

# IRON SHIP.

No. 1011 Survey held at Middlesbrough Date, First Survey 10th January Last Survey 1st August 1898  
On the Screw Steamer "Helderland" Master Boon

**TONNAGE** under Tonnage Deck 1304.39  
Ditto of Third, Spar, or Awning Decks 641.15  
Ditto of Poop, or Raised Or. Dk. 188.89  
Ditto of Houses on Deck 116.12  
Ditto of Forecastle 112.93  
Gross Tonnage 2143.08  
Less Crew Space 112.28  
Less Engine Room 695.39  
Register Tonnage as cut on Beam 1105.41

**ONE, OR TWO DECKED, THREE DECKED VESSEL.**  
**SPAR, OR AWNING-DECKED VESSEL.**  
**HALF BREADTH** (moulded) 11.02  
**DEPTH** from upper part of Keel to top of Upper Deck Beams 21.15  
**GIRTH** of Half Midship Frame (as per Rule) 11.15  
**1st NUMBER** 86.82  
**1st NUMBER, if a THREE-DECKED VESSEL** 119.82  
**LENGTH** 298.25  
**2nd NUMBER** 23806.31  
**PROPORTIONS**—Breadth to Length 8.3  
Depths to Length—Upper Deck to Keel 12.910.8  
Main Deck ditto 14.3 18.1

Built at Middlesbrough  
When built 1898 Launched 18th May 1898  
By whom built Raylton Dixon & Co.  
Owners W. Ruy & Sons  
Port belonging to Rotterdam  
Destined Voyage Rotterdam  
If Surveyed while Building, Afloat, or in Dry Dock.

**LENGTH** on deck as per Rule 300.0 **BREADTH** Moulded 36.25 **DEPTH** top of Floors to Upper Deck Beams 25.0 **Power of Engines** 200 **Horse.** 200 **Nº. of Decks with flat laid** Two **Nº. of Tiers of Beams** Three

Dimensions of Ship per Register, length, 300.0 breadth, 36.25 depth, 11.9

	Inches in Ship.	Inches per Rule.
<b>KEEL</b> , depth and thickness	10 x 2 3/4	10 x 2 3/4
<b>STEM</b> , moulding and thickness	10 x 2 3/4	10 x 2 3/4
<b>STERN-POST</b> for Rudder do. do.	11 x 5	10 x 5 1/2
" " for Propeller	2 1/2	(Class 100A1)
Distance of Frames from moulding edge to moulding edge, all fore and aft	2 1/2	
<b>FRAMES</b> , Angle Iron, for 2/3 length amidships	5 x 3	5 x 3
Do. for 1/3 at each end	5 x 3	5 x 3
<b>REVERSED FRAMES</b> , Angle Iron	3 1/2 x 3	3 1/2 x 3
<b>FLOORS</b> , depth and thickness of Floor Plate at mid line for half length amidships	2 1/2 x 10	2 1/2 x 10
" thickness at the ends of vessel	2 1/2 x 8	2 1/2 x 8
" depth at 2/3 the half-bdth. as per Rule	1 1/2 x 12	1 1/2 x 12
" height extended at the Bilges	1 1/2 x 12	1 1/2 x 12
<b>BEAMS, Upper, Spar, or Awning Deck</b> Single or double Angle Iron, Plate or Tee Bulb Iron	1 1/2 x 11	1 1/2 x 11
Average space	3 x 6	3 x 6
<b>BEAMS, Main, or Middle Deck</b> Single or double Angle Iron, Plate or Tee Bulb Iron	1 1/2 x 8	1 1/2 x 8
Average space	3 x 4	3 x 4
<b>BEAMS, Lower Deck, Hold, or Orlop</b> Single or double Angle Iron, Plate or Tee Bulb Iron	1 1/2 x 8	1 1/2 x 8
Average space	3 x 4	3 x 4
<b>KEELSONS</b> Centre line, single or double plate, box, or intercostal, Plates	1 1/2 x 13	1 1/2 x 13
" Rider Plate	1 1/2 x 13	1 1/2 x 13
" Bulb Plate to intercostal Keelson	1 1/2 x 13	1 1/2 x 13
" Angle Irons	1 1/2 x 8	1 1/2 x 8
" Double Angle Iron Side Keelson	1 1/2 x 6	1 1/2 x 6
" Side intercostal Plate	1 1/2 x 9	1 1/2 x 9
" do. Angle Irons	1 1/2 x 6	1 1/2 x 6
" Attached to outside plating with angle iron	1 1/2 x 6	1 1/2 x 6
<b>BILGE</b> Angle Irons	1 1/2 x 6	1 1/2 x 6
" do. Bulb Iron	1 1/2 x 6	1 1/2 x 6
" do. Intercostal plates riveted to plating for length	1 1/2 x 8	1 1/2 x 8
<b>BILGE STRINGER</b> Angle Irons	1 1/2 x 6	1 1/2 x 6
Intercostal plates riveted to plating for length	1 1/2 x 6	1 1/2 x 6
<b>SIDE STRINGER</b> Angle Irons	1 1/2 x 6	1 1/2 x 6

