

Rpt. 5a.

REPORT ON BOILERS.

No. 38681.
WED. 30 APR. 1919

Received at London Office

Date of writing Report 101 When handed in at Local Office 101 Port of Glasgow
 No. in Survey held at Glasgow Date, First Survey 27th July 1916 Last Survey 18th April 1919
 Reg. Book. on the Donkey Boilers S.S. CLAN MATHESON (Number of Visits 40) } Gross Tons }
 Master Built at PT Glasgow By whom built W Hamilton & Co Ltd When built 1919
 Engines made at Glasgow By whom made W Rowan & Co Ltd When made 1919
 Boilers made at do By whom made do When made 1919
 Registered Horse Power Owners Cayzer & Co Port belonging to Glasgow

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Messrs Stewart & Lloyd Ltd

(Letter for record S) Total Heating Surface of Boilers 1335 ft² Is forced draft fitted No No. and Description of

Boilers one Single ended Working Pressure 100 lb Tested by hydraulic pressure to 200 lb Date of test 13.2.19

No. of Certificate 14617 Can each boiler be worked separately — Area of fire grate in each boiler 29.5 ft² No. and Description of

safety valves to each boiler 2 Spring loaded Area of each valve 4.9 in² Pressure to which they are adjusted 105 lb

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 12 in Mean dia. of boilers 12.0 Length 9.0

Material of shell plates Steel Thickness 3/4 Range of tensile strength 28/32 tons Are the shell plates welded or flanged No

Descrip. of riveting: cir. seams do Lap long. seams Table Lap Diameter of rivet holes in long. seams 15/16 Pitch of rivets 3.2

Lap of plates or width of butt straps 6 1/2 Per centages of strength of longitudinal joint rivets 73.4 Working pressure of shell by

rules 100 Size of manhole in shell 16x12 Size of compensating ring 26 1/2 x 30 1/2 x 7/8 plate 70.6 No. and Description of Furnaces in each

boiler 2 Plain Material Steel Outside diameter 40 9/16 Length of plain part 5.6 1/2 Thickness of plates 17/32

Description of longitudinal joint weld No. of strengthening rings 1 Working pressure of furnace by the rules 101 Combustion chamber

plates: Material Steel Thickness: Sides 9/16 Back 9/16 Top 9/16 Bottom 9/16 Pitch of stays to ditto: Sides 8 1/2 x 12 Back 9 x 10 1/2

Top 12 x 8 1/2 If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 101 Material of stays Steel Diameter at

smallest part 1.22 Area supported by each stay 96 in² Working pressure by rules 101 End plates in steam space: Material Steel Thickness 1

Pitch of stays 26 x 14 1/2 How are stays secured 2 nuts Working pressure by rules 103 Material of stays Steel Diameter at smallest part 3.97

Area supported by each stay 376 in² Working pressure by rules 110 Material of Front plates at bottom Steel Thickness 3/4 Material of

Lower back plate Steel Thickness 5/8 Greatest pitch of stays 13 Working pressure of plate by rules 108 Diameter of tubes 3 1/4

Pitch of tubes 4 3/8 x 4 1/2 Material of tube plates Steel Thickness: Front 3/4 Back 5/8 Mean pitch of stays 11 1/8 Pitch across wide

water spaces 14 1/4 Working pressures by rules 100 Girders to Chamber tops: Material Steel Depth and thickness of

girder at centre 6 3/4 x (5/8) Length as per rule 26 1/8 Distance apart 12 Number and pitch of Stays in each Two 8 1/2

Working pressure by rules 100 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

holes Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness

If 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

The foregoing is a correct description,

David Rowan & Co Ltd Manufacturer.

Dates of Survey } During progress of } 1916. July 27, 1917, May 15, June 19, 1918, Oct 10, June 5, Sept 12. Is the approved plan of boiler forwarded herewith Yes
 work in shops - - } 11.14, 20.24, Oct 1, 4, 16, 14, 28, 22, 29 Dec 3, 11, 19, 24, 26.
 while building } During erection on } 1919. Jan 8, 16, 14, 22, Feb 6, 11, 13, 14, 18, 20, Mar 3, 7, 22, 25, Apr 14, 18, 18. Total No. of visits 40
 board vessel - - }

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built under Special Survey & satisfactorily fitted on board, material and workmanship are good.

Survey Fee £ : : } When applied for, 101
 Travelling Expenses (if any) £ : : } When received, 101

E. A. Easthope 2020
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 29 APR 1919

Assigned See accompanying machinery report

