

REPORT ON BOILERS.

No. 40970
WED. MAR. 23 1921

Received at London Office

Port of Glasgow
 Date, First Survey 18. 2. 1920 Last Survey 16. 3. 1921
 (Number of Visits 16) Gross 641.48 Tons
 Net 265.67
 Survey held at Glasgow
 on the Marine Boilers nos 175/179 of Esconite
 Built at Glasgow By whom built Yarrow Co No 1460 When built 1921
 Engines made at Glasgow By whom made Yarrow Co No 1460 When made 1921
 Boilers made at Glasgow By whom made Forth Shipbuilding Eng Co Ltd When made 1921
 Owners William Robertson Port belonging to Glasgow
 Registered Horse Power _____

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Glasgow 186 Spence & Co
 Letter for record S. Total Heating Surface of Boilers 2140 Sq ft Is forced draft fitted no No. and Description of Boilers 1 No Single Ended

No. of Certificate 15748 Working Pressure 180 Tested by hydraulic pressure to 360 Date of test 16/3/21
 Can each boiler be worked separately yes Area of fire grate in each boiler 33.7 sq ft No. and Description of safety valves to each boiler Double Spring Loaded Area of each valve 3.976 sq in Pressure to which they are adjusted 185 lb/sq in

Are they fitted with easing gear yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 4'-0" Mean dia. of boilers 11'-0" Length 10'-0"
 Material of shell plates Steel Thickness 2 1/2 Range of tensile strength 25/32 Are the shell plates welded or flanged no

Descrip. of riveting: cir. seams Lap. DR long seams DBS. Rip Riv Diameter of rivet holes in long seams 1" Pitch of rivets 7 1/16
 width of butt straps 15" Per centages of strength of longitudinal joint 86.6 Working pressure of shell by rules 189 Size of manhole in shell 16" x 12" Size of compensating ring 2'-7 1/2" x 2'-3" x 2 1/2" No. and Description of Furnaces in each boiler Two Corrugated Material Steel Outside diameter 40 ins Length of plain part 10 1/2 Thickness of plates 1 1/2 crown 1 1/2 bottom 1 1/2

Description of longitudinal joint held No. of strengthening rings yes Working pressure of furnace by the rules 189 Combustion chamber plates: Material Steel Thickness: Sides 1 1/2 Back 5/8 Top 1 1/2 Bottom 2 1/2 Pitch of stays to ditto: Sides 8" x 8" Back 9" x 8"
 Top 8" x 8" If stays are fitted with nuts or riveted heads tubs Working pressure by rules 185 Material of stays Steel Area at smallest part 1750 Area supported by each stay 30 Working pressure by rules 190 End plates in steam space: Material Steel Thickness 1 1/2

Pitch of stays 15" x 1 1/2" How are stays secured Stub Working pressure by rules 190 Material of stays Steel Area at smallest part 3.850
 Area supported by each stay 2150 Working pressure by rules 185 Material of Front plates at bottom Steel Thickness 1 3/16 Material of Lower back plate Steel Thickness 7/8 Greatest pitch of stays 1 1/2" x 8" Working pressure of plate by rules 160 Diameter of tubes 3 1/2

Pitch of tubes 4 1/8" x 1 1/4" Material of tube plates Steel Thickness: Front 13/16 Back 2 1/2 Mean pitch of stays 11" Pitch across wide water spaces 1 1/2" Working pressures by rules with boiler 216 Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 6 3/4" x 3/4" x 2" Length as per rule 28 ins Distance apart 8" Number and pitch of Stays in each two at 8"

Working pressure by rules 200 Steam dome: description of joint to shell none % 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 _____
 Tested by Hydraulic Pressure to _____

UPERHEATER. Type none Date of Approval of Plan _____
 Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler _____
 Date of Test _____ Is Easing Gear fitted _____
 Diameter of Safety Valve _____ Pressure to which each is adjusted _____

The foregoing is a correct description,
 FOR THE FORTH SHIPBUILDING & ENGINEERING CO. L.
 (LINDSAY BURNET'S BOILER WORKS) Signature Manufacturer.

Is the approved plan of boiler forwarded herewith yes.
 Total No. of visits 16
 Dates of Survey while building: During progress of work in shops - 1920 Feb 18, May 12, Jun 9, Aug 11, 25, Sep 28, Oct 13, Nov 9
 During erection on board vessel - 1921 Jan 9, Feb 9, 19, 23, Mar 2, 9, 16

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

15/11/21 These boilers have been well fitted and secured on board, and the safety valves adjusted under steam as above. (See also G.S. rpt. 41517) S. J. Dorey.
 Survey Fee ... £ 14: 6 : : When applied for, 22/3/21
 Travelling Expenses (if any) £ : : When received, 9/6/21

Committee's Minute GLASGOW, 22 MAR 1921
 Assigned TRANSMIT TO LONDON

Signature
 Engineer Surveyor to Lloyd's Register of Shipping.
 GLASGOW 22 NOV 1921
 See G.S. Rpt. 41517

