

3 Decks.

IRON OR STEEL STEAMER.

MON. JAN 21 1907
Received at London Office.

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

Date of completion of report 19th December 1906. Port of Nagasaki No. 526.
Survey held at Nagasaki Date, First Survey 12th January 1906 Last Survey 18th December 1906
On the Steel Steam Screw S. Hitachi Maru Rig Fore & Aft schooner 2 m.TONNAGE under
Tonnage Deck
Do. between Tonnage Dk. and 3rd and 4th Dk.
Total under Upper Dk. 5808.92
Do. of Poop 206.33
Do. of Bridge House 312.96
Do. of Forecastle 98.36
Do. of Houses on Dk. 289.20
Do. of excess of Hatchways
Do. above Crown of
Engine Room 6715.77
Gross Tonnage 402.95
Net Space
above Crown of
Engine Room 6312.82
DO FOR FEES
Engine Room 2149.05
Navigation Spaces
Net Tonnage 4163.77
on Beam

THREE DECKED VESSEL.

CLASS 100 A. I.

Half Breadth (moulded) 26.00
Depth from upper part of Keel to top of Upper Deck Beams 34.58
(with the normal round up of beam)
Girth of Half Midship Frame (as per Rule) 56.75
117.33
deduct 7 feet 7.0
1st Number 110.33
Length on deck from after part of stem to fore part of stern post 443
2nd Number 48876.19
Proportions—Breadth to Length 8.52
Depth to Length—Upper Deck to top of Keel 12.81
Main Deck ditto 16.64

Master W. Townsend.

Year of appointment (1) As Master in service of owner of present vessel: 1896
(2) As Master of this vessel: 1896

Built at Nagasaki

When built 1906. Launched 22.9.06

By whom built Mitsui Bishi & Co. Works

Owners Nippon Yusen Kaisha

Managers (Where necessary to be entered in Reg. Book.)

Residence Tokio

Port belonging to Tokio

Destined Voyage London If Surveyed while Building, Afloat, or in Dry Dock all three

TH on Deck Feet. Inches. BREADTH—Feet. Inches. DEPTH, ACTUAL—Top of Floors to top of Upper Dk. Beams Feet. Inches. No. of Decks with flat laid 2 + part
er Rule 443 Moulded 52 Do. do. do. Main Dk. Beams 22 7 1/2 No. of Tiers of Beams 2 + part
Measurements 449.6 breadth 50.1 depth 30.35 Moulded depth, ft. 33 ins. 6 To Upper Dk. Round of Upper Dk. Beam, Actual 13 ins.

FRAMING.

