

AMENDED.

Index No. _____
(For London Office only.)

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name YOKO MARU	Official Number	Nationality and Port of Registry JAPANESE KOBE.	Gross Tonnage	Date of Build	Port of Survey _____
Moulded Dimensions: Length 400.00 Breadth 52.00 Depth 31.00					Date of Survey 12.6.51
Moulded displacement at moulded draught = 85 per cent. of moulded depth 12200 tons					Surveyor's Signature _____
Coefficient of fineness for use with Tables 779					Particulars of Classification B.S.*

DEPTH FOR FREEBOARD (D). Moulded depth ... 31.00 Stringer plate ... 46 ... 04 Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ Depth for Freeboard (D) = 31.04	DEPTH CORRECTION. (a) Where D is greater than Table depth $(D - \text{Table depth}) R =$ $(31.04 - 26.67) 3 = +13.11$ (b) Where D is less than Table depth (if allowed) (Table depth - D) R = If restricted by superstructures <input checked="" type="checkbox"/>	ROUND OF BEAM CORRECTION. Moulded Breadth (B) 52.00 Standard Round of Beam = $\frac{B \times 12}{50} =$ 12.48 Ship's Round of Beam = 13.00 Difference .52 Restricted to Correction = $\frac{\text{Diff}^{\circ}}{4} \times \left(1 - \frac{S_1}{L}\right) = \frac{.52}{4} \times .4844 = -.06$
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DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	49.25	49.25	8.0	-	49.25
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...	112.67	112.67	8.0	-	112.67
" overhang aft ...	4.58	3.44	8.0	.	3.44
" overhang forward ...	2.25	1.13	8.0	.	1.13
F'cle enclosed ...	38.75	38.75	8.0	.	38.75
" overhang ...	1.00	1.00			1.00
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward ...					
Total ...	206.50	206.24			206.24

Standard Height of Superstructure **7.5**

" " R.Q.D. **42.00**

Deduction for complete superstructure **42.00**

Percentage covered $\frac{S}{L} =$ **52.13**

" " $\frac{S_1}{L} =$ **51.56**

" " $\frac{E}{L} =$ **37.56**

Percentage from Table, Line A.
(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 = **42.00 x .3756 = -15.77**

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...	50.00	1	50.00	65.50	65.50	1	65.50
$\frac{1}{2}$ L from A.P. ...	22.25	4	89.00	25.50	25.50	4	102.00
$\frac{2}{3}$ L " ...	5.50	2	11.00	5.90	5.90	2	11.80
Amidships ...	-	4	-	-	-	4	-
$\frac{2}{3}$ L from F.P. ...	11.00	2	22.00	14.50	14.50	2	29.00
$\frac{1}{2}$ L " ...	44.50	4	178.00	55.50	55.50	4	222.00
F.P. ...	100.00	1	100.00	125.50	125.50	1	125.50
Total ...		✓	450.00			✓	553.80

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{105.80}{18} \left(.75 - \frac{26.07}{2L} \right) = -2.88$

If limited on account of midship superstructure. **.4893** 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 = **31.04** Ft.

Summer freeboard = **5.92**

Moulded draught (d) = **25.12**

Deduction for Tropical freeboard and addition to ...

Winter freeboard = $\frac{d}{4}$ inches = **6.28**

Addition for Winter North Atlantic Freeboard (if required) = **1.60**

Deduction for Fresh Water.

Displacement in salt water at summer load water line

Tons per inch immersion at summer load water line

T =

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

6 1/2

165

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

	+	-
Depth Correction	13.11	
Deduction for superstructures		15.77
Sheer correction		2.88
Round of Beam correction		.86
Correction for Thickness of Deck amidships		
Other corrections, scantlings, etc.		
Summer Freeboard	13.11	18.91

71.50**76.70**

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

Tropical Fresh Water Line above Centre of Disc	325
Fresh Water Line	165
Tropical Line	160
Winter Line below	160
Winter North Atlantic Line	

Tropical Fresh Water Freeboard	1806
Fresh Water	1481
Tropical	1641
Winter	1646
Winter North Atlantic	1966