

# IRON SHIPS.

Rec 14/2/73

No. 3631 Survey held at Glasgow Date, First Survey 28<sup>th</sup> Feb 72 Last Survey 12<sup>th</sup> Feb 73  
On the Three decked Iron Ship 'Colina' Master J Marr

Tonnage under Tonnage Deck 1301.50 ONE, OR TWO DECKED, SPIRIT, OR AWNING-DECKED VESSELS.  
Ditto of Third Span 669.00 Half moulded breadth... 17.20 Built at Glasgow  
Ditto of Deck or 669.00 Total Depth if three or more Decks... 27.66 When built 1873 Launched 31<sup>st</sup> 6  
Ditto of Hoises on Deck... 30.76 Total Girth of Half Mid-ship Frame... 39.99 By whom built Barclay Curle & Co  
Ditto of Forecastle... 640.45 3rd Number... 24.85 Owners Donaldson Bro<sup>r</sup>  
Gross Tonnage 2000.42 Length... 318.33 Port belonging to Glasgow  
Crew Space, as per Rule 64.30 4th Number... 25010 Destined Voyage Glas. S America  
Reg. for Tonnage, as per Rule 1970.66 Depths to Length... 9.22 If Surveyed while Building, Afloat, or in Dry Dock.

Length on deck as per Rule, 318.33 Moulded Breadth, 34.4 Depths from top of Floors to Upper and Main Deck Beams, as per Rule... 10.33 Power of Engines, 265 N<sup>o</sup>. of Decks with flat laid 3 N<sup>o</sup>. of Tiers of Beams 3  
Dimensions of Ship per Register, length, 319.3 breadth, 34.85 depth, 10.33  
Keel, if bar iron, depth and thickness... 10x2 1/4 Inches in Ship. Inches required per Rule. 10x2 3/4  
Do. if centre through plate, depth and thickness... 10x2 3/4 Inches in Ship. Inches required per Rule. 10x2 3/4  
Stem, if bar iron, moulding and thickness... 10x5 1/2 Inches in Ship. Inches required per Rule. 10x5 1/2  
Stern-post for Rudder do. do. 10x5 1/2 Inches in Ship. Inches required per Rule. 10x5 1/2  
Stern-post for Propeller... 10x5 1/2 Inches in Ship. Inches required per Rule. 10x5 1/2  
Distance of Frames from moulding edge to moulding edge, all fore and aft... 24 (Class M.A.)  
Frames, size of Angle Iron, for 1/2 length amidships... 4 1/2 Inches in Ship. Inches required per Rule. 4 1/2  
Do. for 1/4 at each end... 4 1/2 Inches in Ship. Inches required per Rule. 4 1/2  
Reversed Frames, size of Angle Iron... 3 Inches in Ship. Inches required per Rule. 3  
Floors, depth and thickness of Floor Plate at mid line for half the length amidships... 22 Inches in Ship. Inches required per Rule. 22  
Do. at the ends... 6 1/2 Inches in Ship. Inches required per Rule. 6 1/2  
Do. do. do. at Bilge Keelson... 9 Inches in Ship. Inches required per Rule. 9  
Do. height extended at the Bilges... 44 Inches in Ship. Inches required per Rule. 44  
Beams, Upper, Spar, or Awaiting Deck (No. ) single or double Angle Iron, Plate or Tee Bulb Iron... 6 1/2 Inches in Ship. Inches required per Rule. 6 1/2  
Single or double Angle Iron on Upper edge... 2 1/2 Inches in Ship. Inches required per Rule. 2 1/2  
Average space... 4 1/2 Inches in Ship. Inches required per Rule. 4 1/2  
Beams, Main or Middle Deck (No. ) single or double Angle Iron, Plate or Tee Bulb Iron... 8 1/2 Inches in Ship. Inches required per Rule. 8 1/2  
Single or double Angle Iron on Upper Edge... 3 Inches in Ship. Inches required per Rule. 3  
Average space... 4 1/2 Inches in Ship. Inches required per Rule. 4 1/2  
Beams, Lower Deck, Held or Outer (No. ) single or double Angle Iron, Plate or Tee Bulb Iron... 8 1/2 Inches in Ship. Inches required per Rule. 8 1/2  
Single or double Angle Iron on Upper Edge... 3 Inches in Ship. Inches required per Rule. 3  
Average space... 4 1/2 Inches in Ship. Inches required per Rule. 4 1/2  
Keelson Centre line, single or double plate, or, or Intercoastal, size of Plates... 19 1/2 Inches in Ship. Inches required per Rule. 19 1/2  
Do. Plate to Intercoastal Keelson... 9 Inches in Ship. Inches required per Rule. 9  
Do. Size of Angle Irons... 6 Inches in Ship. Inches required per Rule. 6  
Do. Side Intercoastal Keelson, size of Plates... 20 Inches in Ship. Inches required per Rule. 20  