IE, Angles, or Bars for length amidships 7 3 1/2 11 7 3 1/2 11
for 1/2 at each end 7 3 1/2 10 7 3 1/2 10
in way of Double Bottoms at Solid Floors 3 1/2 3 1/2 11 3 1/2 3 1/2 11
at intermdt. Dkts.
ce of Frames from moulding edge to lding edge, all fore and aft 30
RSED FRAME, Angles 8 3 1/2 11 8 3 1/2 11
FRAMING, depth of girder 11 1/2
RS, depth and thickness of Floor Plate at mid-line for 1/2 length amidships
in way of Engines and Boilers
thickness at the ends of vessel
depth at 1/2 the half breadth, as per Rule
height extended at the Bilges
RS & BRACKETS in Cell Dble Bottoms 10 8 30
Distance apart 30
RE GIRDER, in Double bottom, depth and thickness 48 11 9 48 11 9
Angles, Top 5 5 12 5 5 12
Bottom 4 4 10 4 4 10
GIRDERS, number on each side & thickness 2 10 9 2 10 9
Angles 3 1/2 3 1/2 10 3 1/2 3 1/2 10
IN PLATE, depth (exclusive of flange) and thickness 40 11 40 11
Angles to Outside Plating 4 4 11 4 4 11
R BOTTOM PLATING, breadth and thickness of Middle Line Strake 65 11 47 11
in Engine and Boiler space 16 IRON. 20 16 IRON. 20
Remainder in Holds 10 9 10 9
IS, Upper Deck, Single Angle, Bulb, Angle, Plate or Tee Bulb CHANNELS 7 3 1/2 8 7 3 1/2 8
Angles on upper edge 30
Average space 30
IS, Middle Deck, Single Angle, Bulb, Angle, Plate or Tee Bulb CHANNELS 7 3 1/2 9 7 3 1/2 9
Angles on upper edge 30
Average space 30
IS, Lower Deck, Single Angle, Bulb, Angle, Plate or Tee Bulb CHANNELS 7 3 1/2 9 7 3 1/2 9
Angles on upper edge 30
Average space 30
IS, Hold, or Orlop, Plate or Tee Bulb 10 6 12 10 6 12
Angles on upper edge 60
Average space 60
IS, Poop Deck, Angle, Bulb, Angle, Plate or Tee Bulb 9 5 1/2 9 8 5 9
Angles on upper edge 60
Average space 60
IS, Bridge Deck, Angle, Bulb, Angle, Plate or Tee Bulb 10 6 12 10 6 12
Angles on upper edge 60
Average space 60
IS, Forecastle Deck, Angle, Bulb, Angle, Plate or Tee Bulb 7 3 9 7 3 9
Angles on upper edge 27
Average space 27
PILLARS, In 'tween Deck, size and spacing 3 1/2 C. SIDES HOLLOW
Hold SEE PROFILE
Quarter 'tween Dks. HOLLOW
in Hold
WEB-FRAMES, In Fore Body, No. and spacing 7 (10 F.S.) 7 (10 F.S.)
brdth. & thickness 26 11 10 26 11 10
No. of Side Stringers Four Four
WEB-FRAMES, In E. & B. Space, No. & spacing 3 (6 F.S.) 3 (6 F.S.)
brdth. & thickness 26 11 10 26 11 10
WEB-FRAMES, In After Body, No. and spacing 5 (8 F.S.) 5 (8 F.S.)
brdth. & thickness 26 11 10 26 11 10
No. of Side Stringers Four Four
Size of Angles or Tee Bulbs to Web-Frames 6 1/2 4 1/2 15 6 1/2 4 1/2 15
BRACKET PLATES to Stringers between Web Frames, depth and thickness

FORGINGS or CASTINGS.

KEEL, Bar or Side Plates, depth and thickness Flat plate
STEM, moulding and thickness 12 x 3 1/4 12 x 3 1/4
STERN-POST for Rudder do. do. 12 1/2 x 7 3/4 12 1/2 x 7 3/4
for Propeller
MAIN PIECE of Rudder, diameter at head 11 1/8 8 1/4 11 1/8
do. at heel 8 1/4 8 1/4
RUDDER, how constructed Single plate 22 x 20 thick
Can the Rudder be unshipped afloat? Yes.

KEELSONS & STRINGERS.

