

## IRON SHIP.

No. 5403 Survey held at Glasgow Date, First Survey 1st Augt 1881 Last Survey 5th May 1882

On the Iron Screw Steamer "Isang"

TONNAGE	ONE, OR TWO DECKED, THREE DECKED VESSEL, SPAN, OR AWNING DECKED VESSEL.
1356.15	Half Breadth (moulded) ... .. 14.5
13.46	Depth from upper part of Keel to top of Upper Deck Beams ... .. 24.0
119.42	Girth of Half Midship Frame (as per Rule) ... .. 34.25
41.85	1st Number ... .. 48.45
1530.88	2nd Number, if 3-Decked Vessel deduct 7 feet ... .. 248.5
54.54	Length ... .. 195.69
1473.34	2nd Number ... .. 7.1
489.88	Proportions— Breadths to Length ... .. 10.3
983.46	Depths to Length—Upper Deck to Keel ... ..
	Main Deck ditto ... ..

Master John Howden  
Built at Glasgow  
When built 1881-82 Launched 2/3/82  
By whom built London & Glasgow Eng. & Shipb.  
Owners Jardine Mathieson & Co.  
Residence  
Port belonging to London  
Destined Voyage China Coast  
If Surveyed while Building, Afloat, or in Dry Dock.  
While building and afloat.

LENGTH	Feet.	Inches.	BREADTH—	Feet.	Inches.	DEPTH	Feet.	Inches.	Power of	Horse.	Nº. of Decks with flat laid
on deck as	248.5		Moulded...	35		top of Floors to Upper	24		Engines ...	200	2
per Rule ...						Deck Beams					Nº. of Tiers of Beams
						Do. Main Deck Beams					3

Dimensions of Ship per Register, length, 250.2 breadth, 35.3 depth, 22.0

KEEL, depth and thickness	Inches in Ship.	Inches per Rule.	PLATES in Garboard Strakes, br'dth & thickness	Inches in Ship.	16ths. In Ship.	Inches. per Rule.	16ths. per Rule.
STEM, moulding and thickness...	9 1/2 x 2 1/2	9 1/2 x 2 1/2	From Garboard to upper part of Bilges...	36	12	36	12
STERN-POST for Rudder do. do.	9 x 5	9 x 5	Of d'bling at Bilge, or increased thickness, and length applied		14/10		14/10
" " for Propeller	9 x 5	9 x 5	From up. prt of Bilge to l. edge of Sh'rstrake...		10/10		10/10
Distance of Frames from moulding edge to moulding edge, all fore and aft	24	24	Main Sheerstrake, breadth and thickness.....	40	13	40	13
			Of d'bling at Sh'stk. & lng. applied				
FRAMES, Angle Iron, for 1/2 length amidships	5 3 8	5 3 8	From M'n. to Up. or Spar Dk. Sh'rstrake...				
Do. for 1/2 at each end	5 3 7	5 3 7	Up. or Spar Dk. Sh'rstrake, br'dth & thickness...				
REVERSED FRAMES, Angle Iron	3 1/2 3 8	3 1/2 3 8	Butt Straps to outside plating, breadth & thickness	16 1/2 x 12 1/2	16 1/2 x 12 1/2	16 1/2 x 12 1/2	16 1/2 x 12 1/2
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	24 10	24 10	Lengths of Plating	6 frame spaces			
" thickness at the ends of vessel	8	8	Shifts of Plating, and Stringers	2 3 4			
" depth at 3/4 the half-bdth. as per Rule	12	12	Gunwale Plate on ends of Awning, Spar, or	36 10	36 10		
" height extended at the Bilges...	48	48	Upper Deck Beams, breadth and thickness...				
BEAMS, Upper, Spar, or Awning Deck	8 8	8 8	Angle Iron on ditto	5 1/2 x 9	5 1/2 x 9		
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	3 3 6	3 3 6	Tie Plates fore and aft, outside Hatchways	13	13		
Single or double Angle Iron on Upper edge	48	48	Diagonal Tie Plates on Beams No. of Pairs				
Average space...			Flat of Up., Spar, or Awning Dk. * Silliman pine	4	4		
BEAMS, Main or Middle Deck	8 1/2 8	8 1/2 8	How fastened to Beams				
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	3 3 7	3 3 7	Stringer Plate on ends of Main or Middle Deck				
Single or double Angle Iron on Upper Edge	48	48	Beams, breadth and thickness				
Average space...			Is the Stringer Plate attached to the outside plating?				
BEAMS, Hold, or Orlop	9 1/2 9	9 1/2 9	Angle Irons on ditto, No.				
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	4 4 9	4 4 9	Tie Plates, outside Hatchways				
Single or double Angle Iron on Upper Edge			Diagonal Tie Plates on Beams, No. of pairs				
Average space... as per lower plan.			Flat of Middle Deck * do do.				
KEELSONS Centre line, single or double plate, or Intercoastal Plates	18 13	18 13	How fastened to Beams				
" Rider Plate	12 13	12 13	Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	34 9	34 9		
" Bulb Plate to Intercoastal Keelson	5 1/2 4 9	5 1/2 4 9	Is the Stringer Plate attached to the outside plating?				
" Angle Irons	5 1/2 4 9	5 1/2 4 9	Angle Irons on ditto, No. 2 L. Dk. - 3 Hold Strg	4 4 9	4 4 9		
" Double Angle Iron Side Keelson	5 1/2 4 9	5 1/2 4 9	Stringer or Tie Plates, outside Hatchways	13 9	13 9		
" Side Intercoastal Plate	8	8	Flat of Lower Deck * White pine	3	3		
" do. Angle Irons	3 1/2 3 8	3 1/2 3 8	Shaving				
" Attached to outside plating with angle iron	5 1/2 4 9	5 1/2 4 9	Ceiling betwixt Decks, thickness and material...	Coke iron			
BILGE Angle Irons	5 1/2 4 9	5 1/2 4 9	Ceiling in hold	2 1/2	2 1/2		
" do. Bulb Iron			Main piece of Rudder, diameter at head	2 1/2	2 1/2		
" do. Intercoastal plates riveted to plating for length	5 1/2 4 9	5 1/2 4 9	do. at heel	4 1/2	4 1/2		
BILGE STRINGER Angle Irons	5 1/2 4 9	5 1/2 4 9	Can the Rudder be unshipped afloat?	Yes			
Intercoastal plates riveted to plating for length			Bulkheads No. 4 No. per Rule 4				
SIDE STRINGER Angle Irons			" Thickness of	7 1/2 6			
			" Height up	Upper deck (3/4), aftermost bulkh. to m. s. platform			
			" How secured to sides of ship	double frame angle bars			
			" Size of Vertical Angle Irons	5 1/2 x 3 x 5/8 and distance apart 30 ins.			
			" Are the outside Plates doubled two spaces of Frames in length?	Yes			