Do. Angle Irons on tops of Floors... 6 Inches in Ship. Inches required per Rule. 6  
Do. Bilge Keelson, Bulb Iron... 8 1/2 Inches in Ship. Inches required per Rule. 8 1/2  
Do. do. Intercoastal plates riveted to plating for 1/2 length... 13 Inches in Ship. Inches required per Rule. 13  
Do. do. Angle Irons... 6 Inches in Ship. Inches required per Rule. 6  
Side Stringers (No. ) size of Angle Irons... 6 Inches in Ship. Inches required per Rule. 6  
Do. Intercoastal plates riveted to plating for 3/5 length... 10 1/2 Inches in Ship. Inches required per Rule. 10 1/2  
Transoms, material Iron or, if none, in what manner compensated for.  
Knight-heads And Hawse Timbers Iron  
Windlass Hapson Patent Pall Bit  
The Frames extend in one length from Keel to upper deck stringer  
The Reverse Angle Irons on the floors and frames extend from the middle line to upper deck stringer  
Keelsons. Are the various lengths of Plates and Angle Irons properly connected? Yes And are their butts properly shifted? Yes  
Plates, Garboard, double or Riveted to Keel, double or at upper edge, with Rivets (1/2 in.) diameter, averaging (5 1/2 ins.) from centre to centre.  
Do. Edges from Garboards to upper part of Bilge, worked Clencher, double or single Riveted; with Rivets (1/2 in.) diameter, averaging (3 1/2 ins.) from centre to centre.  
Do. Butts from Keel to turn of Bilge, worked carvel with butt straps to strakes (1 1/2 in.) thick, double or single Riveted; with Rivets (1/2 in.) diameter averaging (3 1/2 ins.) from centre to centre. Do the Butt Straps lay over and Rivet through the lands of the strakes above or below? No  
Do. of 3 Strakes at Bilge for half length, treble riveted with Butt Straps 1/2 thicker than their plates.  
Do. Edges from bilge to Main Sheerstrake, worked carvel with a lining piece (1/2 in.) thick, or clencher, double or single riveted; with rivets (1/2 in.) diameter, averaging (3 1/2 ins.) from centre to centre.  
Do. Edges of Sheerstrake, Main, double or single Riveted. Upper, double or single Riveted. At upper edge Single Rivets At lower edge Double  
Do. Butts from Bilge to Main Sheerstrake, worked Carvel with Butt Straps (10/16 in.) thick, double or single Riveted; with Rivets (1/2 in.) diameter, averaging (3 1/2 ins.) from centre to centre.  
Do. Butts of Main Sheerstrake, double or treble Riveted. Butts of Upper or Spar Sheerstrake, and Upper Deck Stringer Plate, double or treble Riveted for half length amidships. Breadth of laps of plating in double Riveting (5 in.) Breadth of laps of plating in single Riveting (3 1/4 in.)  
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Double and single Rivets  
Planksheer, how secured to the plating of the sides. Waterway, how secured to the planksheer and to the Beams. (Explain by Sketch, if necessary.) See Section  
Beams of the various Decks, how secured to the sides? Forged knee ends No. of Breasthooks, Five Crutches, Four  
What description of Iron is used for the Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Bluechain or Head & Co  
Manufacturer's name or trade mark, Bluechain or Head & Co

We certify that the above is a correct description of the several particulars therein given.  
Builder's Signature, Barclay, Curle & Co Surveyor's Signature, J. Marr



11076-600

**Workmanship.** Are the butts of plating planed or otherwise fitted? Planed  
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  
Do the fillings between the ribs and plates fill in solid with single pieces? or are they in short lengths of various thicknesses? Single pieces  
Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? Yes and are the holes well and sufficiently countersunk in the plate and punched from the faying surfaces? Yes  
Are there any rivets which either break into or have been put through the seams or butts of the plating? A few at corners of Butte

