

REPORT ON BOILERS.

No. 39577

WED. FEB. 4 - 1920

Received at London Office

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of writing Report 191 When handed in at Local Office 26.1. 1920 Port of Glasgow
 Survey held at Glasgow Date, First Survey 10th Sept 1919. Last Survey 20.1 1920
 of 7. Book. on the Boiler N° 468 for SS PENTLAND FIRTH (Number of Visits 8.) } Gross 638
 Tons } Net 296.
 T. Black Built at Ardrossan By whom built Ardrossan S.B. Coy Ltd When built 1919
 Lines made at Coatbridge By whom made Wm Beardmore & Co N° 543 When made 1919
 Port made at Paisley By whom made Fleming & Ferguson Ltd (468) When made 1919
 Horse Power Owners Gulliver Co Port belonging to Glasgow

WATER TUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Wm Beardmore & Co.

Number for record S Total Heating Surface of Boilers 1480 sq ft Is forced draft fitted No No. and Description of Boilers One single-ended Working Pressure 180 Tested by hydraulic pressure to 360 lbs Date of test 22/12/19
 Certificate 15143 Can each boiler be worked separately Yes Area of fire grate in each boiler 54.45 sq ft No. and Description of valves to each boiler 2 Spring loaded Area of each valve 5.94 sq ft Pressure to which they are adjusted 185
 Are they fitted with easing gear Yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler Yes
 Least distance between boilers or uptakes and bunkers or woodwork 24" Mean dia. of boilers 14'-0" Length 10' 6"
 Material of shell plates Steel Thickness 1 1/8" Range of tensile strength 28/32 Are the shell plates welded or flanged No
 Kind of riveting: cir. seams D.R. long. seams TR DBS Diameter of rivet holes in long. seams 1 3/16" Pitch of rivets 8 1/2"
 Diameter of plates or width of butt straps 18" Per centages of strength of longitudinal joint rivets 86.1 Working pressure of shell by plate 86
180 Size of manhole in shell 16" x 12" Size of compensating ring 33 x 29 x 1 1/8" No. and Description of Furnaces in each boiler 3 Plain Material Steel Outside diameter 3-4 9/16" Length of plain part 6'-6 7/32" Thickness of plates crown 2 5/32" bottom 1 3/32"
 Description of longitudinal joint Weld No. of strengthening rings 1 Working pressure of furnace by the rules 18 D Combustion chamber 11-8 Material Steel Thickness: Sides 4 3/64" Back 2 1/32" Top 4 3/64" Bottom 1" Pitch of stays to ditto: Sides 10 1/4" x 8 1/4" Back 9" x 8 3/4"
11-8 3/4" x 4 1/2" stays are fitted with nuts or riveted heads nuts Working pressure by rules 181 Material of stays Steel Area at smallest part 1.43 Area supported by each stay 43.28 Working pressure by rules 188 End plates in steam space: Material Steel Thickness 1 7/32"
20 of stays 19 x 19 1/4" How are stays secured D Nuts Working pressure by rules 182 Material of stays Steel Area at smallest part 4.2 Area supported by each stay 365 Working pressure by rules 206 Material of Front plates at bottom Steel Thickness 1 5/16" Material of back plate Steel Thickness 1 3/16" Greatest pitch of stays 13 1/4" Working pressure of plate by rules 181 Diameter of tubes 3 1/2"
20 of tubes 4 3/4" x 4 5/8" Material of tube plates Steel Thickness: Front 1 5/16" Back 2 1/32" Mean pitch of stays 11 1/16" Pitch across wide spaces 14 1/2" Working pressures by rules 184 & 182 Girders to Chamber tops: Material Steel Depth and thickness of at centre 8 3/4" x 7/8" D Length as per rule 30 1/2" Distance apart 10 3/4" Number and pitch of Stays in each 3 @ 4 1/2"
 Working pressure by rules 189 Superheater or Steam chest; how connected to boiler none Can the superheater be shut off and the boiler worked Yes

Manufacturer's Certificate: The foregoing is a correct description, For Fleming & Ferguson Ltd. G. Dunlop, Manufacturer.

During progress of work in shops: 1919. Sept 10. 23. Oct 3. 14. 22. Nov 6. 13. Dec 22. Is the approved plan of boiler forwarded herewith Yes
 During erection on board vessel: Yes Total No. of visits 8

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built under special survey in accordance with the approved plans and the workmanship and material are of good quality. This boiler has been completely fitted on board and this report accompanies that of the machinery.

Survey Fee ... £ Charge When applied for, 191...
 Selling Expenses (if any) £ Charge When received, 191...

Committee's Minute See accompanying machinery report
 David C Barr, Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

GLASGOW 3-FEB-1920
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