

# STEEL ROYAL SHIP.

(Received at London Office) 1 JAN 1884

No. *1074* Survey held at *Govan* Date, First Survey *26 Feb 1883* Last Survey *24 Dec 1883*  
On the *Steel S.S. "Ruapehu"* 3 Masts

TONNAGE under Tonnage Deck *2755.17*  
 Ditto of Third, Spar, Lining Deck *1098.48*  
 Ditto of Poop, *93.73*  
 Ditto of Houses on Deck *153.36*  
 Ditto of Forecabin *61.85*  
 Gross Tonnage *4162.59*  
 Less Crew Space *175.60*  
 Less Engine Room *1332.03*  
 Register Tonnage as out on Beam *2654.96*

ONE, OR TWO DECKED, THREE DECKED VESSEL,  
 SPAR, OR AWNING DECKED VESSEL.  
 Half Breadth (moulded) *22.9*  
 Depth from upper part of Keel to top of Upper Deck Beams *26.16*  
 Girth of Half Midship Frame (as per Rule) *42.8*  
 1st Number *91.86*  
 2nd Number *34646*  
 Length *377*  
 Proportions— Breadths to Length *8.2*  
 Depths to Length— Upper Deck to Keel *10.9*  
 Main Deck ditto *14.4*

Master *Critchley*  
 Built at *Govan*  
 When built *1883* Launched *19 Nov 1883*  
 By whom built *J. Elder & Co*  
 Owners *New Zealand Shipping Co Ltd*  
 Residence *84 Bishopsgate St (within)*  
 Port belonging to *Lyttelton, London*  
 Destined Voyage *London for New Zealand*  
 If Surveyed while Building, Afloat, or in Dry Dock.  
*While Building & Afloat*