CENTRE LINE KEELSON, Vertical Plate above floors, Through Plate, or Intercoastal Plate
Rider Plate
Bulb Plate to Intercoastal Keelson
Horizontal Plates on Floors
Angles
SIDE KEELSON, Angles
Bulb or Plate above floors, for lng.
Intercoastal Plate, for length
Attached to outside Plating with Angle
BILGE KEELSON, Angles
Bulb or Plate above floors, for lng.
Intercoastal Plate for length
Attached to outside Plating with Angle
BILGE STRINGER Angles
Bulb Plate for whole length
Intercoastal Plate for whole length
Attached to outside Plating with Angle
SIDE STRINGER Angles
Bulb or Intercoastal Plate, for whole lng.
Attached to outside plating with AngleUpper Deck Stringer Plates, br'dth & thickness 69 x 12 17 69 x 12 17
Angle on ditto 5 x 5 15 5 x 5 15
Tie Plates fore and aft, outside Hatchways 9 - 8 9 - 8
Deck. Iron or Steel, for whole lng. Teak. 5 x 3 Teak. 5 x 3
Wood Deck. Material & thickness
Middle Deck Stringer Plate, br'dth & thickness 69 11 69 11
Angles on ditto, No. Two 4 x 4 9 4 x 4 9
Tie Plates outside Hatchways
Diagonal Tie Plates on Bms., No. of prs.
Deck. Iron or Steel, for whole lng. 9 - 8 9 - 8
Wood Deck. Material & thickness
Lower Deck Stringer Plate, br'dth & thickness 57 10 57 10
Angles on ditto, No. Two 4 x 4 9 4 x 4 9
Tie Plates, outside Hatchways
Deck. Material and thickness Steel 7 7
Hold, or Orlop Stringer Plate, br'dth & th'kns
Angles on ditto, No.
Tie Plates outside Hatchways
Deck. Material and thickness
Poop Deck Stringer Plate, breadth & thickness 42 8 42 8
Angle on ditto 4 x 4 10 4 x 4 10
Tie Plates 22 8 22 8
Deck. Material and thickness Teak 5 x 3 5 x 3
Bridge Deck Stringer Plate, br'dth & thickness 44 11 44 11
Angle on ditto 5 x 5 11 5 x 5 11
Tie Plates 8 8
Deck. Material and thickness Teak 5 x 3 5 x 3
Forecastle Deck Stringer Plate, br'dth & th'kns 42 8 42 8
Angle on ditto 4 x 4 10 4 x 4 10
Tie Plates 8 8
Deck. Material and thickness Teak 5 x 3 5 x 3BULKHEADS. Number. Thickness. STIFFENERS. Single or Double Frames. Height up.
In Vessel. Per Rule. Horizontal. Vertical. Size. Spacing. Size. Spacing.
W. T. BULKHEADS 7 7 8-7 9 x 3 1/2 10 48 6 1/2 10 30 double up dk.
PARTITION In deep tank and peaks only.
LONGITUDINAL
Are the outside Plates doubled two spaces of Frames in length? Yes.
Are the Stanchions and Watertight Doors in efficient working order?

PLATING.										RIVETING.									
STRAKES.	AS IN SHIP.				PER RULE OR AS APPROVED.		EDGES.				BUTTS.								
	AMIDSHIP.		FORWARD.	AFT.	AMIDSHIP.		Single or Double.	Breadth of Lap.	RIVETS. Diam.	Spacing cr. to cr.	Double or Treble and for what length.	RIVETS.		STRAPS.		IF LAPPED.			
	Breadth.	Thickness.	Thickness.	Thickness.	Breadth.	Thickness.						Inches.	Inches.	Inches.	Inches.	Breadth.	Thickness.	Breadth.	For what length.
FLAT PLATE KEEL.....	36	20	15	16	36	20	Double	6 3/4	1 1/8	4 3/8	3 R. ALL.	1 1/8	4	2 1/4	16	14	-	-	
GARBOARD OF A STRAKE ...	36 1/2	15	14	14	36 1/2	15	"	6	1	3 3/8	3 R. ALL.	1	3 1/2	-	-	10 1/2	whole		
State actual thickness in way of Double Bottom.	63 1/2	14	14	12	63 1/2	14	"	6	1	3 3/8	4 R. "	1	3 1/2	-	-	14	"		
B	51 1/4	13	12	12	51 1/4	13	"	6	1	3 3/8	3 R. "	1	3 3/8	-	-	12	"		
C	59	14	12	13	59	14	"	6	1	3 3/8	4 R. 3/4	1	3 3/8	-	-	14	"		
D	49	15	13	14	49	15	"	6	1	3 3/8	"	1	3 3/8	-	-	14	"		
E	49	16	13	14	49	16	"	6	1	3 3/8	"	1	3 3/8	-	-	14	"		
F	42 1/2	15	12	13	42 1/2	15	"	6	1	3 3/8	"	1	3 3/8	-	-	14	"		
G	49	15	12	12	49	15	"	6	1	3 3/8	" ALL	1	3 3/8	-	-	14	"		
H	43	14	11	11	43	14	"	6	1	3 3/8	"	1	3 3/8	-	-	14	"		
J	49 1/2	15	12	12	49 1/2	15	"	6	1	3 3/8	"	1	3 3/8	-	-	14	"		
K	45 1/2	14	11	11	45 1/2	14	"	6	1	3 3/8	"	1	3 3/8	-	-	14	"		
L	52 1/2	15	12	12	42 1/2	15	"	6	1	3 3/8	"	1	3 3/8	20	19	-	-		
M	43 1/4	14 1/2	11	11	43 1/4	14 1/2	"	6 3/4	1 1/8	4 3/8	"	1 1/8	4 3/8	29	14 1/2	-	-		
N	49 1/2	16 1/2	12	13	49 1/2	16 1/2	"	6 3/4	1 1/8	4 3/8	"	1 1/8	4 3/8	29	14 1/2	-	-		
U.D. SHEER O	30	13	#	-	30	13													
P	59 1/2	15	13	-	59 1/2	15													
B.D. SHEER Q	15	-	-	-	-	-													
R	20	-	-	-	-	-													
DOUBLING OF FLAT PLATE KEEL	20 for half length																		
Length of Bilges.....	Bridge ends doubled fore and aft. 27' 9"																		
Thickness of Sheerstrakes.	-																		
Thickness of Strake below	-																		
POOP SIDES					9		9		Single 3		7/8		3 1/2		2 R		7/8 3 9 1/4 11 - -		
BRIDGE SIDES	59 1/2 30 15 13				59 1/2 30 15 13		Double 6		1		4		4 R		1 3 1/2		25 11 9 - -		
FORECASTLE SIDES	9				9		Single 3		7/8		3 1/2		2 R		7/8 3 9 1/4 11 - -				