	Inches in ship.	16ths in ship.	Inches per Rule	16ths per Rule
<b>Flat Keel Plates</b> , breadth and thickness	36	12	36	12
<b>PLATES</b> in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges	11		11	
" of doubling at Bilge, or increased thickness, and length applied				
" fm up. part of Bilge to l. edge of Sh'rstrake.	11		11	
" Main Sheerstrake, breadth and thickness of doubling at Sh'rstrake, & length applied from Mn. to Upr. or Spar Dk. Sh'rstrake.				
" Up. or Spar Dk Sh'rstrake, brdth & thickness	11	13	11	13
Butt Straps to outside plating, breadth & thickness	11	13	11	13
Lengths of Plating	120		120	
Shifts of Plating, and Stringers	118		118	
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	62	9	62	9
Angle Iron on ditto	11 x 11 x 9		11 x 11 x 9	
Tie Plates fore and aft, outside Hatchways	15	9	15	9
Diagonal Tie Plates on Beams No. of Pairs				
Planksheer material and scantling	Cutter			
Waterways do. do.				
Flat of Upper Deck do. do.	11 x 11 x 8		11 x 11 x 8	
How fastened to Beams	11 x 11 x 8		11 x 11 x 8	
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	11 x 11	10	11 x 11	10
Is the Stringer Plate attached to the outside plating?	Yes		Yes	
Angle Irons on ditto, No.	11 x 11 x 9/16		11 x 11 x 9/16	
Tie Plates, outside Hatchways	15	10	15	10
Diagonal Tie Plates on Beams, No. of pairs				
Waterways materials and scantlings	11 x 11 x 9/16		11 x 11 x 9/16	
Flat of Middle Deck do. do.	11 x 11 x 8		11 x 11 x 8	
How fastened to Beams	11 x 11 x 8		11 x 11 x 8	
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	11 x 11	9	11 x 11	9
Is the Stringer Plate attached to the outside plating?	Yes		Yes	
Angle Irons on ditto, No.	11 x 11 x 9/16		11 x 11 x 9/16	
Stringer or Tie Plates, outside Hatchways	11 x 11 x 9/16		11 x 11 x 9/16	
Flat of Lower Deck	11 x 11 x 8		11 x 11 x 8	
Ceiling betwixt Decks, thickness and material	2 1/2 x 11		2 1/2 x 11	
" in hold do. do.	2 1/2 x 11		2 1/2 x 11	
Main piece of Rudder, diameter at head	11		11	
do. at heel	11		11	
Can the Rudder be unshipped afloat?	Yes		Yes	
Bulkheads No. Thickness of	1		1	
" Height up Upper & Main Decks				
" How secured to sides of ship	By double frames			
" Size of Vertical Angle Irons 3/4 x 3/4 x 9/16 and distance apart	30 ins.			
" Are the outside Plates doubled two spaces of Frames in length?	Yes		Yes	

Transoms, material. Knight-heads. Hawse Timbers. Plating & Angles  
Windlass Boiler Pull Bitt

The **FRAMES** extend in one length from Keel to gunwale Riveted through plates with 1/8 in. Rivets, about 1/2 apart.

The **REVERSED ANGLE IRONS** on floors and frames extend across middle line to above Main 8" Stringer and to gunwale 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 3 1/8 ins. from centre to centre.

- " **Edges of Garboards** and to upper part of Bilge, worked clencher, double riveted; with rivets 1/8 in. diameter, averaging 3 1/8 ins. from centre to centre.
- " **Butts from Keel to turn of Bilge**, worked carvel, double riveted; with rivets 1/8 in. diameter averaging 3 1/8 ins. from centre to centre.
- " **Butts of three** Strakes at Bilge for one-half length, treble riveted with Butt Straps 1/10 thicker than the plates they connect.
- " **Edges from bilge to Main Sheerstrake**, worked clencher, double or single riveted; with rivets 1/8 in. diameter, averaging 3 1/8 ins. from cr. to cr.
- " **Butts from Bilge to Main Sheerstrake**, worked carvel, double riveted; with rivets 1/8 in. diameter, averaging 3 1/8 ins. from cr. to cr.
- " **Edges of Main Sheerstrake**, double or single riveted. **Upper Sheerstrake**, double or single riveted.
- " **Butts of Main Sheerstrake**, treble riveted for length amidships. Butts of Upper or Spar Sheerstrake, treble riveted 1/2 length amidships.
- " **Butts of Main Stringer Plate**, treble riveted for 1/2 length amidships. **Butts of Upper or Spar Stringer Plate**, treble riveted for 1/2 length.
- " Breadth of laps of plating in double riveting 11 x 5 1/4 Breadth of laps of plating in single riveting —

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted?