Her Masts, Bowsprit, Yards, &c., are in Good condition, and sufficient in size and length. If they are of Iron or Steel give the 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  
Foremast. 83 feet in length 2 1/2 in diam. 3 plates in section 6 1/2 x 1 1/2 Butts treble and part double riveted edges.  
Mainmast 78 ft. double riveted

Date of Builders Contract 18th Sept 1871 Date of Test of Chains 24th Jan 1872

N <sup>o</sup> .	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test as per Certificate.	Inf. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	N <sup>o</sup> .	Weight.	Test as per Certificate.	Wight req'd per Rule.	Test req'd per Rule.
			296.	1 1/2	59.2.			Ships & Synchro	10524	33.0.5	30.8.1.31	32.0.0	30.2.0
	Fore Sails,	Chain	4	"	"	300 1 1/2	59.2.0	Bowers	10524	34.0.5	31.13.1.21	32.0.0	30.2.0
	Fore Top Sails,	(State Machine where Tested, and name of Superintendent).	20 links	Tested to 20% Cent above work				(State Machine where Tested, and name of Superintendent).	10524	20.0.14	27.4.3.14	27.0.25	26.1/2
	Fore Topmast Stay Sails,	Hempen Stream Cable	90	1 1/2	70.1.0	90 1 1/2		Stream	1	13.0.26		13 -	
	Main Sails,	Hawser	11.0		"	"		Kedges	1	6.2.26		6 1/2	
	Main Top Sails,	Towlines	7		"	"				3.1.26		3 1/2	
	and	Warp	5		"	"							
		All of quality.											

Her Standing and Running Rigging is True sufficient in size and Good in quality. She has Six Long Boats and  
The present state of the Windlass is Good Capstan Good and Rudder Good Pumps Good  
**Engine Room Skylights.**—How constructed? Upward iron deckhouse How secured in ordinary weather? By bolts and plates  
What arrangements are there for deadlights in such for bad weather? Deadlights with huddles  
**Coal Bunker Openings.**—How constructed? Thin upward deck How are lids secured? By studs How high above deck? Flush  
**Scuppers, &c.**—What arrangements are there beyond the scuppers on deck, for clearing upper deck of water, in case of a sea coming on board? Two gangways and four water ports  
**Cargo Hatchways.**—How formed? With iron comings State size 15 x 9. 11 x 9 1/2 12 x 9 1/2  
If of extraordinary size, state how framed and secured? Wood shifting beam and iron after  
What arrangement for shifting beams? 1  
**Hatches, themselves, whether strong and efficient?** Yes **Main Hatchways.**—State size 15 x 9.

Order for Special Survey No. 210 DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought Birth under  
Date Sept. 27 Surveys held 2nd. On the plating during the progress of riveting Special survey  
Order for Ordinary Survey No. 229 while building 3rd. When the beams were in and fastened, and before the decks were laid between  
Date as per 4th. When the ship was complete, and before the plating was finally coated or cemented 20th Feb 72  
No. 229 in builder's yard. Section 18. 5th. After the ship was launched and equipped and 12th February 73  
(+ 7 trials)

**General Remarks,**  
This ship is built in accordance with the accompanying  
Indership section. In the 100 A grade 3 Decks. The main sheerstrake  
is reduced to and this is added to the top side strake its edges  
being double riveted.

State if one, two or three decked vessel, or if spar or awning decked, and lengths of poop, forecabin or raised quarter deck, or of double or part double bottom.  
In what manner are the surfaces preserved from oxidation? Inside Cement and paint Outside Paint  
I am of opinion this Vessel should be Classed 100A 3 Decks

The amount of the Entry Fee .....£ 5 : 5 : 0 is received by me,  
Feb 1872 Special .....£ 44 5 : 6  
Certificate ..... 100A  
(Travelling Expenses) (if any) £  
Committee's Minute 18th Feb 1872  
Character assigned 100A  
TJW M.C. Three decks  
ATCP

W. J. Manning  
This ship appears to be built to the standard of 100A (3 decks) and is recommended for service.  
Lloyd's Register  
Foundation