Write "Sheer Strake" opposite to corresponding letter.

Manufacturer's name or trade mark of the Iron or Steel (state process of manufacture of Steel) used for Frames, Floors, Beams, Keelsons, Tie and Stringer Plates, Plating, &c.: *South Durham S & C Co., Palmers, Tarmar Long & Co. Ltd., Trowingham S & S Works, Walside S & Rm Co.*

Has the Steel been tested as required by the Rules? *Yes.*

Upper Deck (Butts, treble riveted for 4 R + 3 R AT ENDS length amidship. Stringer Plate (Straps, single, double or overlapped for whole length amidship. Middle Deck (Butts, treble riveted for whole 3 R length amidship. Stringer Plate (Straps, single, double or overlapped for whole length amidship. Butts of Bilge & Side Stringers and Tie Plates, treble or double riveted? Inner Bottom Plating, riveting of Edges Double & Single Butts Double. Centre Girder Butts, Treble riveted Keelson Butts, 1/2" riveted. Frames, riveted through Plates with 1/2" in. Rivets, about 5/8" apart. Rivets, state whether Iron or Steel *Steel*

FRAMES extend in one length from *Centre line* to *Margin plate, thence to gunwale, double in A.P. to P & V ALT.*

REVERSED FRAMES on floors and frames extend from *Centre line to margin plate thence to gunwale for 1/2 length on every frame, before and abaft 1/2 to upper and main decks all, in Forecastle to Fore and Main decks all.*

MASTS, SPARS, &c.

	Material.	Total Length.	DIAMETER AND THICKNESS.				No. of Plates in round.	ANODES.		RIVETING.	
			At Partners.	Heel.	Hoards.	Head.		Number.	Size.	Seams.	Butts.
Fore	<i>Steel</i>	<i>118-0</i>	<i>27 x 8</i>	<i>21 x 8</i>	<i>22 x 7</i>	<i>8 1/2 x 3/8</i>	<i>Two</i>	<i>3</i>	<i>3 x 3 x 10</i>	<i>Single</i>	<i>T.R. + 2 R</i>
Main	<i>Steel</i>	<i>102-3</i>	<i>25 1/2 x 8</i>	<i>25 x 8</i>	<i>21 x 7</i>	<i>8 1/2 x 3/8</i>	<i>Two</i>	<i>3</i>	<i>3 x 3 x 7</i>	<i>Single</i>	<i>T.R. + 2 R</i>
Mizen		<i>121-10 1/2</i>									

Bowspit

Topmasts, Yards and Remainder of Spars *Booms Oregon Pine*

Rigging, Material and Size, Shrouds *Galvanized Steel Wire 4"*

Sails. *One* Suit of *Fore and aft* Sails, and the following spare sails *Stays 4" + 3 1/2" Bluewants Lined.*

EQUIPMENT No. *55830* LETTER *+ B* ANCHORS.

