

Freeboard D.

MON 16 OCT 1916

Lloyd's Register of British and Foreign Shipping.

FORM OF COMPARISON OF SCANTLINGS OF UNCLASSED IRON AND STEEL SHIPS
WITH THE RULES OF LLOYD'S REGISTER.

IRON OR STEELSteel S.S. "Kishima Maru"Port ofOsaka

Survey held atOsaka

On theSteel Single Deck Steamer "Kishima Maru"Rig 2 masts

ONE, OR TWO DECKED, THREE DECKED VESSEL,
SINGL OR AWNING DECKED VESSEL.

1916-8Off. No.

By whom builtFujinagata S. B. Co. Osaka.
Hull No. 21.

OwnersMatsuda Kisen Gomei Kaisha

Port belonging toOsaka

20.0Breadth (moulded)40.00

25.0Depth from upper part of Keel to top of Upper Dk. Beams24.16

42.4Girth of Half Midship Frame (as per Rule)64.16

8.71st Number

80.41st Number, if a 3-Decked Vessel deduct 7 ft.

27.5Length272.00

18282nd Number17451

6.79Proportions—Breadths to Length

10.86Depths to Length—Upper Deck to Keel

Main Deck ditto d=20'10" to tank top. 21'11" to floor B.S.

COMPARISON OF THE SCANTLINGS:—To be made with the Rules of Lloyd's Register.									
FRAMING.					KEELSONS & STRINGERS.				
FRAME, (Built up) Angles, or Bars for length amidships	Inches in Ship	Inches in Ship	16ths or 20ths in Ship	Inches per Rule	CENTRE LINE KEELSON, Vertical Plate, above and below Through Plate, or Intercoastal Plate, in B.S.	Inches in Ship	Inches in Ship	16ths or 20ths in Ship	Inches per Rule
" Distance of frames from Moulding edge to moulding edge, all fore and aft	24	3 1/2	50	9 3 1/2 50	" Rider Plate	13	46	38	46
REVERSED FRAME Angles on floors	3	3	34	3 3 34	" Bulb Plate to Intercoastal Keelson	12	46	13	46
REVERSED ANGLES on floors and frames extend	3 1/2	3 1/2	32	3 1/2 3 32	" Horizontal Plates on Floors, each side	6	44	6	44
FLOORS, depth and thickness of Floor Plate at mid-line for length amidships	27	B.S.	54	27 B.S. 54	" Angles	7	42	7	42
" height extended at the Bilges	54			54	2 SIDE KEELSONS Angles	3 1/2	40	3 1/2	40
FLOORS AND BRACKETS in Cell Double Bottoms	48	24	ER 1/2	48 24	" Bulb or Plate above floors, for length	3 1/2	40	3	40
" Distance apart	40	46	36	46	" Intercoastal Plate for length	3 1/2	40	3	40
CENTRE GIRDER, in Double Bottom, depth and thickness	4	4	52	4 4 52	" Attached to outside Plating with Angle	3 1/2	38	3 1/2	38
" Angles, Top	3	3	34	3 3 34	BILGE KEELSON, Angles	3 1/2	38	3 1/2	38
SIDE GIRDERS, number and thickness	3	3	34	3 3 34	" Bulb or Plate above floors, for length	3 1/2	38	3 1/2	38
" Angles	33	38	29	38	" Intercoastal Plate for length	3 1/2	38	3 1/2	38
MARGIN PLATE, depth (exclusive of flange) and thickness	3 1/2	3 1/2	38	3 1/2 3 38	" Attached to outside Plating with Angle	3 1/2	38	3 1/2	38
" Angles	48	42	36	42	BILGE STRINGER, Angles	3 1/2	38	3 1/2	38
INNER BOTTOM PLATING, breadth and thickness of Middle Line Strake	8	40	34	8 40 B.S. 34	" Bulb Plate for length	3 1/2	38	3 1/2	38
" in Engine and Boiler Space	7	3	40	7 3 40	" Intercoastal Plate for length	3 1/2	38	3 1/2	38
" Remainder in Holds	24			24	" Attached to outside Plating with Angle	3 1/2	38	3 1/2	38
BEAMS, Upper Deck, Single Angle, Bulb	48	42	36	42	SIDE STRINGER, Angles	3 1/2	38	3 1/2	38
" Angle, Plate or Tee Bulb	7	3	40	7 3 40	" Bulb or Intercoastal Plate for length	3 1/2	38	3 1/2	38
" Angles on upper edge	24			24	" Attached to outside Plating with Angle	3 1/2	38	3 1/2	38
" Average space					Upper Deck Stringer Plate, on ends of Beams, breadth and thickness	48	27	50	45
BEAMS, Middle Deck, Single Angle, Bulb					" Angle on ditto	4 1/2	4 1/2	38	4 1/2
" Angle, Plate or Tee Bulb					" Flat of Deck, Iron or Steel, for whole length	3 1/2	30	3 1/2	30
" Angles on upper edge					" Wood Material & thickness				
" Average space					" How fastened to Beams				
BEAMS, Lower Deck, Single Angle, Bulb					Middle Deck Stringer Plate, breadth and thickness				
" Angle, Plate or Tee Bulb					" Diagonal Tie Plates on Beams, No. of pairs				
" Angles on upper edge					" Flat of Deck, Iron or Steel, for length				
" Average space					" Wood Material & thickness				
BEAMS, Hold, or Orlop, Plate or Tee Bulb					Lower Deck Stringer Plate, breadth and thickness				
" Angle, Plate or Tee Bulb					" Flat of Deck, Material & Thickness				
" Angles on upper edge					Hold or Orlop Stringer Plate, breadth and thickness				
" Average space									
BEAMS, Fore and Aft Bridge Deck, Angle, Bulb	7 1/2	3	50	7 1/2 3 50	PLATING.				
" Bulb Angle, Plate or Tee Bulb	48			48	FLAT PLATE KEEL, breadth and thickness	43	82	58	43
" Angles on upper edge					" Doubling or inch thickness and length applied				
" Average space					PLATES in Garboard Strakes, breadth and thickness	57	52	40	52
BEAMS, Forecastle Deck, Angle, Bulb	7 1/2	3	50	7 1/2 3 50	" from Garboard to lower part of Bilges		52	40	52
" Bulb Angle, Plate or Tee Bulb	48			48	" Bilges, number of Strakes and thickness	48	52	40	52
" Angles on upper edge					" Of doubling at Bilge, and length applied				
" Average space					" from upper part of Bilge to lower edge of Sheerstrake	44	62	40	43
BOLLARDS, Hold	6	7/16	27 rows		" Sheerstrake, breadth and thickness				
MAINS, Deck	5	2 1/2	3/8	5 5 44	Upper Sheerstrake				
" "					" Of doubling at Sheerstrake and length applied				
BE-FRAMES, in Fore Body, No. and spacing					" Poop and Awning Decked Sides	36			36
" Breadth & Thickness					" Bridge do.	36			36
" No. of Side Stringers					" Forecastle do.				
BE-FRAMES, in After Body, No. and spacing					Bulkheads No. 4 No. per Rule				
" Breadth & Thickness					" Height up	34	30		34
" No. of Side Stringers					Thickness of sides of ship	36	30		36
" Size of Angles or Tee Bars to Web Frames					Size of Vertical Angle Irons	8 1/2	3	46	9
					" distance apart				
					Are the outside Plates doubled two spaces of Frames in length?				

