

# IRON SHIP.

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

On the Iron Screw Steamer "Osang"

TONNA	1356.15
Ditto of Po	13.46
Ditto of Houses	119.42
Ditto of Recastles	41.85
Gross Tonnage	1530.88
Less Crew Space	54.54
Less Engine Room	489.88
Register Tonnage	983.46

ONE, OR TWO DECKED, THREE DECKED VESSEL, SPAN, OR AWNING DECKED VESSEL.	
Half Breadth (moulded)	14.5
Depth from upper part of Keel to top of Upper Deck Beams	24.0
Girth of Half Midship Frame (as per Rule)	34.25
1st Number	48.45
2nd Number	195.69
Length	248.5
Propotions— Breadths to Length	7.1
Depths to Length—Upper Deck to Keel	10.3
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 on deck as per Rule	248.5	BREADTH—Moulded	35	DEPTH top of Floors to Upper Deck Beams	24	Power of Engines	200	No. of Decks with flat laid	2	No. of Tiers of Beams	3
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Dimensions of Ship per Register, length, 250.2 breadth, 35.3 depth, 22.0

	Inches in Ship			Inches per Rule			Flat Keel Plates, breadth and thickness				
	Inches in Ship	Inches in Ship	16ths in Ship	Inches per Rule	Inches per Rule	16ths per Rule	In Ship	16ths in Ship	Inches per Rule	16ths per Rule	
KEEL, depth and thickness	9 1/2	2 1/2		9 1/2	2 1/2						
STEM, moulding and thickness	9	2 1/2		9	2 1/2						
STERN-POST for Rudder do. do.	9	5		9	5						
" " for Propeller	9	5		9	5						
Distance of Frames from moulding edge to moulding edge, all fore and aft	24			24							
FRAMES, Angle Iron, for 1/2 length amidships	5	3	8	5	3	8					
Do. for 1/4 at each end	5	3	7	5	3	7					
REVERSED FRAMES, Angle Iron	3 1/2	3	8	3 1/2	3	8					
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	24	10		24	10						
" thickness at the ends of vessel		8			8						
" depth at 3/4 the half-bdth. as per Rule	12			12							
" height extended at the Bilges	48			48							
BEAMS, Upper, Spar, or Awning Deck Single or double Angle Iron, Plate or Tee Bulb Iron	8	8		8	8						
Single or double Angle Iron on Upper edge	3	3	6	3	3	6					
Average space	48			48							
BEAMS, Main or Middle Deck Single or double Angle Iron, Plate or Tee Bulb Iron	8 1/2	8		8 1/2	8						
Single or double Angle Iron on Upper Edge	3	3	7	3	3	7					
Average space	48			48							
BEAMS, Lower Deck Single or double Angle Iron, Plate or Tee Bulb Iron	8 1/2	8		8 1/2	8						
Single or double Angle Iron on Upper Edge	3	3	7	3	3	7					
Average space	48			48							
BEAMS, Hold, or Orlop Single or double Angle Iron, Plate or Tee Bulb Iron	9 1/2	9		9 1/2	9						
Single or double Angle Iron on Upper Edge	4	4	9	4	4	9					
Average space	as per lower plan										
KEELSONS Centre line, single or double plate, or Intercoastal Plates	18	13		18	13						
" Rider Plate	12	13		12	13						
" Bulb Plate to Intercoastal Keelson	5 1/2	4	9	5 1/2	4	9					
" Angle Irons	5 1/2	4	9	5 1/2	4	9					
" Double Angle Iron Side Keelson	5 1/2	4	9	5 1/2	4	9					
" Side Intercoastal Plate			8			8					
" do. Angle Irons	3 1/2	3	8	3 1/2	3	8					
Attached to outside plating with angle iron	3 1/2	3	8	3 1/2	3	8					
BILGE Angle Irons	5 1/2	4	9	5 1/2	4	9					
" do. Bulb Iron											
" do. Intercoastal plates riveted to plating for length	5 1/2	4	9	5 1/2	4	9					
BILGE STRINGER Angle Irons	5 1/2	4	9	5 1/2	4	9					
Intercoastal plates riveted to plating for length											
SIDE STRINGER Angle Irons											

The FRAMES extend in one length from Middle line to gunwale Riveted through plates with 4/8 in. Rivets, about 7/8 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 1/8 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 4/8 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.  
 Lower 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 & double No. of Breasthooks, 6 Crutches, 3  
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Best  
 Manufacturer's name or trade mark, Norman Lang & Co, Stockton & 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.

\* If Iron Deck, state if whole or part, and if wood is laid thereon.

**Workmanship.**

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

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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	Diaparture	Leel	Leads	Head
Foremast	48.6	56.6	26	19	20	14
	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**

N <sup>o</sup> .	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntd.	ANCHORS. N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Machine where Tested & Suprntd.
	Fore Sails,	Chain	240	1 1/4	55 1/2	240 x 1 1/4	<i>Low Walker</i>	Bower Anchors 6604	30.2.1	29.0.3.21	30	
	Fore Top Sails,	Iron Stream Chain	75	1 1/2	20 1/2	75 x 1 1/2	<i>Low Walker</i>	6634	30.1.22	29.0.0.0	30	
	Fore Topmast Stay Sails,	Steel Wire					<i>Low Walker</i>	6635	25.0.21	24.19.1.14	25 1/2	
	Main Sails,	Hawser Manila	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 <i>good</i>						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) Capstan and Rudder *good* Pumps *good*

Engine Room Skylights.—How constructed? *Deck framing 2" oak beams* How secured in ordinary weather? *Angle iron coming over Coach scow*

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 *Two* Main Hatches *8ft by 6ft* Forehatch *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.	Date	Order for Ordinary Survey No.	Date	No.	in builder's yard.	DATES of Surveys held while building as per Section 18.	1st.	2nd.	3rd.	4th.	5th.
1605	31 <sup>st</sup> March 1881			225			On the several parts of the frame, when in place, and before the plating was wrought	On the plating during the process of riveting	When the beams were in and fastened, and before the decks were laid....	When the ship was complete, and before the plating was finally coated or cemented..	After the ship was launched and equipped
							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.	Oct <sup>r</sup> 3, 4, 10, 13, 24, 28.	Nov <sup>r</sup> 4, 24 and 30.	Dec <sup>r</sup> 5, 8, 15, 19, 23 and 24.
							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.	March 6, 9, 10, 16, 20 and 22.	April 3, 8, 14, 17, 18 and 24.	May 4 and 5 <sup>th</sup> .

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

The Vessel has been built in conformity with the approved Gridship Section and Longitudinal plans herewith, the instructions contained in the Secretary's letters of the 4<sup>th</sup> March, 14<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 fore of poop 44 feet. partial shade deck fore of bridge 22 feet.

State if one, two, or three decked vessel, or if spar, or awning 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* *part shade deck* subject to the Committee's approval of the *particulars* accompanying this Report.

The amount of the Entry Fee ... £ 5: 0: 0 is received by me, *J. G. 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*

The Surveyors are requested not to write on or below the space for Committee's Minute.

Surveyor to Lloyd's Register of British and Foreign Shipping.  
 This vessel appears worthy of the favorable consideration of the Committee (subject to satisfactory explanation being received from Mr. Latham) and is hereby classed as *100 A1* with 2 Decks on Part Iron and Part Shade Deck.