

REPORT ON BOILERS.

No. 37096

Received at London Office

Date of writing Report 21 Aug 1917 When handed in at Local Office Glasgow Port of Glasgow
 No. in Survey held at Glasgow Date, First Survey 20th May 1915 Last Survey 13th Aug 1917
 Reg. Book. on the Marine Boilers designated nos 1564/65. In Ardrossan Dry Dock S.S. St. Ninians Hill (Number of Visits 38) Gross Tons }
 Master Built at Ardrossan By whom built Ararosa & Co S.S. Co When built 1917
 Engines made at Glasgow By whom made Archibald Blair Ltd When made 1918
 Boilers made at Glasgow By whom made Lindsay Burnet & Co When made 1917
 Registered Horse Power Owners Mead Son & Hussey Port belonging to London

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Steel Co Scotland & Lancashire

(Letter for record S) Total Heating Surface of Boilers 2524 sq ft Is forced draft fitted no No. and Description of Boilers Two Single Ended Working Pressure 180 lbs Tested by hydraulic pressure to 360 Date of test 13-8-17
 No. of Certificate 13878 Can each boiler be worked separately yes Area of fire grate in each boiler 45 sq ft No. and Description of safety valves to each boiler 2 Spring loaded Area of each valve 4 sq in Pressure to which they are adjusted 55 lbs
 Are they fitted with easing gear yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler no
 Smallest distance between boilers or uptakes and bunkers or woodwork 4' 6" Mean dia. of boilers 12'-6" Length 10'-6"
 Material of shell plates Steel Thickness 1 3/4" Range of tensile strength 28/32 Are the shell plates welded or flanged no
 Descrip. of riveting: cir. seams DR Lap long. seams Zip Riv Bulbs Diameter of rivet holes in long. seams 1 1/8" Pitch of rivets 8"
 Lap of plates or width of butt straps 1'-4 1/2" Per centages of strength of longitudinal joint rivets 88 Working pressure of shell by rules 183 lbs Size of manhole in shell 16" x 12" Size of compensating ring 7" x 1 1/2" flanged No. and Description of Furnaces in each boiler Two horizontal Material Steel Outside diameter 4'-4 1/2" Length of plain part top 7'-0" Thickness of plates crown 1 1/2" bottom 1 1/2"
 Description of longitudinal joint bead No. of strengthening rings none Working pressure of furnace by the rules 180 lbs Combustion chamber plates: Material Steel Thickness: Sides 2 1/2" Back 2 1/2" Top 2 1/2" Bottom 2 1/2" Pitch of stays to ditto: Sides 9" x 8 7/8" Back 8 7/8" x 8 7/8"
 Top Girders If stays are fitted with nuts or riveted heads no Working pressure by rules 190 lbs Material of stays Steel Area at smallest part 203 sq in Area supported by each stay 70 sq in Working pressure by rules 23 lbs End plates in steam space: Material Steel Thickness 1 1/8"
 Pitch of stays 18" x 17" How are stays secured double nut Working pressure by rules 135 lbs Material of stays Steel Area at smallest part 5.78 sq in
 Area supported by each stay 306 sq in Working pressure by rules 195 lbs Material of Front plates at bottom Steel Thickness 1 3/16" Material of Lower back plate Steel Thickness 3/4" Greatest pitch of stays 14" x 8 7/8" Working pressure of plate by rules 208 lbs Diameter of tubes 3 1/2"
 Pitch of tubes 4 3/16" Material of tube plates Steel Thickness: Front 13/16" Back 13/16" Mean pitch of stays 10 1/2" Pitch across wide water spaces 11 1/2" Working pressures by rules with 5/8 double 216 lbs Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 8" x 3/4" x 2 Length as per rule 30 1/2" Distance apart 9" Number and pitch of Stays in each two at 9"
 Working pressure by rules 188 lbs Steam dome: description of joint to shell _____ % of strength of joint _____
 Diameter _____ Thickness of shell plates _____ Material _____ Description of longitudinal joint _____ Diam. of rivet holes _____
 Pitch of rivets _____ Working pressure of shell by rules _____ Crown plates _____ Thickness _____ How stayed _____

SUPERHEATER. Type _____ Date of Approval of Plan _____ Tested by Hydraulic Pressure to _____
 Date of Test _____ Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler _____
 Diameter of Safety Valve _____ Pressure to which each is adjusted _____ Is Easing Gear fitted _____

Survey request form No. 1691 attached The foregoing is a correct description, Lindsay Burnet & Co Manufacturer.

Dates of Survey } During progress of 1915 May 20 June 24 July 1-8 Aug 29 16-23-31 Sept 6-13-20-30 Is the approved plan of boiler forwarded herewith yes
 while building } Dec. 15-1916 Jan. 20-26 Feb. 1-7-21-28 Dec. 11-18-29 1917 Jan 8-26
 } During erection on board vessel --- Jan 6-12-21-22 May 4-25 June 4-9-25 July 3-9-27 Total No. of visits 38
 } Aug 2-9-13

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These boilers have been built under special survey in accordance with approved plan. The workmanship and material is of good quality & the boilers are in my opinion suitable for a working pressure of 180 lbs per sq. in. The boilers are being sent to Ardrossan.
These Boilers have now been satisfactorily fitted on board at Ardrossan

Survey Fee ... £ 8 : 8 : When applied for, 21-8- 1917
 Travelling Expenses (if any) £ : : When received, 22-8- 1917

Committee's Minute GLASGOW 28 AUG. 1917
 Assigned TRANSMIT TO LONDON See Glasgow Report No. 37572
 Peter W. Gregor, Engineer Surveyor to Lloyd's Register of Shipping.