

REPORT ON BOILERS.

No. 29314

WED. 21 SEP 1910

Received at London Office
 of writing Report 4. 8. to 10. When handed in at Local Office 12 SEP 1910 Port of Glasgow.
 in Survey held at Glasgow. Date, First Survey 16th March Last Survey 3rd Aug^t 1910
 Book. Boilers on the s/s "BRENTHAM." (Number of Visits 18) Gross 828.54 Tons Net 370.75
 Master A. Campbell. Built at Glasgow By whom built Thackie & Thomson (N^o 397) When built 1910.
 Engines made at Coatbridge By whom made W. V. V. Lidgerwood (N^o 339) when made 1910.
 Boilers made at Glasgow By whom made Lindsay Burnet & Co (N^o 1268) when made 1910.
 Registered Horse Power Owners Paton & Hendry Port belonging to Glasgow.

ULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel D. Colville & Sons.
 Matter for record S. Total Heating Surface of Boilers 2503^{ft} Is forced draft fitted ☒ No. and Description of
 Boilers One Single Ended Marine type Working Pressure 160 lb. Tested by hydraulic pressure to 320 lb. Date of test 3. 8. 10.
 of Certificate 10523 Can each boiler be worked separately ☒ Area of fire grate in each boiler 76^{ft} No. and Description of
 Safety valves to each boiler ☒ Area of each valve ☒ Pressure to which they are adjusted ☒
 Are they fitted with easing gear ☒ In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler ☒
 Smallest distance between boilers or uptakes and bunkers or woodwork ☒ Inside dia. of boilers 16'-0" Length 11'-0"
 Material of shell plates Steel Thickness 1⁵/₃₂" Range of tensile strength 28/32 tons Are the shell plates welded or flanged no
 Description of riveting: cir. seams D.R. long. seams T.R.B.S. Diameter of rivet holes in long. seams 1⁷/₃₂" Pitch of rivets 8⁷/₁₆"
 Width of butt straps 17³/₄" Per centages of strength of longitudinal joint rivets 87.6% Working pressure of shell by
 rules 181 lb. Size of manhole in shell 16" x 12" Size of compensating ring 5³/₄" flanged No. and Description of Furnaces in each
 boiler 4 Deighton Material steel Outside diameter 3'-7" Length of plain part top } 1' 1⁵/₈" Thickness of plates bottom } 1⁵/₃₂"
 Description of longitudinal joint welded No. of strengthening rings none Working pressure of furnace by the rules 161 lb. Combustion chamber
 Material steel Thickness: Sides 5⁷/₈" Back 19/32" Top 5⁷/₈" Bottom 5⁷/₈" Pitch of stays to ditto: Sides 8³/₄ x 8⁵/₈" Back 8³/₄ x 9³/₈"
 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 162 Material of stays steel area at
 smallest part 1.73^{sq} Area supported by each stay 75^{sq} Working pressure by rules 184 End plates in steam space: Material steel Thickness 1"
 Pitch of stays 18 x 16" How are stays secured on wash Working pressure by rules 217 Material of stays steel area at smallest part 4.77^{sq}
 Area supported by each stay 226^{sq} Working pressure by rules 219 Material of Front plates at bottom steel Thickness 2⁵/₃₂" Material of
 lower back plate steel Thickness 2⁵/₃₂" Greatest pitch of stays 1'-1⁵/₈" Working pressure of plate by rules 219 Diameter of tubes 3¹/₂"
 Pitch of tubes 4³/₄ x 4³/₄" Material of tube plates steel Thickness: Front 1" Back 3¹/₄" Mean pitch of stays 9¹/₂" Pitch across wide
 of spaces 13¹/₂" Working pressures by rules 196 lb. Girders to Chamber tops: Material steel Depth and thickness of
 girder at centre 9' x 1¹/₂" Length as per rule 35¹/₃₂" Distance apart 9" Number and pitch of Stays in each 3 @ 8⁷/₈"
 Working pressure by rules 160 lb. Superheater or Steam chest: how connected to boiler none Can the superheater be shut off and the boiler worked
 separately ☒ Diameter ☒ Length ☒ Thickness of shell plates ☒ Material ☒ Description of longitudinal joint ☒ Diam. of rivet
 Pitch of rivets ☒ Working pressure of shell by rules ☒ Diameter of flue ☒ Material of flue plates ☒ Thickness ☒
 Stays stiffened with rings ☒ Distance between rings ☒ Working pressure by rules ☒ End plates: Thickness ☒ How stayed ☒
 Working pressure of end plates ☒ Area of safety valves to superheater ☒ Are they fitted with easing gear ☒

Survey request form

No. attached

The foregoing is a correct description,
Lindsay Burnet & Co Manufacturer.

Dates During progress of 1910 Mar 16. 31. Apr: 7. 14. 20. 27 Is the approved plan of boiler forwarded herewith yes.
 Survey work in shops - - 29. May 4. 19. 30. June 7. 10. 17. 24. July
 while During erection on 4. 11. 30. Aug 3. Total No. of visits 18.
 building board vessel - - -

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) The workmanship & materials are good. The boiler has been built under special survey & will be fitted on board the vessel at Glasgow.

See machinery report

Survey Fee ... £ : : When applied for, 19.
 Travelling Expenses (if any) £ : : When received, 19.

A. H. Eilditch.
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute GLASGOW 20 SEP. 1910

Assigned See Machinery report.