

Awning or Shelter Deck, or Flying Deck.

STEEL STEAMER.

No. 3980

State if Report is also sent on the Machinery of the Vessel Yes

Port of Kobe Date of completion of Report May 19th 1923 Received at London Office WED AUG. 1 1923
 Survey held at Imoshima Date, First Survey Nov. 2nd 1920 Last Survey Apr. 26th 1923

On the (State if Single, Twin, or Triple Screw) Single Screw Steamer "HEIYO MARU" Rig Two masts

TONNAGE under Tonnage Deck... 3676.64

CLASS 100 A1

FEET 39316

Master

Do. between Tonnage Dk. and 3rd, 4th, or Awning Dk. 58.06
 Total under Upper Dk. 313.75
 Do. of Poop 62.35
 Do. of R. (Gr. Dk.) 119.76
 Do. of Bridge House 44.42
 Do. of Houses on Deck 90.48
 Do. of excess of Hatchways 4365.48
 Do. above Crown of Engine Room 155.74
 Gross Tonnage 4365.48
 Less Crew Space 155.74
 Tonnage Crown of

Breadth (greatest moulded) 49.83
 Depth, at middle of length from top of keel to top of beams at side of uppermost Continuous Deck 28.17
 Deduct height of 'tween deck when this does not exceed 8ft. 8.00
 Transverse Number 70.00
 Length on deck from fore part of stem to after part of sternpost 345.00
 Longitudinal Number 241.50
 Depth "d" at middle of length. See Secs. 2 & 13 12.25
 Proportions, Depths to Length, Uppermost Continuous Deck at side to top of keel 17.10
 Upper Deck at side to top of keel 17.10
 Destined Voyage

Year of Appointment (1) As Master in service of owner of present vessel:—191...
 (2) As Master of this vessel:—191...
 Built at Habu Dockyard, Imoshima
 When built July 25th 1921
 By whom built Osaka Iron Works
 Owners Nippon Kisen Kaishiki Kaisha
 Managers Kobe
 Residence Kobe
 Port belonging to Habu

If Surveyed while Building, Afloat, or in Dry Dock Building
 No. of Decks with flat laid 2
 No. of Tiers of Beams 2
 Moulded depth, ft. 28 ins. 2 To Awning or Shelter Dk. Round up of Uppermost Dk. Beam, Actual 12 ins.
 Moulded depth, ft. 19 ins. 2 To Upper Dk.

