

## Lloyd's Register of Shipping.

Index No. 30934  
(For London Office only.)

## SURVEYS FOR FREEBOARD. STEAM SHIPS.

PARTICULARS RELATING TO ALL STEAM SHIPS EITHER FLUSH DECKED, OR WITH GALLANT FORECASTLES, SHORT POOPS AND BRIDGE HOUSES DISCONNECTED, OR WITH TOP GALLANT FORECASTLES HAVING LONG POOPS, OR RAISED QUARTER DECKS CONNECTED WITH BRIDGE HOUSES, OR OTHERWISE.

Port of Survey Kobe  
Date of Survey 28<sup>th</sup> DECEMBER 1921  
Name of Surveyor S. Innes-RustonMitsubishi Dockyard, Kobe Works, No. 92.

Ship's Name <u>S/S. "KOYU MARU"</u>	Port of Registry and Nationality. <u>Kobe Japanese</u>	Official Number. <u>28928</u>	Gross Tonnage. <u>5324.97</u>	Date of Build. <u>July 1921</u>	Particulars of Classification. <u>100A1 Contemplated</u>
Number in Register Book					

Registered Dimensions from Ship's Register.	LENGTH.	BREADTH.	DEPTH. To INNER BOTTOM	UNDER DECK TONNAGE.
	<u>400.0</u>	<u>54.5</u>	<u>27.5</u>	<u>4846</u>
Length on LOADLINE.	<u>399.25</u>	Frame Depth Rule <u>10</u> <u>6</u> <u>4</u> <u>- .66</u>	Ceiling <u>FITTED</u> Sheer <u>+ 1.33</u> <u>3' drop in tank.</u> <u>+ .12</u> <u>29.03</u>	Peak Tanks
CORRECTED DIMENSIONS.	<u>399.25</u>	<u>53.84</u>	<u>28.95</u>	<u>4846</u>

Co-efficient of fineness..... .77  
Any modification necessary [Para. 4 (a) to (e)]\* -.02 CDB  
Co-efficient as corrected ..... .75

Sheer { Stem..... 38 } 199 ÷ 2 = 99½ Mean  
at { Sternpost ... 61 }  
Sheer at ½ of the length from { Stem 80 } 111 ÷ 2 = 55.5 Mean  
Sternpost 31 }  
Gradual mean Sheer ..... 100.2 101.6 ÷ 55 = 100.9  
Standard mean Sheer [Table, Para. 18] 49.92 50 Correction  
Difference..... 50.28 51.6 ÷ 4 = 12¾  
§ If limited as Para. 18 (f) ..... -12½

Rise in Sheer { At front of bridge house..... ✓  
from amidships {  
[Para. 18 (e)] { At after end of forecastle ..... ✓

Fall in Sheer { ÷ 2 = ✓  
Para. 18 (d) {  
Length uncovered ..... ✓ Correction

## ALLOWANCE FOR DECK ERECTIONS:—

Freeboard, Table C.....	<u>4'-4"</u>
Correction for Length, if required (Para. 12, 13, and 14) .....	<u>+ ¾"</u>
Freeboard by Table A, corrected for sheer, and for length, if required (Para. 12, 13, and 14) .....	<u>4'-7¼"</u>
Difference .....	<u>6'-11"</u>
Percentage as below.....	<u>2.3¾"</u>
	<u>32.6%</u>

Correction for R. Q. Dk. if engine and boiler openings not covered by bridge house (Para. 11)

Allowance for Deck Erections ..... - 9"

	Length.	Length allowed.	Height.
Forecastle.....	<u>42.5</u>	<u>42.5</u>	<u>7.6</u>
Bridge House .....	<u>121.00</u>	<u>121.00</u>	<u>7.9</u>
† Raised Qr. Dk.....	✓	✓	✓
Poop.....	<u>38.75</u>	<u>38.75</u>	<u>7.9</u>
Total .....	<u>202.25</u>	<u>202.25</u>	<u>202.25</u>
Length of Ship .....	<u>399.25</u>	<u>399.25</u>	<u>= .507</u>
Corresponding percentage (Para. 11, 12, 13, or 14) .....	<u>32.6%</u>		

FREEBOARD recommended amidships from centre of Disc to top of Statutory Deck Line, Steel Deck:—

Fresh Water Line	above centre of Disc	.....
Indian Summer Line	" "	.....
Winter Line	below	.....
Winter North Atlantic Line	" "	.....