The FRAMES extend in one length from Middle line to gunwale Riveted through plates with 7/8 in. Rivets, about 7' apart.

The REVERSED ANGLE IRONS on floors and frames extend from middle line to Upper deck and to Lower deck alternately

KEELSONS. Are the various lengths of Plates and Angle Irons properly connected? Yes And butts properly shifted? Yes

PLATING. Garboard, double riveted to Keel, with rivets 1 1/8 in. diameter, averaging 5 3/4 ins. from centre to centre.

Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 7/8 in. diameter, averaging 3 1/2 ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7/8 in. diameter averaging 3 1/2 ins. from centre to centre.

Butts of three Strakes at Bilge for half length, treble riveted with Butt Straps 4' thicker than the plates they connect.

Edges from Bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 7/8 in. diameter, averaging 3 1/2 ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 in. diameter, averaging 3 1/2 ins. from cr. to cr.

Upper Edges of Main Sheerstrake, double or single riveted. Upper Sheerstrake, double or single riveted.

Butts of Main Sheerstrake, treble riveted for half length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length amidships.

Butts of Main Stringer Plate, treble riveted for half length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for length.

Breadth of laps of plating in double riveting 5 1/2 Breadth of laps of plating in single riveting

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Treble &amp; double No. of Breasthooks, 6 Crutches, 3

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &amp;c.? Best

Manufacturer's name or trade mark, Norman Lang &amp; Co, Stockton &amp; Goran

The above is a correct description

Builder's Signature, J. J. House Surveyor's Signature, J. J. House

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

TAYLOR &amp; SON Commercial and General Steam Engineers, 19, Old Street, Goswell Road, E.C., London.

GLS146-0386



Workmanship.

Are the butts of plating planed or otherwise fitted?

Planed

5703

Do the edges of the carvel work and of the butts lay close together throughout their length without requiring any making good of deficiencies?

Yes

Are the fillings between the ribs and plates solid single pieces?

Yes

Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other?

Yes

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 the plating?

A few

Masts, Bowsprit, Yards, &c., are Iron in good condition, and sufficient in size and length. If of Iron or Steel give Scantlings of Plating, Angle Irons, &c., and further explain by a Sketch showing how the lower Masts and Bowsprit are constructed, showing the number of Plates and Angle Irons, mode of riveting, quality of Materials, and if stamped with Maker's name.