| FRAMING. | | | | PILLARS. | | | |
|-----------------------------------|-----------------|-----------------|-----------------|--|-----------------|-----------------|-----------------|
| Inches in Ship. | Inches in Ship. | Inches in Ship. | Inches in Ship. | Inches in Ship. | Inches in Ship. | Inches in Ship. | Inches in Ship. |
| 345 | 0 | 49 | 10 | 25 | 9 1/2 | 16 | 9 1/2 |
| FRAMING. | | | | PILLARS. | | | |
| s, or [or L Bars, amidships | | | | PILLARS, In 'tween Deck, size and spacing | | | |
| Double Bottoms at Solid Floors | | | | " " Hold | | | |
| " at intermdt. Bkts. | | | | " " Quarter, 'tween Dks. | | | |
| " from centre to centre amidships | | | | " " in Hold | | | |
| " to collision bulkhead | | | | " " " " | | | |
| " from centre to centre in peaks | | | | " " " " | | | |
| FRAME, Angles | | | | KEELSONS AND STRINGERS. | | | |
| Double bottoms at Solid Floors | | | | CENTRE LINE KEELSON, Vertical Plate above | | | |
| " at intermdt. Bkts. | | | | " " Rider Plate | | | |
| " from centre to centre amidships | | | | " " Flat Keel Plate Angles | | | |
| " to collision bulkhead | | | | " " Horizontal Plates on Floors | | | |
| " from centre to centre in peaks | | | | " " Angles or Bulb Angles | | | |
| FRAME, Angles | | | | SIDE KEELSONS, Number | | | |
| Double bottoms at Solid Floors | | | | " Angles or Bulb Angles | | | |
| " at intermdt. Bkts. | | | | " Plate above floors, for length | | | |
| " from centre to centre amidships | | | | " Intercoastal Plate, for length | | | |
| " to collision bulkhead | | | | " Attached to outside plating with Angle | | | |
| " from centre to centre in peaks | | | | BILGE KEELSON, Angles | | | |
| FRAME, Angles | | | | " Intercoastal Plate, for length | | | |
| Double bottoms at Solid Floors | | | | " Attached to outside plating with Angle | | | |
| " at intermdt. Bkts. | | | | SIDE STRINGERS, Number | | | |
| " from centre to centre amidships | | | | " Angle | | | |
| " to collision bulkhead | | | | " Intercoastal Plate, for lng. | | | |
| " from centre to centre in peaks | | | | " Attached to outside plating with Angle | | | |
| FRAME, Angles | | | | Awning or Shelter Deck Stringer Plates | | | |
| Double bottoms at Solid Floors | | | | " breadth and thickness | | | |
| " at intermdt. Bkts. | | | | " Angle on ditto | | | |
| " from centre to centre amidships | | | | " Tie Plates, fore and aft, outside Hatchways | | | |
| " to collision bulkhead | | | | " Deck * Steel, for whole lng. | | | |
| " from centre to centre in peaks | | | | " Wood Deck. Material & thickness | | | |
| FRAME, Angles | | | | Upper Deck Stringer Plate, breadth and thickness | | | |
| Double bottoms at Solid Floors | | | | " Angles on ditto, No. one | | | |
| " at intermdt. Bkts. | | | | " Tie Plates, outside Hatchways | | | |
| " from centre to centre amidships | | | | " Deck * Steel, for whole lng. | | | |
| " to collision bulkhead | | | | " Wood Deck. Material & thickness | | | |
| " from centre to centre in peaks | | | | Second Deck Stringer Plates, br'dth & thickn's | | | |
| FRAME, Angles | | | | " Angles on ditto, No. | | | |
| Double bottoms at Solid Floors | | | | " Tie Plates, outside Hatchways | | | |
| " at intermdt. Bkts. | | | | " Deck * Material and thickness | | | |
| " from centre to centre amidships | | | | Third, Fourth & Fifth Deck Stringer Plate, breadth and thickness | | | |
| " to collision bulkhead | | | | " Angles on ditto, No. | | | |
| " from centre to centre in peaks | | | | " Tie Plates, outside Hatchways | | | |
| FRAME, Angles | | | | " Deck. Material and thickness | | | |
| Double bottoms at Solid Floors | | | | Poop Deck Stringer Plate, breadth & thickness | | | |
| " at intermdt. Bkts. | | | | " Angles on ditto | | | |
| " from centre to centre amidships | | | | " Tie Plates | | | |
| " to collision bulkhead | | | | " Deck. Material and thickness | | | |
| " from centre to centre in peaks | | | | Bridge Deck Stringer Plate, br'dth & thickness | | | |
| FRAME, Angles | | | | " Angle on ditto | | | |
| Double bottoms at Solid Floors | | | | " Tie Plates | | | |
| " at intermdt. Bkts. | | | | " Deck. Material and thickness | | | |
| " from centre to centre amidships | | | | Forecastle Deck Stringer Plate, br'dth & th'kns | | | |
| " to collision bulkhead | | | | " Angle on ditto | | | |
| " from centre to centre in peaks | | | | " Tie Plates | | | |
| FRAME, Angles | | | | " Deck. Material and thickness | | | |
| Double bottoms at Solid Floors | | | | " Steel | | | |
| " at intermdt. Bkts. | | | | " Shear | | | |
| " from centre to centre amidships | | | | " OP. | | | |
| " to collision bulkhead | | | | | | | |
| " from centre to centre in peaks | | | | | | | |
| FRAME, Angles | | | | | | | |
| Double bottoms at Solid Floors | | | | | | | |
| " at intermdt. Bkts. | | | | | | | |
| " from centre to centre amidships | | | | | | | |
| " to collision bulkhead | | | | | | | |
| " from centre to centre in peaks | | | | | | | |
| FRAME, Angles | | | | | | | |
| Double bottoms at Solid Floors | | | | | | | |
| " at intermdt. Bkts. | | | | | | | |
| " from centre to centre amidships | | | | | | | |
| " to collision bulkhead | | | | | | | |
| " from centre to centre in peaks | | | | | | | |
| FRAME, Angles | | | | | | | |
| Double bottoms at Solid Floors | | | | | | | |
| " at intermdt. Bkts. | | | | | | | |
| " from centre to centre amidships | | | | | | | |
| " to collision bulkhead | | | | | | | |
| " from centre to centre in peaks | | | | | | | |
| FRAME, Angles | | | | | | | |
| Double bottoms at Solid Floors | | | | | | | |
| " at intermdt. Bkts. | | | | | | | |
| " from centre to centre amidships | | | | | | | |
| " to collision bulkhead | | | | | | | |
| " from centre to centre in peaks | | | | | | | |
| FRAME, Angles | | | | | | | |
| Double bottoms at Solid Floors | | | | | | | |
| " at intermdt. Bkts. | | | | | | | |
| " from centre to centre amidships | | | | | | | |
| " to collision bulkhead | | | | | | | |
| " from centre to centre in peaks | | | | | | | |
| FRAME, Angles | | | | | | | |
| Double bottoms at Solid Floors | | | | | | | |
| " at intermdt. Bkts. | | | | | | | |
| " from centre to centre amidships | | | | | | | |
| " to collision bulkhead | | | | | | | |
| " from centre to centre in peaks | | | | | | | |
| FRAME, Angles | | | | | | | |
| Double bottoms at Solid Floors | | | | | | | |
| " at intermdt. Bkts. | | | | | | | |
| " from centre to centre amidships | | | | | | | |
| " to collision bulkhead | | | | | | | |
| " from centre to centre in peaks | | | | | | | |
| FRAME, Angles | | | | | | | |
| Double bottoms at Solid Floors | | | | | | | |
| " at intermdt. Bkts. | | | | | | | |
| " from centre to centre amidships | | | | | | | |
| " to collision bulkhead | | | | | | | |
| " from centre to centre in peaks | | | | | | | |
| FRAME, Angles | | | | | | | |
| Double bottoms at Solid Floors | | | | | | | |
| " at intermdt. Bkts. | | | | | | | |
| " from centre to centre amidships | | | | | | | |

