00 ✓	Standard Height of Superstructure 6.98 ✓
" overhang						" " R.Q.D. ✓
R.Q.D. enclosed						Deduction for complete superstructure 38.52 ✓
" overhang						Percentage covered $\frac{S}{L} =$ 61.69 ✓
Bridge enclosed	162.73 ✓	162.73 ✓	8.00	✓	162.73 ✓	" " $\frac{S_i}{L} =$ 61.51 ✓
" overhang aft	2.62 ✓	1.97 ✓			1.97 ✓	" " $\frac{E}{L} =$
" overhang forward						Percentage from Table, Line A. ✓
F'cle enclosed	28.21 ✓	28.21 ✓	7.5	✓	28.21 ✓	(corrected for absence of forecastle (if required))
" overhang						Percentage from Table, Line B. 48.57 ✓
Trunk aft						(corrected for absence of forecastle (if required))
" forward						Interpolation for bridge less than .2L (if required) ✓
Tonnage opening aft						Deduction = 38.52 x .4857 = 18.71 ✓
" " forward						
Total	214.56	213.91 ✓			213.91 ✓	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P.	44.78 ✓	1		44.78 ✓	46 ✓	44.78	1		44.78 ✓	Mean actual sheer aft = > 1.00
$\frac{1}{2}$ L from A.P.	19.93 ✓	4		79.72 ✓	19 ✓	79.72	4		79.72 ✓	Mean standard sheer aft =
$\frac{3}{8}$ L "	4.93 ✓	2		9.86 ✓	7 ✓	4.93	2		9.86 ✓	Mean actual sheer forward = < 1.00
Amidships		4					4			Mean standard sheer forward =
$\frac{3}{8}$ L from F.P.	9.85 ✓	2		19.70 ✓	9 ✓	9	2		18.00 ✓	Length of enclosed superstructure forward of amidships =
$\frac{1}{2}$ L "	39.85 ✓	4		159.40 ✓	37 ✓	37	4		148.00 ✓	" " aft of " =
F.P.	89.56 ✓	1		89.56 ✓	90 ✓	90	1		90.00 ✓	
Total				403.02 ✓					390.36 ✓	

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L} \right) = \frac{12.66}{18} \left(\frac{.75 - .3085}{.4415} \right) = + .31$ ✓
If limited on account of midship superstructure. If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **27.60** Ft. ✓
Summer freeboard = **4.31** ✓
Moulded draught (d) = **23.29** ✓

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

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

Depth Correction **11.80** ✓
Deduction for superstructures **18.71** ✓
Sheer correction **.31** ✓
Round of Beam correction
Correction for Thickness of Deck amidships
Other corrections, scantlings, etc.

Summer Freeboard = **51.75** ✓SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Water~~ Steel, Deck :-

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

$$\begin{array}{r} 21 \\ 3 \\ \hline 1470 \end{array}$$

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.

0-9 / 2600	.150 - 200 /
9-108 / 2500	5.400 ✓
108-124 / 2700	79.200 ✓
124-139 / 2600	14.700 ✓
	6.000 ✓
	.450 500
	<hr/>
	105.900 ✓ stated 106 m ✓

Pook .200 ✓
 5.400 ✓
 1800 ✓

 6.400 ✓ =

21.00 ✓

6) 347-8
 57-11

Bridge

28-900 ✓
 62 x 800 = 49.500 ✓ = 162.73 ✓

O'bay 800 / = 2.62 ✓

Trunk

2.400 ✓
 6.000 ✓
 500 ✓

 8.600 ✓ = 28.20 /

Trade of ship _____

Names of sister ships _____

Builder's name and yard number _____

Owners _____

Fee £ _____



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