State also Length and Diameter of Lower Masts and Bowsprit

	Length	Along masts	Diagonals	Leet	Round	Head
Foremast	48.6	58.6	26	19	20	14
Mainmast	42.0	58.6	26	23	20	14

Scantlings of plating  $\frac{1}{8}$  to  $\frac{5}{16}$  Two plates in the round

NUMBER for EQUIPMENT 2526

NUMBER for EQUIPMENT			Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntd.	ANCHORS.		N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate.	Wght req'd per Rule.	Tested & Suprntd.
SAILS.			CABLES, &c.						Bower Anchors					
N <sup>o</sup> .		Chain .....	240	12	55 1/2	240 x 12	Low Walker	(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)	6604	30.2.1	29.0.3.21	30		
Fore Sails,		Iron Stream Chain	75	1 1/2	20 3/8	75 x 1 1/2	Low Walker		6634	30.1.22	29.0.0.0	30		
Fore Top Sails,		<del>on Steel Wire</del>					Low Walker		6635	25.0.21	24.19.1.14	25 1/2		
Fore Topmast Stay Sails,		<del>on Thompson Stron Cable</del>					Robt. Burwell							
Towline,		Homp	90	3 1/2	26	90 x 3 1/2	Superintendent							
Main Sails,		<del>on Steel Wire</del>												
Hawser		Manilla	90	9		90 x 9		Stream Anchor	6630	9.2.0	11.11.1.0	9 1/2		
Main Top Sails,		Warp	90	7 1/2		90 x 7 1/2		Kedge	6631	4.2.16	4.1.1.0	4 3/4		
and		quality						2nd Kedge	6632	2.3.3	5.4.2.0	2 1/2		

Standing and Running Rigging Wire and Manila sufficient in size and good in quality. She has Four Long Boats and Four others

The Windlass is Iron (Patent Sw. patent Capstan) and Rudder good Pumps good

Engine Room Skylights.—How constructed? Deck framing 2' 10" diagonal How secured in ordinary weather? Angle iron coming to each corner

What arrangements for deadlights in bad weather? Flaps - thick glass lights

Coal Bunker Openings.—How constructed? Cast Iron frames How are lids secured? Clutches Height above deck? 6 inches

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea?

8 water ports and 14 scuppers

Cargo Hatchways.—How formed? Plates and angles

State size Main Hatches 8ft by 6ft Fore hatch 10ft by 8ft Two Quarterhatches 8ft by 6ft

If of extraordinary size, state how framed and secured? Ordinary size

What arrangement for shifting beams? None

Hatches, if strong and efficient? Yes

Order for Special Survey No. <u>1605</u>	1st. On the several parts of the frame, when in place, and before the plating was wrought	1881 - Aug <sup>t</sup> 1, 4, 9, 12, 15 and 16 - Sept <sup>r</sup> 1, 4, 11, 16, 21, 26, 28 and 30.
Date <u>31 March 1881</u>	2nd. On the plating during the process of riveting	Oct <sup>r</sup> 3, 4, 10, 13, 24, 28 - Nov <sup>r</sup> 7, 24 and 30.
Order for Ordinary Survey No. <u>225</u>	3rd. When the beams were in and fastened, and before the decks were laid....	Dec <sup>r</sup> 5, 8, 15, 19, 23 and 24.
Date <u>10 April 1882</u>	4th. When the ship was complete, and before the plating was finally coated or cemented..	1882 - Jan <sup>y</sup> 9, 11, 18, 20, 23, 25 and 30. Feb <sup>r</sup> 1, 3, 7, 9, 13, 15, 17, 21, 22 and 28.
No. <u>225</u> in builder's yard.	5th. After the ship was launched and equipped	March 6, 9, 10, 16, 20 and 22 - April 3, 8, 14, 17, 18 and 24.
		May 4 <sup>t</sup> and 5 <sup>t</sup>

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

The Vessel has been built in conformity with the approved Builders' Section and Longitudinal plans herewith, the instructions contained in the Secretary's letters of the 4<sup>th</sup> March, 4<sup>th</sup> June, 29<sup>th</sup> Sept., and 6<sup>th</sup> October 1881 and 14<sup>th</sup> Jan<sup>y</sup> 1882, and otherwise in conformity with the Rules with a view to the grade contemplated.

On account of the death of Mr. Latham this report has been arranged from information obtained from the Vessel at that time, and subsequently as she advanced towards completion.

Two decked Vessel  
With Short poop 8ft Length of bridge 58 feet. Length of forecabin 36 feet.  
partial shade deck from 2<sup>nd</sup> of poop 44 feet. partial shade deck from 2<sup>nd</sup> of bridge 22 feet.

State if one, two, or three decked vessel, or if spar, or aving decked; and the lengths of poop, bridge, forecabin, or raised quarter deck. (If double bottom, state particulars on separate form.)

How are the surfaces preserved from oxidation? Inside Paint and Cement Outside Paint

I am of opinion this Vessel should be Classed 100 A1 partial shade deck

The amount of the Entry Fee ... £ 5: 0: 0 is received by me, J. J. Glouse for self & Mr. Latham

Special ... £ 61: 16: 6 10/5/ 1882

Certificate ... £ 0: 0: 0

(Travelling Expenses, if any, £ ...)

Committee's Minute Friday, 12th May, 1882.

Character assigned 100 A1

2 Decks one partial shade deck