

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

42510
Index. No. 175
(For London Office only).

20 SEP 1950

Ship's Name YUKIKAWA MARU.	Official Number	Nationality and Port of Registry JAPAN KOBE	Gross Tonnage 4,501.81	Date of Build 9. 1941.	Port of Survey KOBE
Moulded Dimensions: Length 112.250 M. Breadth 15.800 Depth 9.015 M.					Date of Survey 2nd 19th May. 1950.
Moulded displacement at moulded draught = 85 per cent. of moulded depth 9.953 m ³ .					Surveyor's Signature <i>G. Young</i>
Coefficient of fineness for use with Tables .732					Particulars of Classification 100 A.1. CONTEMPLATED

Depth for Freeboard (D). Moulded depth ... 9.015 Stringer plate ... 0.10 Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ Depth for Freeboard (D) = 9.032	Depth correction. (a) Where D is greater than Table depth $(D - \text{Table depth}) R =$ $8.33(9.015 - 7.284) 28.348 = +364/-$ (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) 15.800 Standard Round of Beam = $\frac{B \times 12}{50} =$ 316 $-/-$ Ship's Round of Beam = 300 Difference 16 Restricted to Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{16^2}{4} \times 0.5272 = +2 -/-$
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DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	9.860	9.860	2.300	✓	9.860
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...	34.400	34.400	2.300	✓	34.400
" overhang aft ...					
" overhang forward ...					
F'dle enclosed ...	8.810	8.810	2.300	✓	8.810
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" forward ...					
Total ...	53.070	53.070			53.070

Standard Height of Superstructure **2.92** $-/-$ ✓
 " " R.Q.D. $-/-$ ✓
 Deduction for complete superstructure **1013** $-/-$ ✓
 Percentage covered $\frac{S}{L} =$
 $\frac{S_1}{L} =$ **47.28** ✓
 $\frac{E}{L} =$
 Percentage from Table, Line A. **33.68** ✓
 (corrected for absence of forecastle (if required))
 Percentage from Table, Line B. **33.68** ✓
 (corrected for absence of forecastle (if required))
 Interpolation for bridge less than 2L (if required) ✓
 Deduction = $1013 \times 33.68 = -341 -/-$ ✓

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	1189	1	✓	1189	1.187	1187	1	✓	1187
$\frac{1}{2}$ L from A.P. ...	528	4	✓	2112	.527	527	4	✓	2108
$\frac{2}{2}$ L " ...	132	2	✓	264	.132	132	2	✓	264
Amidships ...	✓	4	✓	✓	0	✓	4	✓	✓
$\frac{2}{2}$ L from F.P. ...	264	2	✓	528	.264	264	2	✓	528
$\frac{1}{2}$ L " ...	1057	4	✓	4228	1.055	1055	4	✓	4220
F.P. ...	2378	1	✓	2378	2.374	2374	1	✓	2374
Total ...		✓		10699					10681

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{18}{18} (.75 - .2364) = +1 -/-$ ✓

If limited on account of midship superstructure. ✓

Mean actual sheer aft =
 Mean standard sheer aft = } Definit ✓
 Mean actual sheer forward =
 Mean standard sheer forward = }
 Length of enclosed superstructure forward of amidships = } Definit ✓
 " " aft of " = } ✓

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **9.026**

Summer freeboard = **1.649**

Moulded draught (d) = **7.377**

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{48}$ inches = **154** $-/-$

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta = 9.835$ KT.

Tons per inch immersion at summer load water line

T = **15.13** KT.

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

162 $-/-$

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{732 + 68}{1.36} = 1.412$ **1571** ✓

1631 ✓

Depth Correction ... **364** ✓

Deduction for superstructures ... **341** ✓

Sheer correction ... **1** ✓

Round of Beam correction ... **2** ✓

Correction for Thickness of Deck amidships ... **✓**

Other corrections, scantlings, etc. ... **✓**

367 341 + 26

Summer Freeboard = **1657** ✓

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

Tropical Fresh Water Line above Centre of Disc	316 $-/-$
Fresh Water Line " "	162 $-/-$
Tropical Line " "	154 $-/-$
Winter Line below " "	154 $-/-$
Winter North Atlantic Line " "	✓

Tropical Fresh Water Freeboard	1649 $-/-$
Fresh Water " "	1333 $-/-$
Tropical " "	497 $-/-$
Winter " "	495 $-/-$
Winter North Atlantic " "	863 $-/-$

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.

SURVEYS FOR FREEBOARD

FOR THE USE OF THE SURVEYOR



Owners

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