RIVETING OF EDGES AND BUTTS OF SHELL PLATING AND BUTTS OF STRINGER PLATES.
Plating quad riv. straps to treble. Sheerstrake quad riv. lap 1/2 L to treble. Other strakes treble riv. lap. Double rivets. Stringer plates treble riv. lap.

GENERAL REMARKS (state quality of Workmanship and present condition of Vessel).
The workmanship where seen appears good. The vessel was launched on 30 May 1916 and stated to have been in dry dock in August (undocked Aug 30) & leaves the builders hands early this month (Sept 1916). (Continued on separate sheet)

Surveyor's Signature: Arthur L. Jones

W536-0405 1/2

S/S "Kishima Maru" H.D.D.

The vessel has now been surveyed afloat, holds, peaks, bunkers, decks, E & B space & tanks internally being found in good condition. Sufficient ceiling lifted for survey of bilges. E & B space & this sort.

It not being convenient to have the vessel specially docked for this survey the Owners & Builders request that a Certificate of Freeboard may be issued subject to survey in dry dock say within six months. The vessel was not seen by me before launching nor when subsequently docked but there is no reason to suppose that the bottom is otherwise than in good condition.

Pillars are fitted at the middle line only i.e. at the centre of the h'way end beams: four in the forward hold & two in the after hold. Those in the forward hold are formed of four bulbs $6 \times \frac{7}{16}$ & four B.A. $5 \times 2\frac{1}{2} \times \frac{3}{8}$ with brackets as shown top & bottom. The pillars in the after hold are of two bulbs $6 \times \frac{7}{16}$ & two bulb tees $7 \times 5 \times \frac{1}{2}$. In each hold the mast forms an additional support half way between the hatch ways. The masts are riveted by angles to the deck, no wedges being fitted.

The side girders are continuous with the hatch side coamings 15×50 int'cos. plates or side coaming below d.R. with B.A. $12 \times 3\frac{1}{2} \times 60$ on lower edge, connected at hatchway corners to by $45 \times 36 \times 50$ diamond plates to the $9 \times 3\frac{1}{2} \times 50$ B.A. on lower edge of hatchway end beams.

The B.A. side Reels on in way of single bottom (u.B.) are continued for three frame spaces into the doub. bottom each way.

The steel used in the construction has been tested by the Surveyors to this Society. The steel makers are:- Illinois Steel Co (Plates, angles, rods) Sth Durham Stl Co (Plates) Saml Iyzaek (Hatch rest bars). Palmer's (Angles) Carnegie (Angles) Consitt (Angles).

The chain cables have L.R. certificates.

The Anchors are certified by the Kaigi Kyokai. (J.L.)

The freeboard assigned by the Kaigi Kyokai ("Japan Lloyd's") is shown on the enclosed photo print. & is now marked on the vessel. Stat. d.R. line $9\frac{1}{2}$ " above stow d.R. Cen. of disc $4' 4\frac{3}{8}$ below deck line. F.W. $4\frac{1}{2}$ above. I.S. $3\frac{3}{8}$ above. S. Cen. disc. W. $3\frac{3}{8}$ below. WNA $5\frac{3}{8}$ below.

Arthur L. Jones

Plans of Mid. Sec, Profile & Deck; Bulkheads & Gen. Arr^{mt} are forwarded under separate cover.