† If the frames, skin planking, or ceiling are of unusual thickness the breadth of vessel to inside of ceiling should be reported if possible.  
† In vessels obtaining an allowance for deck erections under Para. 11 where the sheer drops abaft amidships the height of the R.Q.D. is to be taken from the level of the top of the amidship beam.  
§ In flush-decked vessels the total standard mean sheer means the sheer measured at the stem and sternpost. In vessels having poops and forecastles, it means the sheer measured at points distant one-eighth of the vessel's length from stem and sternpost.

Moulded Depth as measured..... 30'-0"  
Addition for Keel below base line for draught record..... 2'-04" inches.

NOTE.—If the depth is measured when vessel is afloat, the details of measurement should be reported.

## CORRECTION FOR LENGTH.

Length of Ship on Loadline..... 399.25  
Length in Table ..... 360.00  
Difference ..... 39.25  
Correction for 10ft., Table A. .... 1.5 Table C. .8  
× Difference divided by 10 ..... 5.887 (if required.) 3.14  
If 10ths length covered divide by 2 +6" +3¾"

## CORRECTION FOR IRON DECK.

Proportion covered, if less than 10ths length covered ..... .507  
Thickness of usual wood deck, less stringer ..... 3½ - 1¾

## CORRECTION FOR ROUND OF BEAM.

Breadth at Gunwale amidships..... 53.5  
Round of Beam ..... 13½  
Normal round..... 13½  
Difference ..... ÷ 2 = .....  
Proportion of Deck uncovered (Para. 19) .....

NOTE.—The round of beam should be reported on the full breadth of vessel at the gunwale.

Freeboard, Table A .....	<u>7' - 5½"</u>
Correction for Sheer .....	<u>1' - 0½"</u>
Correction for Length .....	<u>6' - 5"</u>
Allowance for Deck Erections .....	<u>6' - 11"</u>
Correction for Round of Beam.....	<u>6' - 2"</u>
Correction for fall in Sheer (if any).....	✓
Correction for <u>steel</u> Deck (if required) .....	<u>- 1¾"</u>
Additions for non-compliance with provisions of Para. 11 (d) and (e) † .....	<u>6' - 0¼"</u>
Other Corrections (if any) .....	✓

Winter Freeboard .....	<u>6' - 0¼"</u>
Summer Freeboard ..... <u>5¼"</u>	<u>5' - 7"</u>
Indian Summer Freeboard .....	<u>5' - 1¾"</u>
<del>N. A. Winter Freeboard</del> .....	✓

Correction necessary because clearside amidships, measured in accordance with the Statute is not taken at the intersection of the steel deck with side. + 1¾"

Winter Freeboard from deck line .....	<u>6' - 2"</u>
Summer " " " " .....	<u>5' - 8¾"</u>
Indian Summer " " " " .....	<u>5' - 3½"</u>
<del>N. A. Winter</del> " " " " .....	✓
<u>steel</u> " " " " .....	<u>5' - 8½"</u>
<u>wood</u> " " " " .....	<u>6"</u>
<u>5"</u> .....	<u>5"</u>
<u>5½"</u> .....	<u>5½"</u>

State dimensions of freeing port area on back of this form.

† The Surveyor should state whether the fall in sheer as reported is measured relatively to the straight line of keel or to the water line. If measured relatively to water line the vessel's draft at time of survey, and also the usual load draft forward and aft, should be reported.

