

IRON SHIPS.

Rec 26/6/71

No: 5967 Survey held at Port Glasgow Date, first Survey 20th January Last Survey 9th June 18 71
on the Ship "Colmonell" Master Scobie
Tonnage under Tonnage Deck 1178.11 ONE, OR TWO DECKED THREE DECKED VESSELS.
Ditto of Spar Deck, or Awning Deck. 22.41 Half moulded breadth 35.7 Total Depth if three or more Decks 25.47
Ditto of Deep on Raised Qr. Dk. 18.60 Girth of Half Mid-ship Frame 35.7 Total Girth of Half Mid-ship Frame 35.7
Ditto of Houses on Deck 35.68 3rd Number 79.50 Length 219.5
Ditto of Forecastle 1254.80 1st Number 79.50 Length 219.5
Gross Tonnage 56.04 2nd Number 17457.3475 4th Number 17457.3475
Crew Space, as per Rule 1198.76 Depths to Length 8 and under 9 Breadths to Length 5 and under 6
Register Tonnage, as on Beam 1198.76 Destined Voyage Glasgow to Jada
If Surveyed while Building, Afloat, or in Dry Dock While building and Afloat

Length on deck as per Rule 219.5 Moulded Breadth 36.66 Depth from top of Keel to Deck Beam, as per Rule 25.5 Power of Engines — No. of Decks Two No. of Tiers of Beams Two
Dimensions of Ship per Register, length, 231 breadth, 37 depth, 23.4
Keel, if bar iron, depth and thickness 8 1/2 x 3 Inches in Ship. Inches required per Rule. 9 x 2 1/2
Do. if centre through plate, depth and thickness 8 1/2 x 3/4 8 1/2 x 2 1/2
Stem, if bar iron, moulding and thickness 8 x 23/4 8 1/2 x 2 1/2
Stern-post do. do. do. 8 x 23/4 8 1/2 x 2 1/2
Distance of Frames from moulding edge to moulding edge, all fore and aft 23 24
Frames, size of Angle Iron, for 1/2 length amidships 5 3 9/16 4 3/8 3 3/8 5 3/8 3 3/8
Do. for 1/2 at each end 5 3 9/16 4 3/8 3 3/8 5 3/8 3 3/8
Reversed Frames, size of Angle Iron 8 1/2 3 9/16 3 3/8 3 3/8 7 3/8 3 3/8
Floors, depth and thickness of Floor Plate at mid line for half the length amidships 25 10 1/2 22 1/2 9 1/2
Do. at the ends 5 10 1/2 5 9 1/2
Do. do. do. at Bilge Keelson 12 10 1/2 10 1/2 9 1/2
Do. height extended at the Bilges 17 feet
Beams, Three Decked, Spar, or Awning Decked (No.) single or double Angle Iron, Plate or Tee Bulb Iron — — — —
Single or double Angle Iron on Upper edge — — — —
Average space — — — —
Beams, Upper or Middle Deck (No.) single, or double Angle Iron, Plate or Tee Bulb Iron 9 5 1/2 9/16 8 1/2 3 3/8 9 3/8 3 3/8
Single, or double Angle Iron, on Upper Edge — — — —
Average space 46 inches 48 inches
Beams, Lower Deck or Orlop (No.) single, or double Angle Iron, Plate or Tee Bulb Iron 9 5 1/2 9/16 8 1/2 3 3/8 9 3/8 3 3/8
Single or double Angle Iron on Upper Edge — — — —
Average space 46 inches 48 inches
Keelson Centre line, single or double plate, box, or intercostal, size of Plates 11 x 6 1/2 x 1/8 11 x 6 1/2 x 1/8 11 x 6 1/2 x 1/8 11 x 6 1/2 x 1/8
Do. Bulb Plate to Intercostal Keelson — — — —
Do. Size of Angle Irons — — — —
Do. Side Intercostal Keelson, size of Plates 21 9 1/2 5 4 3/8
Do. Angle Irons on tops of Floors 5 4 3/8 5 4 3/8
Do. Bilge Keelson, Bulb Iron — — — —
Do. do. Angle Irons 5 4 3/8 5 4 3/8
Do. Side Stringers (No. one pair) size of Angle Irons 5 4 3/8 5 4 3/8
Transoms, material Iron or, if none, in what manner compensated for.
Knight-heads Iron Hawse Timbers Iron
Windlass Iron Patent Pall Bitt Not any
The Frames extend in one length from Keel to Gunwale Riveted through plates with (7/8 in.) Rivets, about 4 apart.
The Reverse Angle Irons on the floors extend across the middle line to above the hold beam stringer
On all the Frames, and to Gunwale plate on alternate frames
Keelsons. Are the various lengths of Plates and Angle Irons properly connected? Yes And are their butts properly shifted? Yes
Plates, Garboard, double or single Riveted to Keel, double or single at upper edge, with Rivets (1 1/8 in.) diameter, averaging (6 1/2 ins.) from centre to centre.
Do. Edges from Garboards to upper part of Bilge, worked Clencher, double or single Riveted; with Rivets (7/8 in.) diameter, averaging (3 1/2 ins.) from centre to centre.
Do. Butts from Keel to turn of Bilge, worked carvel with butt straps (1 1/2 in.) thick, treble or double or single Riveted; with Rivets (7/8 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. Edges of Sheerstrake, double or single Riveted. At upper edge Single At lower edge Double
Do. Butts from Bilge to Planksheers, worked Carvel with Butt Straps (1 1/2 in.) thick, double or single Riveted; with Rivets (7/8 in.) diameter, averaging (3 1/2 ins.) from centre to centre. Breadth of laps in double Riveting (5 1/2 inches) Breadth of laps in single Riveting (—)
Butt Straps of Keelsons, Stringer and Tie Plates, treble or double or single Riveted?
Planksheer, how secured to the plating of the sides, { Explain by Sketch, }
Waterway " " planksheer and to the Beams, { if necessary. }
Beams of the various Decks, how secured to the sides? Beams ends turned down No. of Breasthooks, Five Crutches, Five
What description of Iron is used for the Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Blackburne's Patent, Messrs. Massena's, and Palmers' Shipbuilding and Iron Co.
Manufacturer's name or trade mark, Blackburne's Patent, Messrs. Massena's, and Palmers' Shipbuilding and Iron Co.
We certify that the above is a correct description of the several particulars therein given.
Builder's Signature, John Reid & Co. Surveyor's Signature, —

