

SCANTLING
(as a steamer actual section sheer standard)
LLOYD'S REGISTER OF SHIPPING
UNITED WITH THE BRITISH CORPORATION REGISTER
SURVEYS FOR FREEBOARD.
(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Index No. _____
(For London Office only.)

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Ship's Name KYOKUTO MARU	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length 529.50 Breadth 65.00 Depth 37.07					Date of Survey 22/11/51
Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing)					Surveyor's Signature
Coefficient of fineness for use with Tables .74					Particulars of Classification Re-classification Carrying Petroleum (calculated) in Bulk.

DEPTH FOR FREEBOARD (D). Moulded depth ... 37.07 Stringer plate07 Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ Depth for Freeboard (D) = 37.14	DEPTH CORRECTION. (a) Where D is greater than Table depth (D-Table depth) R = (37.14-35.47) 3 = +3.51" (b) Where D is less than Table depth (if allowed) (Table depth-D) R = If restricted by superstructures	ROUND OF BEAM CORRECTION. Moulded Breadth (B) 65.00 Standard Round of Beam = $\frac{B \times 12}{50} =$ 15.60 Ship's Round of Beam = 16.50 Difference +0.90 Restricted to Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.90}{4} \times .5468 = -.12"$
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DEDUCTION FOR SUPERSTRUCTURES.					Standard Height of Superstructure 7.50	
	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	" " R.Q.D.
Poop enclosed	160.50	160.50	7.75		160.50	
" overhang						
R.Q.D. enclosed						
" overhang						
Bridge enclosed	38.84	38.84	8.00		38.84	
" overhang aft						
" overhang forward						
F'cle enclosed	45.16	45.16	7.50		45.16	
" overhang						
Trunk aft						
" forward						
Tonnage opening aft						
" " forward						
Total	244.50	244.50			244.50	
					Percentage covered $\frac{S}{L} =$	
					" $\frac{S_1}{L} =$	45.32
					" $\frac{E}{L} =$	
					Percentage from Table, Line A. (corrected for absence of forecastle (if required))	28.02
					Percentage from Table, Line B. (corrected for absence of forecastle (if required))	32.02
					Interpolation for bridge less than .2L (if required)	29.46
					Deduction = 42.00 x .2946 = -12.37	

SHEER CORRECTION.							
Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.		1				1	
$\frac{1}{4}$ L from A.P.		4				4	
$\frac{2}{8}$ L		2				2	
Amidships		4				4	
$\frac{2}{8}$ L from F.P.		2				2	
$\frac{1}{4}$ L		4				4	
F.P.		1				1	
Total							
Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) =$ NIL							
If limited on account of midship superstructure.							
Mean actual sheer aft = Mean standard sheer aft = Mean actual sheer forward = Mean standard sheer forward = Length of enclosed superstructure forward of amidships = " " aft of " =							

Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard. Ft. Depth to Freeboard Deck = 37.14 Summer freeboard = 9.12 Moulded draught (d) = 28.02 Keel allowance = Extreme draught = 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 $\frac{.74 + .68}{1.36} = \frac{1.42}{1.36}$ Depth Correction ... 3.51 Deduction for superstructures ... 12.37 Sheer correction ... Round of Beam correction12 Correction for Thickness of Deck amidships ... Other corrections, scantlings, etc. ... Summer Freeboard = 109.59	113.56 118.57 27.11.51 -8.98 109.59
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SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, 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	"

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.

$$\text{Bridge less the } .2L = 7.20\%$$

$$\text{line A} = 28.02 \checkmark$$

$$\text{line B} = 32.02 \checkmark$$

$$\text{diff} = 4.00\% \checkmark$$

$$\text{allowance} = 28.02 + \left(\frac{.072}{.2} \times 4 \right)$$

$$= 28.02 + 1.44$$

$$= 29.46\%$$

.036.
1.44

$$\begin{aligned} \text{Bridge equiv. length} &= 34 + \frac{2}{3} \times 6 + \frac{2.47 \times 22}{65} \\ &= \underline{\underline{38.84}} \end{aligned}$$

Trade of ship _____

Names of sister ships _____

Builder's name and yard number _____

Owners _____

Fee £ _____



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Foundation