WEB FRAMES. In Fore Body, No. and spacing. No. of Side Stringers. WEB FRAMES, In E. & B. Space, No. and spacing. WEB FRAMES, In After Body, No. and spacing. No. of Side Stringers. Size of Face Angles to Web-Frames. BRACKET PLATES to Stringers between Web Frames, depth and thickness. BULKHEADS. W.T. BULKHEADS. COLLISION. PARTITION. LONGITUDINAL. PLATING. STRAKES. SHEERSTRAKES. THICKNESS OF SHEERSTRAKE. POOP SIDES. SHORT BRIDGE SIDES. FORECASTLE SIDES. BUTTS, LEAD. BUTTS OF SIDE STRINGERS. TIE PLATES. INNER BOTTOM PLATING. CENTRE GIRDER BUTTS. KEELSON BUTTS. FRAMES, RIVETED THROUGH PLATES WITH. RIVETS, STATE WHETHER IRON OR STEEL. FRAMES EXTEND IN ONE LENGTH FROM. REVERSED FRAMES ON FLOORS AND FRAMES EXTEND FROM. MASTS, SPARS, &c. LOWER MASTS. BOWSPRIT. TOPMASTS, YARDS AND RUNNING SPARS. RIGGING, MATERIAL AND SIZE, SHROUDS. SALES.

EQUIPMENT No. 27532 LETTER W. ANCHORS. PARTICULARS OF DROP TEST OF CAST STEEL ANCHORS. CHAIN CABLES. HAWSERS AND WARPS. Boats. Steering Gear, Steam. Steering Gear, Hand. Pumps, Number. Windlass. Engine Room Skylights. Coal Bunker Openings. Number of Scuppers. Ceiling in Holds. Cargo Hatchways. State size No. 1 Hatch. Number of Web Plates. Bulwarks. The foregoing is a correct description. Builder's Signature. Correspondence. Workmanship. Is the riveted work properly closed? Are the liners between the frames and plates solid single pieces? to plate, &c., conform well to each other? from the facing surfaces? Are the butts of Plating, Stringers, &c., properly shifted and strapped? Have all the upper and weather decks been tested as required by the Rules (Sec. 26, par. 20)? Have all the gutterways been tested as required by the Rules (Sec. 26, par. 20)? General Remarks. Committee's Minute. Character assigned. The Surveyor should state the Number of Report and Name of any Sister Vessel. The amount of Entry Fee. Special Survey Fee. Travelling Expenses. State whether the Vessel has been built under Special Survey. I am of opinion this Vessel should be Classed. With, or without Freeboard, as condition of Class. The Surveyor's Signature. Date of Issue.