Number of Certificate.	Anchors.	WEIGHT, EX. STOCK.			WEIGHT OF STOCK.			TEST, PER CERTIFICATE.			WEIGHT REQUIRED BY TABLE 22.			Description of Anchor.	Makers.	Where and when tested and Superintendent.	
		Cwts.	qrs.	lbs.	Cwts.	qrs.	lbs.	Tons.	cwts.	qrs.	lbs.	Cwts.	qrs.				lbs.
57399	1st Bower	60	3	25	15	1	-	48	17	2	-	58	-	-	<i>Box Hook Totten</i>	<i>Hingley</i>	<i>Ketherton 30.6.06</i>
57398	2nd "	59	0	7	15	1	7	47	16	2	7	58	-	-	"	"	"
57397	3rd "	50	1	12	13	2	2	42	12	-	21	49	102	-	"	"	"
	4th "														"	"	"
	Collective weight	170	1	16	-	-	-	-	-	-	-	165	202	-			
57401	Stream	20	2	18	4	3	22	21	8	-	14	20	2	0	<i>Ordinary</i>	"	"
57405	Kedge	9	-	22	2	2	0	11	6	3	14	9	-	-	<i>Ordinary</i>	"	"

CHAIN CABLES.

Number of Certificate.	Fathoms.	Size.	Test per Certificate.	WEIGHT OF CHAIN CABLE.		Fathoms and Size per Table 22.	Description.	Makers of Cables.	When and where tested, and Superintendent.	Material.	Fathoms.	Size.	Breaking Test of Steel Wire Towline.	Fathoms and Size per Table 22.
				Supplied.	Per Table 22.									
40347	150	2 1/8	142.2	428.2	10.422	150-2 1/8	<i>Steel</i>	<i>Hingley</i>	<i>Ketherton 30.6.06</i>	<i>Steel</i>	80	5 1/2	130.5	
40343	150	2 1/8	142.2	428.2	10.422	150-2 1/8	<i>Steel</i>	<i>Hingley</i>	<i>" 30.6.06</i>	<i>Steel</i>	4	100	8	
	300	3 1/8	853.3	2494.0	300-3 1/8						2	90	5	
Iron Stream (Chain or Steel Wire) TOWLINE	120	5	72.8	Steel		120-5	<i>Steel</i>	<i>Scott</i>	<i>Glasgow 7.5.06</i>					
	130	5 1/2	75.8			130-5 1/2	<i>Steel</i>	<i>Radish</i>	<i>" 8.5.06</i>					

HAWSERS AND WARPS.

Boats *Nine lifeboats, 1 Cutter, 1 gig, and one jolly boat.*

Pumps, Number *Ten in holds 2 in Peak tops* Diameter of Barrel *5 1/2 x 2 1/4* State whether they are in efficient working order *Yes*

Windlass is *Napiers with gear to Capstan steam Capstan on Poop, steam*

Engine Room Skylights.—How constructed? *Steel plates and angles with strong link shutters.*

What arrangements for deadlights in bad weather? *Thick glass and cast iron deadlight.*

Coal Bunker Openings.—How constructed? *Plates & angles* How are lids secured? *3" wood latches* Height above deck? *3'-0".*

Number of Scuppers, and numbers and dimensions of Freeing Ports, &c. *6, 5" Scuppers each side,*

Ceiling in Holds, thickness and material *2 1/2" Lamin, Pine, Oregon.* Ceiling 'tween Decks, thickness and material *Sparring, 2" pine*

Cargo Hatchways.—How formed? *Plates and angles Steel.* Hatches, If strong and efficient? *Yes 3" thick.*

State size No. 1 Hatch (Forward) *20 x 16 x 33* No. 2 Hatch *25 x 16 x 33* No. 3 Hatch *20 x 16 x 33* No. 4 Hatch *25 x 16 x 33*

Number of Web Plates, Shifting Beams and Fore and Afters to each Hatch *No. 1 3 + 5, one shifting beam, No. 2 2 + 4, two 3" beams*

all fitted with three fore and afters.