MARKING FORM

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Do all the Frames extend to the top height in the Poop? *Yes* - Raised Quarter Deck? *✓* Bridge House? *Yes* - Forecastle? *Yes* -  
 To what height do the Reverse Frames extend? *B.A. frames to 2<sup>nd</sup> deck allierly.* -  
 Has the Poop ~~on Raised Quarter~~ Deck an efficient Iron Bulkhead at the fore end? *Yes* -  
 Give particulars of the means for closing the openings in Bulkhead *Watertight doors* -  
 Is the Poop ~~on Raised Quarter~~ Deck connected with the Bridge House? *No* - Has the Bridge House an efficient Bulkhead at the fore end? *Yes* -  
 Give particulars of the means for closing the openings in Bulkhead *Watertight doors* -  
 What is the thickness of the Bridge Front plating? *.40* and Coaming plate? *.44* -  
 Give scantlings and spacing of the Stiffeners *9 x 3½ x .52 B.A. spaced 29"* -  
 Are bracket plates fitted at each end of the Stiffeners? *Yes* - Are horn brackets fitted connecting Bridge Bulk'd. with Bulwarks? *Yes* -  
 Has the Bridge House an efficient ~~Iron~~ *Steel* Bulkhead at the after end? *Yes* -  
 How are the openings closed? *Storm boards in riveted channels full height* -  
 Is the Forecastle at least as high as the main or top-gallant rail? *Yes* - Has the Forecastle an efficient ~~Iron~~ *Steel* Bulk'd. at after end? *Yes* -  
 Are the Engine and Boiler openings covered by a Bridge, ~~Poop, Raised Quarter Deck, or enclosed by a Strong Iron or Steel Deckhouse?~~ *Yes* -  
 If the openings are not so protected are the exposed parts of the Casings efficiently constructed? *✓*  
 Give thickness of plating; scantlings and spacing of Stiffeners *✓*  
 What is the height of the exposed Casings? *✓* Are suitable means provided for closing all openings in them in bad weather? *✓*  
 Are the Weather Deck Hatchways efficiently constructed and at least equal to the requirements of Section 28 of the Rules for 1904-5? Give particulars below:— *Yes* -

Position and Size.		No. 1 Fwd. 27'-0" x 18'-0"		No. 2 30'-3" x 18'-0"		No. 3 13'-9" x 16'-0"		No. 4 30'-3" x 18'-0"		No. 5 27'-6" x 18'-0"	
Item.		Ship.	Rule.	Ship.	Rule.	Ship.	Rule.	Ship.	Rule.	Ship.	Rule.
COAMING.	Height above top of DECK	24 + 30		24 + 30		24 + 30		24 + 30		24 + 30	
	Thickness { Sides	.44		.50		.44		.50		.44	
	Ends	.44		.44		.44		.44		.44	
WEATHER DECK WEB PLATES.	Number	5		5		2		5		5	
	Section and Scantlings	PLATE 15" x 7½" x .35		PLATE 16½" x 8¼" x .36		PLATE 13 x 6½" x .34		PLATE 16½" x 8¼" x .36		PLATE 15 x 7½" x .35	
	Material	DOUBLE ANGLES 3½ x 3½ x .50		D.A. 3½ x 3½ x .50		D.A. 3½ x 3½ x .44		D.A. 3½ x 3½ x .50		D.A. 3½ x 3½ x .50	
FORE AND AFTERS.	Number										
	Section and Scantlings				NONE						
	Material										
HATCHES Thickness		2½"		2½"		2½"		2½"		2½"	
Remarks		Solid		Solid		Solid		Solid		Solid	

\* The depth of Fore and Afters should be stated from the underside of the hatches in all cases.

(If the sill of the lowest side scuttle will be less than 6 inches above the Indian Summer Load Line if assigned under the tables, state vertical distance from top of deck at side amidships to lower edge of lowest side scuttle.)

The following information is to be given in all Cases of vessels dealt with under Paras. 11, 12 (under 15 feet Moulded depth) and under Shelter Deck Rules.