| FRAMING. | | AMIDSHIPS. | | | ENDS. | | | AMIDSHIPS. | | | ENDS. | | | RIVETING. | | | | |
|---------------------------------------|--|-------------------------------|------|------|----------------------------|------|------|----------------------------|------|------|----------------------------|------|------|---|---|---|----------------------|-----|
| | | In Ship. | | | In Ship. | | | Per Rule or as approved. | | | Per Rule or as approved. | | | Rivets in Longitudinal Frames. Diam. Spacing. Inches. | Spacing of Rivets on each side of Transverses and Bulkheads. Inches. | Rivets in Brackets to Bulkheads. | | |
| | | Ins. | Ins. | Ins. | Ins. | Ins. | Ins. | Ins. | Ins. | Ins. | Ins. | Ins. | Ins. | | | Number. | Diameter. Inches. | |
| Framing of <u>Lower</u> C | | | | | | | | | | | | | | 7/8 | 5 1/4 | 5 1/4 | 5 | 7/8 |
| Frames in Bridge 'tween Decks... | | 6x35x3 1/2 x 37 1/2 | | | 6x35x3 1/2 x 37 1/2 | | | 6x35x3 1/2 x 37 1/2 | | | | | | | | | | |
| Frames from Uppermost Continuous Deck | | No. 1 | | | 6x35x3 1/2 x 37 1/2 | | | | | | | | | | | | | |
| | | No. 2 | | | | | | | | | | | | | | | | |
| | | No. 3 | | | | | | | | | | | | | | | | |
| | | No. 4 | | | 7x31 1/2 x 3 1/2 x 40 | | | 7x31 1/2 x 3 1/2 x 40 | | | 7x31 1/2 x 3 1/2 x 40 | | | | | 6 | | |
| | | No. 5 | | | 7x32 1/2 x 3 1/2 x 50 | | | 7x32 1/2 x 3 1/2 x 50 | | | 7x32 1/2 x 3 1/2 x 50 | | | | | | | |
| | | No. 6 | | | 10x37 1/2 x 3 1/2 x 43 1/2 | | | 10x37 1/2 x 3 1/2 x 43 1/2 | | | 10x37 1/2 x 3 1/2 x 43 1/2 | | | | | 7 | | |
| | | No. 7 | | | | | | | | | | | | | | 7 | | |
| | | No. 8 | | | | | | | | | | | | | | 8 | | |
| | | No. 9 | | | | | | | | | | | | | | 8 | | |
| | | No. 10 | | | | | | | | | | | | | | | | |
| | | No. 11 | | | | | | | | | | | | | | | | |
| | | No. 12 | | | | | | | | | | | | | | | | |
| | | No. 13 | | | | | | | | | | | | | | | | |
| | | No. 14 | | | | | | | | | | | | | | | | |
| | | No. 15 | | | | | | | | | | | | | | | | |
| | | No. 16 | | | | | | | | | | | | | | | | |
| Spacing of Longitudinal Frames | | Amidships | | | 30 | | | 30 | | | | | | | | | | |
| | | At Ends | | | 30 | | | 30 | | | | | | | | | | |
| Double Bottoms | | Tank Top Longitudinals | | | 6x35x3 1/2 x 37 1/2 | | | 6x35x3 1/2 x 37 1/2 | | | 6x35x3 1/2 x 37 1/2 | | | 7/8 | 5 1/4 | 3 1/2 for 4 rivets | 6 | 7/8 |
| | | Bottom | | | 7x31 1/2 x 3 1/2 x 40 | | | 7x31 1/2 x 3 1/2 x 40 | | | 7x31 1/2 x 3 1/2 x 40 | | | | | | | |
| Spacing of Longitudinals | | Amidships | | | 30 | | | 30 | | | | | | | | | | |
| | | At Ends | | | 30 | | | 30 | | | | | | | | | | |
| Transverses. | | | | | | | | | | | | | | | | | | |
| In Bridge | | Depth and Thickness | | | 15 x 38 | | | 15 x 38 | | | | | | | | | | |
| 'tween Decks | | Face Angles | | | Single 4 3 1/2 44 | | | 4 3 1/2 44 | | | | | | 7/8 | 4 3/4 | Joggled | | |
| | | Lugs to Shell | | | 3 1/2 3 1/2 38 | | | 3 1/2 3 1/2 38 | | | | | | | | | | |
| In Shelter or Upper 'tween Decks. | | Depth and Thickness | | | 16 x 40 | | | 16 x 40 | | | 16 x 40 | | | | | | | |
| | | Face Angles | | | Single 8 3 1/2 46 | | | 8 3 1/2 46 | | | 8 3 1/2 46 | | | 7/8 | 4 3/4 | Joggled | | |
| | | Lugs to Shell | | | 3 1/2 3 1/2 40 | | | 3 1/2 3 1/2 40 | | | 3 1/2 3 1/2 40 | | | | | | | |
| In Hold. | | Depth and Thickness | | | 19 x 48 | | | 19 x 48 | | | 19 x 48 | | | | | | | |
| | | Face Angles | | | 8 3 1/2 68 | | | 8 3 1/2 68 | | | 8 3 1/2 68 | | | 7/8 | 4 3/4 | Double 4 spaces above T.T. in fore hold (Joggled) | | |
| | | Lugs to Shell | | | 5 5 46 | | | 5 5 46 | | | 5 5 46 | | | | | | | |
| | | Brackets | | | | | | | | | | | | | | | | |
| Spacing of Transverse Frames | | 11'-0" x 12'-0" | | | 11'-0" x 12'-0" | | | 11'-0" x 12'-0" | | | 11'-0" x 12'-0" | | | | | | | |
| | | * State if joggled or liners. | | | | | | | | | | | | | | | | |
| Longitudinal Beams of | | Bridge Deck | | | 6x31 1/2 x 2 1/2 x 39 | | | 6x31 1/2 x 2 1/2 x 39 | | | 6x31 1/2 x 2 1/2 x 39 | | | 3 1/2 | | | | |
| | | Shlter Dk. | | | " " " " " " " " | | | " " " " " " " " | | | " " " " " " " " | | | | | | | |
| | | Upper | | | 7x31 1/2 x 3 1/2 x 40 | | | 7x31 1/2 x 3 1/2 x 40 | | | 7x31 1/2 x 3 1/2 x 40 | | | 4 1/2 | | | | |
| | | Second | | | | | | | | | | | | | | | | |
| | | Third | | | | | | | | | | | | | | | | |