IRON 448-0437

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? Solid lengths
 Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? Yes and are the rivet 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 in butts

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

Fore Mast 80 feet 10 1/2 inches - 2 plates 3/4 Butts treble riveted, Edges double riveted, 5 x 3 x 3/4 30 inches
 Main Mast 80 feet - 2 do 3/4 " " 5 x 3 x 3/4 30
 Mizzen Mast 80 feet 5 1/2 inches - 2 do 3/4 " " 5 x 3 x 3/4 27
 Bowsprit 38 feet 5 inches - 2 do 3/4 " " 5 x 3 x 3/4 29



No.	Number for equipment	Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	No.	Weight. Ex. Stock.	Test as per Certificate.	Weight req'd per Rule.	Test req'd per Rule.
	SAILS.						15 E. 9. 8. 71	9636	31. 0. 22	29. 11. 1. 0	30. 0. 0	28. 3. 0
	CABLES, &c.						15 E. 9. 8. 71	9637	30. 3. 22	29. 7. 2. 0	30. 0. 0	28. 2. 0
	Chain						15 E. 9. 8. 71	9638	25. 2. 7	25. 5. 3. 21	25. 2. 0	25. 3. 0
	Fore Sails,						(State Machine where Tested, and name of Superintendent.)					
	Fore Top Sails,						Proving House, Low Walker, Newcastle upon Tyne					
	Fore Topmast Stay Sails,						Robert Barrill, Superintendent					
	Two Fore Topmast Stay Sails,						Proving House, Low Walker, Newcastle upon Tyne					
	Stay Sails,						Robert Barrill, Superintendent					
	Main Sails,						Proving House, Low Walker, Newcastle upon Tyne					
	Main Top Sails,						Robert Barrill, Superintendent					
	and						Proving House, Low Walker, Newcastle upon Tyne					
	rigging is Wire						Robert Barrill, Superintendent					
	Her Standing and Running Rigging						Proving House, Low Walker, Newcastle upon Tyne					
	The present state of the Windlass is						Robert Barrill, Superintendent					

Capstans Good and Rudder Good with patent Pumps Good and Iron Good

Engine Room Skylights. How constructed? How constructed?

What arrangements are there for deadlights in such for bad weather? How constructed?

Coal Bunker Openings. How constructed? How constructed? How are lids secured? How are lids secured? How high above deck? How high above deck?

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? Scuppers on each side, and Ports in bulwarks

Cargo Hatchways. How formed? Of Iron State size, Two each 7 feet by 6 feet 6 inches

If of extraordinary size, state how framed and secured?

What arrangement for shifting beams? One portable Beam secured by screw bolts and nuts

Hatches, themselves, whether strong and efficient? Strong and efficient Main Hatchways. State size 15 feet by 16 feet

Order for Special Survey No. <u>554</u> DATES of	1st. On the several parts of the frame, when in place, and before the plating was wrought	Specially surveyed while building from January to June 1871 in all 19 visits.
Date <u>18th Jan'y 1871</u> Surveys held	2nd. On the plating during the progress of riveting	
Order for Ordinary Survey No. <u>while building</u>	3rd. When the beams were in and fastened, and before the decks were laid	
Date <u>as per</u>	4th. When the ship was complete, and before the plating was finally coated or cemented	
No. <u>42</u> in builder's yard. Section 18.	5th. After the ship was launched and equipped	

General Remarks. This vessel has been built under Special Survey as per Order No. 554; and as will be seen on the other side is built far in excess of the present Rules; viz. The Keel, Floors, Main and reverse frames, all the outside plating from the Keel to the under side of sheerstrake, hold beam stringers and deck ties to each deck. The frames are spaced 23 inches apart instead of 24 inches and every deck and hold beam has an iron pillar 3 1/2 inch diameter to hold beam, and 2 1/2 inch to upper deck beams and double riveted at head and heel all fore and aft. It will be seen by the midship section herewith appended that this vessel has a great rise of floor; the floors extending up the bilges to a perpendicular height of about seven feet. Agreeable to Rule she should require an additional stringer above the bilges in consequence of the depth of hold, but seeing the great excesses she has over and above the requirements of the Rules; and the great rise of floor (thereby shortening the length of frames,) this discrepancy is more than compensated for; and I am of opinion she is worthy the most favorable consideration of the Committee for the class sought; viz. 100 A1.

In what manner are the surfaces preserved from oxidation? Inside Portland Cement and three coats of Outside Three coats of red iron paint and
Black paint on topsides.

I am of opinion this Vessel should be Classed 100 A1

The amount of the Entry Fee£ 5 : " : " is received by me,

Travelling Expenses (if any)£ " : " : "

Special£ 59 : 19 : "

X Certificate

Committee's Minute 24th June 1871

Character assigned 100 A1

Taking into consideration the great excess of this vessel has, and that her frames are deeper and closer, and her plating is a great extent thicker than required by the Rules, we submit that she would be a double angle iron stringer on the floor plates is ample compensation for - we therefore concur in the opinion of the Committee.