LENGTH on deck as per Rule	Feet. Inches.	BREADTH— Moulded	Feet. Inches.	DEPTH top of Floors to Upper Deck Beams Do. do. Main Deck Beams	Feet. Inches.	Power of Engines	Horse.	N° of Decks with flat laid	N° of Tiers of Beams
<i>377</i>	<i>377</i>	<i>45 9</i>	<i>45 9</i>	<i>26 16</i>	<i>26 16</i>	<i>600</i>	<i>600</i>	<i>3</i>	<i>3 1/2</i>
Dimensions of Ship per Register, length, <i>389</i> breadth, <i>46</i> depth, <i>26 16</i> moulded depth <i>33 53</i>									
KEEL, depth and thickness	Inches in Ship		Inches per Rule		Flat Keel Plates, breadth and thickness				
STEM, moulding and thickness	<i>11 x 3</i>		<i>11 x 3</i>		PLATES in Garboard Strakes, br'dth & thickness				
STERN-POST for Rudder do. do.	<i>11 x 7</i>		<i>11 x 7</i>		" From Garboard to upper part of Bilges				
" " for Propeller	<i>11 x 7</i>		<i>11 x 7</i>		" Of Bilge at Bilge, or increased thickness and length applied				
Distance of Frames from moulding edge to moulding edge, all fore and aft	<i>24 ins</i>		<i>24 ins</i>		" From up. prt of Bilge to l. edge of Sh'rstrake				
FRAMES, Angle <i>Steel</i> for 2/3 length amidships	<i>5 1/2 3 1/2 13</i>		<i>5 1/2 3 1/2 13</i>		" Main Sheerstrake, breadth and thickness				
Do. for 1/3 at each end	<i>5 1/2 3 1/2 12</i>		<i>5 1/2 3 1/2 12</i>		" Of Bilge at Sh'rstrake & lng applied				
REVERSED FRAMES, Angle <i>Steel</i>	<i>3 1/2 3 1/2 13</i>		<i>3 1/2 3 1/2 13</i>		" From M'n. to Upper Spar Dk. Sh'rstrake				
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	<i>26</i>		<i>26</i>		" Upper Spar Dk Sh'rstrake, br'dth & thick'ns				
" thickness at the ends of vessel	<i>13</i>		<i>13</i>		Butt Straps to outside plating, breadth & thickness				
" depth at 2/3 the half-b'ath. as per Rule	<i>13</i>		<i>13</i>		Lengths of Plating <i>6 frame space</i>				
" height extended at the Bilges	<i>5 1/2</i>		<i>5 1/2</i>		Shifts of Plating, and Stringers <i>2</i>				
BEAMS, Upper Spar, or Lining Deck	<i>9 5 1/2</i>		<i>9 5 1/2</i>		Gunwale Plate on ends of Lining Spar, or Upper Deck Beams, breadth and thickness				
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<i>9 5 1/2</i>		<i>9 5 1/2</i>		Angle Iron on ditto				
Single or double Angle Iron on Upper edge	<i>48 ins</i>		<i>48 ins</i>		Tie Plates fore and aft, outside Hatchways				
Average space	<i>48 ins</i>		<i>48 ins</i>		Diagonal Tie Plates on Beams No. of Pairs				
BEAMS, Main, or Middle Deck	<i>10 6</i>		<i>10 6</i>		Flat of Up., Spar, or Awning Dk.				
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<i>10 6</i>		<i>10 6</i>		How fastened to Beams				
Single or double Angle Iron on Upper Edge	<i>48 ins</i>		<i>48 ins</i>		Stringer Plate on ends of Main or Middle Deck				
Average space	<i>48 ins</i>		<i>48 ins</i>		Beams, breadth and thickness				
BEAMS, Lower Deck	<i>10 6</i>		<i>10 6</i>		Is the Stringer Plate attached to the outside plating?				
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<i>10 6</i>		<i>10 6</i>		Angle Irons on ditto, No. <i>2</i>				
Single or double Angle Iron on Upper Edge	<i>48 ins</i>		<i>48 ins</i>		Tie Plates, outside Hatchways				
Average space	<i>48 ins</i>		<i>48 ins</i>		Diagonal Tie Plates on Beams, No. of pairs				
BEAMS, Hold or Orlop	<i>6 3 7/4</i>		<i>6 3 7/4</i>		Flat of Middle Deck* do. do.				
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<i>6 3 7/4</i>		<i>6 3 7/4</i>		How fastened to Beams				
Single or double Angle Iron on Upper Edge	<i>48 ins</i>		<i>48 ins</i>		Stringer Plates on ends of Lower Deck, Hold or Orlop Beams				
Average space	<i>48 ins</i>		<i>48 ins</i>		Is the Stringer Plate attached to the outside plating?				
KEELSONS Centre line, single or double plate, box, or Intercostal, Plates	<i>29 23 29 23</i>		<i>29 23 29 23</i>		Angle Irons on ditto, No. <i>2</i>				
" Rider Plate	<i>14 23 14 23</i>		<i>14 23 14 23</i>		Stringer or Tie Plates, outside Hatchways				
" Bulb Plate to Intercostal Keelson	<i>6 4 16 6 4 16</i>		<i>6 4 16 6 4 16</i>		Flat of Lower Deck* <i>2 1/2 P. Pine</i>				
" Angle Irons <i>Steel</i>	<i>6 4 16 6 4 16</i>		<i>6 4 16 6 4 16</i>		Ceiling betwixt Decks, thickness and material				
" Double Angle Iron Side Keelson	<i>6 4 15 6 4 15</i>		<i>6 4 15 6 4 15</i>		" in hold do. do.				
" Side Intercostal Plate	<i>6 4 16 6 4 16</i>		<i>6 4 16 6 4 16</i>		Main piece of Rudder, diameter at head				
" do. Angle Irons <i>Steels</i>	<i>6 4 16 6 4 16</i>		<i>6 4 16 6 4 16</i>		do. at heel				
" Attached to outside plating with angle iron	<i>3 1/2 3 1/2 13 3 1/2 3 1/2 13</i>		<i>3 1/2 3 1/2 13 3 1/2 3 1/2 13</i>		Can the Rudder be unshipped afloat?				
BILGE Angle Irons <i>steels</i>	<i>6 4 16 6 4 16</i>		<i>6 4 16 6 4 16</i>		Bulkheads No. <i>8</i> No. per Rule <i>6</i>				
" do. Bulb Iron	<i>11 16 11 16</i>		<i>11 16 11 16</i>		" Thickness of <i>3/16</i> Iron to main st. and out to up. st.				
" do. Intercostal plates riveted to plating for <i>22 1/2</i> length	<i>15 15</i>		<i>15 15</i>		" Height up <i>7 1/2</i> ft. B.H. bet. dks. at frames <i>34.625</i> ft. <i>7 1/2</i>				
BILGE STRINGER Angle Irons <i>steels</i>	<i>6 4 16 6 4 16</i>		<i>6 4 16 6 4 16</i>		" How secured to sides of ship <i>Double frames</i>				
" Intercostal plates riveted to plating for <i>22 1/2</i> length	<i>15 15</i>		<i>15 15</i>		" Size of Vertical Angle <i>Steel</i> <i>3 1/2 x 3 1/2 x 1 1/2</i> and distance apart <i>30</i> ins.				
SIDE STRINGER Angle Irons <i>steels</i>	<i>6 4 16 6 4 16</i>		<i>6 4 16 6 4 16</i>		" Are the outside Plates doubled two spaces of Frames in length? <i>Yes</i>				

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 main spar dks. as used to on profile*  
 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 *1/4* in. diameter, averaging *6* 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 *5 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 *5 1/2* ins. from centre to centre.  
 " Butts of all Strakes at Bilge for *3/4* length, treble riveted with Butt Straps *2 1/8* 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.  
 " Edges of Main Sheerstrake, double or single riveted. Upper Sheerstrake, double or single riveted.  
 " Butts of Main Sheerstrake, treble riveted for *3/4* length amidships. Butts of Upper or Spar Sheerstrake, treble riveted *3/4* length amidships.  
 " Butts of Main Stringer Plate, treble riveted for *3/4* length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for *3/4* length.  
 " Breadth of laps of plating in double riveting *6 1/2* Breadth of laps of plating in single riveting *✓*  
 Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? *Yes & don* No. of Breasthooks, *60* Crutches, *2*  
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *Steel C: of Scotland*  
 Manufacturer's name or trade mark, *Mosund, Consett, Parkhead, & Dalziel*  
 The above is a correct description.  
 Owner's Signature, *J. Elder & Co.* Surveyor's Signature, *A. H. ...*  
 Surveyor to Lloyd's Register of British and Foreign Ships

If Iron Deck, or parts, and if wood deck, state of which or parts, and if wood deck, state clearly where plating is of alternate thickness—as distinguished from diminished thickness at ends of vessel.