The particulars of framing in peaks (if ordinary), Floors, Centre Girder, Side Girders and Margin Plate and their angle attachments, etc., to be entered in their respective places provided for on the Report Forms.

NOTE:—This slip to be pasted on the fourth page of the Report, and reference to same to be made under framing, etc., on the first page.

5c, 4, 19.—T.

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 30.0 ft., R.Q.D. ✓ ft., Bridge 77.0 ft., Forecastle 34.0 ft. (in feet and tenths). When the Poop is joined to the B.D., this should be distinctly stated no

No. and Material of Decks (if Iron or Steel) and whether wholly or partially covered with wood, and No. of tiers of Beams (this information is to be given should appear in the Register Book) 1 Deck (steel) + Shelter deck (steel) 2 Tiers of Beams.
Official No. 28745; Signal Letters SKDW. State if Machinery is fitted aft no
How are the surfaces preserved from oxidation? Inside Paint + Cement Outside Paint

PARTICULARS OF WATER BALLAST.—State whether the Double bottom is constructed on the cellular system or with girders on floors Cellular

| Where Fitted. | Length. Feet. | Water Capacity. Tons. | Where Fitted. | Length. Feet. | Water Capacity. Tons. |
|---|------------------|--------------------------|--|------------------|--------------------------|
| Double bottom, aft, | 119.00 | 356.04 | Fore peak tank, | 17.10 | 114 |
| Double bottom, under Engines and Boilers, | 23.00 | 108.82 | After peak tank, | 10.00 | 29 |
| Double bottom, if under Engines only, | 23.00 | 104.78 | Deep tank, aft, | 32.00 | 689 |
| Double bottom, if under Boilers only, | 143.00 | 550.09 | Deep tank, forward, | 10.15 | 29 |
| Double bottom, forward, | | | Other tanks, if fitted, | 8.50 | |
| Total capacity of double bottom | 1119.83 | | If necessary, furnish further information by sketch. | | |

* The wells are not to be included in the lengths of the tanks.

State whether the above have been tested as required by the Rules yes

Order for Special Survey No.

Date

No. 961 in builder's yard.

DATES of Surveys held while building

1920 Nov. 2, 8, 15, 19, 24; Dec. 8, 10, 17, 20, 24; 1921 Jan. 5, 14, 17, 31; Feb. 3, 15, 21, 28; Mar. 7, 11, 28; Apr. 8, May 2, 9, 12, 17, 20; June 6, 13, 24; July 7, 21; Aug. 24; 1923 Jan. 26; Mar. 20; Apr. 24, 26.

Surveyor's Signature

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