What is the thickness of the Bridge Sheerstrake? *Sirake between Main and Bridge Sheerstrakes?*

Delete the words } The Crew are, are not, berthed in the bridge house.  
 that do not apply } The arrangements to enable them to get backwards and forwards from their quarters are, are not satisfactory.

Length of Bulwarks in well

Area of Freeing Ports required by Para. 11 (e) each side of vessel =

Sq. ft.

Ft. Tenths. Ft. Tenths. No.

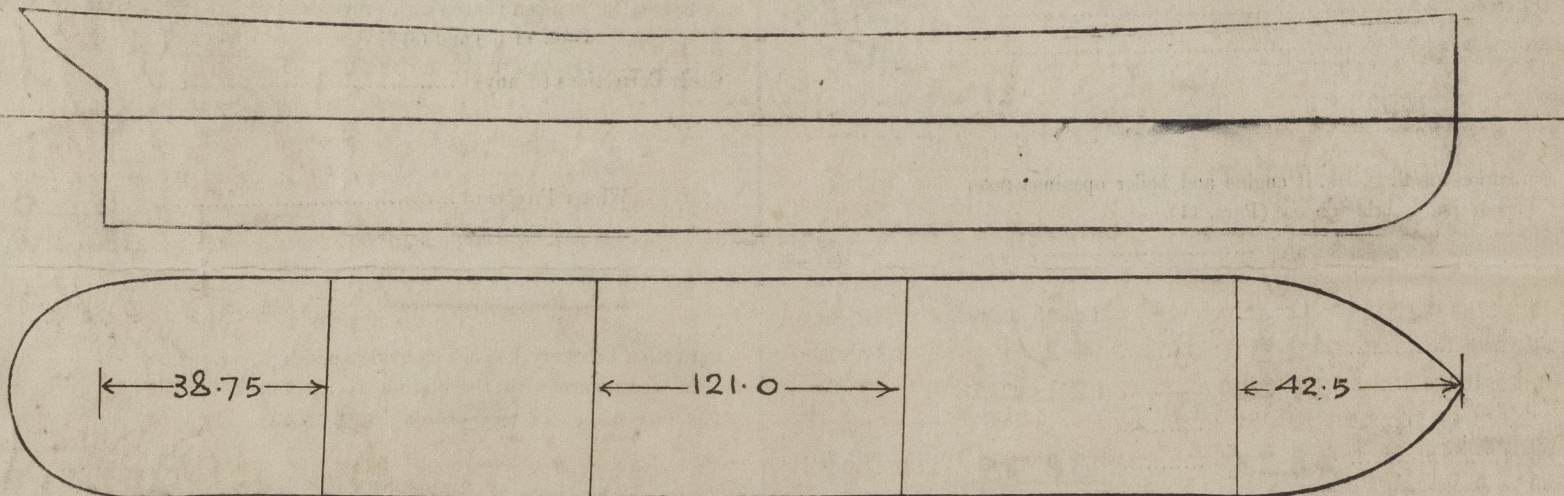
x x  
 x x

Freeing Ports  
 (each side of vessel)

Sq. ft.

Total deficiency or excess =

Sq. ft.



Show hereon line of Floors or Tank Top with position of any Breaks in same; also height of Peak Tank tops, &c., &c.

State any special features in the construction of the Vessel

Builder's name and yard number *Mitsubishi Zosen Kaisha, Kobe Works, No. 92*

Names of sister vessels *5/5. Ayaha Maru Kobe Rpt. No. 2005; Oridono Maru Rpt. 2186; Hakodate Maru Rpt. No. 2617; Malacca Maru Rpt. 2869.*

Owners *Airoumi Shoji Kabushiki Kaisha*

Address *Higashinomachi, Yenokoshima, Nishiku, Osaka Japan.*

Fee *Yen 150.00*

Received by me

*Red. Oct. 14th 1921.*

*S. Inoue President*

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