No. of Breasthooks *Five.* No. of Crutches *two & deep floors*

Bulwarks, height above deck and description *4-3 x 16 Steel Scuppers* Main Rail, material and size *6 1/2 x 3 Steel section*

The above is a correct description.

Builder's Signature (here only) *J. Marwick & Co., Shipbuilders & Engineers*

Surveyor's Signature *A. C. Heron*

Surveyor to Lloyd's Register of British and Foreign Shipping.

Correspondence.—State dates and initials of letters respecting this case (Reference should be made to any correspondence connected with this case)

M. 11th December, 1905.

Workmanship. Are the butts of plating planed or otherwise fitted? *Planed.*

Is the riveted work properly closed? *Yes.*

Are the liners between the frames and plates solid single pieces? *Yes.*

to plate, &c., conform well to each other? *Yes.*

Do the holes for riveting plate to frames, butt straps, or plate

Are the rivet holes well and sufficiently countersunk in the plate and punched

from the faying surfaces? *Yes.*

Do any rivets break into or through the seams or butts of plating? *Yes a few.*

Are the butts of Plating, Stringers, &c., properly shifted and strapped? *Yes.*

Have all the upper and weather decks been tested as required by the Rules (Sec. 23, par. 24)? *Yes.*

State results of tests *Satisfactory.*

Have all the gutterways been tested as required by the Rules (Sec. 23, par. 25)? *Yes.*

State results of tests *Satisfactory.*

General Remarks (State quality of workmanship, &c.)

This vessel has been specially surveyed during construction, the materials used and workmanship are of good quality, the vessel has been built in accordance with the rules, approved plans and above noted correspondence.

Under each rounding type iron plates are embedded in the cement.

Tracings of the Longitudinal and Midship sections, approved, also certificates of Rudder and Cast Steel Stern Frame are now forwarded.

The Surveyor should state the Number of Report and Name of any Sister Vessel.

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop *59.3* ft., R.Q.D. or Break *—* ft., Bridge Dk. *117.5* ft., F'castle *53.7* ft. (in feet and tenths). When the Poop is joined to the B.D., this should be distinctly stated

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 as it should appear in the Register Book) *2 DKS (Stl - U leak S) and deep framing.*

Official No. *10577*; Signal Letters *L.C.B.S.*

How are the surfaces preserved from oxidation? Inside *Paint and 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.	Water Capacity.	Where fitted.	*Length.	Water Capacity.
	Feet.	Tons.		Feet.	Tons.
Double bottom, aft,	<i>120.0</i>	<i>380.0</i>	Fore peak tank,	<i>23.9</i>	<i>114.2</i>
Double bottom, under Engines and Boilers,	<i>82.6</i>	<i>365.0</i>	After peak tank,	<i>10.9</i>	<i>27.8</i>
Double bottom, if under Engines only,			Midship deep tank,	<i>24.9</i>	<i>535.0</i>
Double bottom, if under Boilers only,			Other tanks, if fitted,		
Double bottom, forward,	<i>180.0</i>	<i>631.2</i>	(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 *12.7.05*

No. *188* in builder's yard.

DATES of Surveys held while building

Continuous from 12th January 1906 to 18th December 1906.

Total No. of Visits *120.*

The amount of Entry Fee.....£ *5* : - : -

Special Survey Fee ...£ *74* : *10* : -

Travelling Expenses, if any £ : : -

Fees applied for,

19.12.1906

Received by me,

20.12.1906

A.C. Heron.

Certificate to be sent to

Nagasaki

State whether the Vessel has been built under Special Survey

Yes

I am of opinion this Vessel should be Classed

100 A.1. Three dk Steel.

With, or without Freeboard, as condition of Class

Without

Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute

TUES. JAN 22 1907

Character assigned

100 A.1 (Stl)

Lloyd's as CP Thme 12.06