Waterway, how secured to Beams Gutter (Explain by Sketch, if necessary.)

Beams of the various Decks, how secured to the sides? Ends linned and welded No. of Breasthooks, Six Crutches, Five

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

Manufacturer's name or trade mark, Highland & Co. - Bowditch & Co. & S. & A. Co.

The above is a correct description.

Builder's Signature, RAYLTON DIXON & CO.

Surveyor's Signature, Robinson

Surveyor to Lloyd's Register of British and Foreign Shipping

IRON 479-0378



See Declaration of Survey dated 30th Aug 1877

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*

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

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? *None in Butts*

21504 Iron

Masts, Bowsprit, Yards, &c., are *Iron & 90* 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

*Dimensions similar to S.S. "Lybenton" Report No. 3918, &c. S. "Overijssel" Report No. 3942*

NUMBER for EQUIPMENT

N <sup>o</sup> .	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Length & Size req'd per Rule.	Test req'd per Rule.	ANCHORS.	N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate.	Weight req'd per Rule.	Test req'd per Rule.
		Chain	240	1 1/8	88 1/2	240	88 1/2	Bowers	3	35-C-8	32-9-1-1/2	34-C-0	31-12-0-0
	Fore Sails,				63 1/4	1 1/8	63 1/4			34-C-20	31-19-0-1	34-C-0	31-12-0-0
	Fore Top Sails,									29-1-22	28-5-C-0	28-3-14	24-16-0-0
	Fore Topmast Stay Sails												
	Main Sails,												
	Main Top Sails,												
	and												

Standing and Running Rigging *Done & Done* sufficient in size and *good* in quality. She has *one* Long Boat and *three* others

The Windlass is *good* Capstan *good* and Rudder *and* Pumps *good*

Engine Room Skylights.—How constructed? *No iron casing a steel skylight* How secured in ordinary weather? *Bulls Eyes*

What arrangements for deadlights in bad weather? *Bulls Eyes*

Coal Bunker Openings.—How constructed? *Coming 1/16 inch* How are lids secured? *Bars* Height above deck? *2 ft 1/2*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Six scuppers & ten ports each side*

Cargo Hatchways.—How formed? *8 1/16 iron coming*

State size Main Hatch *24' x 11'* Forehatch *10' x 8'* Quarterhatch *11' x 11'*

If of extraordinary size, state how framed and secured?

What arrangement for shifting beams? *Web plates and 3 bars and again*

Hatches, If strong and efficient? *Yes*

Order for Special Survey No. *677*

Date *25th Jan 1878*

Order for Ordinary Survey No.

Date

No. *141* in builder's yard.

DATES of Surveys held while building as per Section 18.

- 1st. On the several parts of the frame, when in place, and before the plating was wrought
- 2nd. On the plating during the process of riveting
- 3rd. When the beams were in and fastened, and before the decks were laid...
- 4th. When the ship was complete, and before the plating was finally coated or cemented..
- 5th. After the ship was launched and equipped

*Build under Special Survey*  
*First Survey 10th January, Last Survey 1st Aug 1878*

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

*Forecastle in frames as specified, Beams 1 1/2 x 1/2, angles 3 x 2 1/2 x 1/2*  
*Stringer on d. 2 1/2 x 1/2, angle 2 x 3 1/2 x 1/2, tie plate 1 1/2 x 1/2, Plating 1/16 Deck 3/16*  
*Short Poop with rounded gunwale Plating 1/16 Deck 3/16*

RAYLTON DIXON & CO.  
*Robinson*

State if one, two, or three decked vessel, or if spar, or awning-decked, and the lengths of poop, forecabin, or raised quarter deck, and the length of double, or part double bottom.

How are the surfaces preserved from oxidation? Inside *Paint* Outside *Paint*

I am of opinion this Vessel should be Classed *100 M 1*

The amount of the Entry Fee ... £ 5 : 0 : 0 is received by me,  
Special ... £ 10 : 0 : 0  
Certificate ...

(Travelling Expenses, if any, £ )

Committee's Minute 13th August, 1878.

Character assigned

*100 M 1*  
*Lloyd's M.C. 2nd 3 to B*

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

*This vessel appears eligible to be classed 100 M 1 as recommended*

*Lloyd's Register*  
*Foundation*