6374 GL

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? *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 very few.*

Masts, Bowsprit, Yards, &c., are *Steel* 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 *These have been built in accordance with the tracing attached herewith, see Secretary's letter of the 14<sup>th</sup> Feb/83. The steel has been tested at the works of the Manufacturers, Messrs The Steel Company of Scotland.*

(see Sect 4<sup>th</sup> May 1883)

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.	W'ght req'd per Rule.	Machine where Tested & Suprntd.	
SAILS. CABLES, &c.	1503	2 1/2	81.25	300-2 1/2	Ketchum	Bower Anchors	41-3.26	37.2-0	4 1/2	Ketchum	
Chain	1503	2 1/2	113.75				10.0-22				
Fore Sails,	90	12/37	12/31		by	1692	41-1-12	36.4-2-0	159 3/4	by	
Fore Top Sails,	105	10/16	16.92	90-1 1/2	D. G.	1455	39-0-20	35-5-14	cut	Lewis	
Fore Topmast Stay Sails,	120	4 1/2	120 1/2	130 1/2	Lewis	1456	39-0-0	35-2-0	cut	Glasgow	
Main Sails,	90	3 1/2	90	110	Steel	Stream Anchor	906	12-2-23	14-10-1-4	6 1/2	by
Main Top Sails,	90	3 1/2	90	9		Kedge	904	2-2-14	8-17-2-0	3 1/2	W. T. Hall
and spare	180	5	180			2nd Kedge	905	3-4-13	4-14-1-14	3 1/2	

Standing and Running Rigging *wire & hemp* sufficient in size and *9<sup>th</sup>* in quality. She has *4* Long Boats and *3* others.  
The Windlass is *Harfields* Capstan *8* and Rudder *good* Pumps *good*  
Engine Room Skylights. How constructed? *Iron on Bridge Deck.* How secured in ordinary weather? *Bolted*  
What arrangements for deadlights in bad weather? *Bronze guards with tarpaulins*  
Coal Bunker Openings. How constructed? *Cut Iron in Deck* How are lids secured? *Synnet pins* Height above deck? *flush*  
Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? *6 wash ports, 7 scuppers, 4 mousing ports, 4 cargo ports & 2 gangway ports.*  
Cargo Hatchways. How formed? *Plate & angle iron*  
State size Main Hatch *10 1/2 ft x 12 1/2 ft* Forehatch *7 1/2 ft x 8 ft* Quarterhatch *7 1/2 ft x 8 ft*  
If of extraordinary size, state how framed and secured? *Shifting Beams as required.*  
What arrangement for shifting beams?  
Hatches, if strong and efficient? *Solid hatches 3" P. Pine & gratings under*

Order for Special Survey No. *115* DATES of Surveys held while building as per Section 18.  
Date *15<sup>th</sup> Dec 1882*  
Order for Ordinary Survey No. *202*  
Date *15<sup>th</sup> Dec 1882*  
No. *202* in builder's yard.  
State dates of letters respecting this case *7<sup>th</sup> Dec 1882, 14<sup>th</sup> Feb, 14<sup>th</sup> May & 3<sup>rd</sup> Sept 1883*

General Remarks (State quality of workmanship, &c.)  
*The workmanship is good and the vessel has been built in accordance with the nine tracings herewith attached, and with the instructions contained in the letters above referred to.*

*The fore & after peaks have been filled with water and the bulkheads proved satisfactory.*  
*This is a sister ship to the Steel S.S. "Tongariro", Glasgow Report - N<sup>o</sup> 6291, and to the "Aorangi", N<sup>o</sup> 6329.*  
*The steel of which she was built was tested at the works of the Manufacturers in accordance with Committee's circular.*  
*Length of fore-castle 57 ft; Open Bridge 124 ft; Poop 36 ft; House between poop and Bridge 56 ft x 16 1/2 ft covered with shelter deck and open bulwarks.*

State if *one, two, or three decked vessel, or if spar, or running decked*; and the lengths of poop, bridge, fore-castle, *omitted under deck.* (If double bottom, state particulars on separate form.)  
How are the surfaces preserved from oxidation? Inside *Cement & Paint* Outside *Paint*  
I am of opinion this vessel should be Classed *+100 A.1. "steel" "spar deck"*  
The amount of the Entry Fee .....£ *5: 0: 0* is received by me, *J. Dodd*  
Special .....£ *124: 13: 6* 31/12/ 1883  
(to be sent as per margin). Certificate ...  
(Travelling Expenses, if any, £ )

Committee's Minute *TUESDAY 1 JAN 1884*  
Character assigned *10 A.1 2nd class*  
*Steel*  
Surveyor to Lloyd's Register of British and Foreign Shipping.  
© 2019 Lloyd's Register Foundation