

## REPORT ON BOILERS.

No. 17236.

Received at London Office

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Date of writing Report 31<sup>st</sup> Dec 1917 When handed in at Local Office 3<sup>rd</sup> Jan. 1918, Port of Greenock  
 No. in Survey held at Greenock Date, First Survey 30<sup>th</sup> Nov. 1915; Last Survey 21<sup>st</sup> Jan 1918.  
 Reg. Book. (Number of Visits 114.) Gross Tons }  
 6055 on the Steel Steamer Sheridan Net }  
 Master Built at Dundee By whom built A. McMillan & Co When built 1917  
 Engines made at Greenock By whom made Hankin & Blackmore Ltd When made 1917  
 Boilers made at Greenock By whom made Hankin & Blackmore Ltd When made 1917  
 Registered Horse Power Owners The Royal & Scottish L & Co. (Limited) Port belonging to Liverpool

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Academy(Letter for record S) Total Heating Surface of Boilers 14783 sq ft Is forced draft fitted Yes No. and Description ofBoilers One single ended Working Pressure 170 lb Tested by hydraulic pressure to 240 lb Date of test 4/9/17No. of Certificate 1304 Can each boiler be worked separately Yes Area of fire grate in each boiler 194 sq ft No. and Description ofsafety valves to each boiler Two spring Area of each valve 7.07 sq in Pressure to which they are adjusted 125 lbAre they fitted with easing gear Yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler YesSmallest distance between boilers or uptakes and bunkers or woodwork 18 in Ext Mean dia. of boilers 12' 6" Length 10' 6"Material of shell plates Steel Thickness 1 1/2 in Range of tensile strength 28/32 Are the shell plates welded or flanged YesDescrip. of riveting: cir. seams Yes long. seams all with steel Diameter of rivet holes in long. seams 1 in Pitch of rivets 5 1/2 inLap of plates or width of butt straps 10 1/2 in Per centages of strength of longitudinal joint rivets 84.96 Working pressure of shell by plate 81.81rules 121 lb Size of manhole in shell 16 in Size of compensating ring 30 in No. and Description of Furnaces in eachboiler Two Material Steel Outside diameter 44 7/8 in Length of plain part 6.0 Thickness of plates 2 1/2 inDescription of longitudinal joint butt No. of strengthening rings Yes Working pressure of furnace by the rules 143 lb Combustion chamberplates: Material Steel Thickness: Sides 9/16 in Back 5/16 in Top 9/16 in Bottom 1 1/4 in Pitch of stays to ditto: Sides 9 1/4 in Back 9 1/4 inTop 9 1/4 in If stays are fitted with nuts or riveted heads Yes Working pressure by rules 123 lb Material of stays Steel Area atsmallest part 1227 sq in Area supported by each stay 78 sq in Working pressure by rules 126 lb End plates in steam space: Material Steel Thickness 1 3/4 inPitch of stays 18 in How are stays secured all nut Working pressure by rules 158 lb Material of stays Steel Area at smallest part 3.85 sq inArea supported by each stay 310 sq in Working pressure by rules 129 lb Material of Front plates at bottom Steel Thickness 4 5/16 in Material ofLower back plate Steel Thickness 1 1/2 in Greatest pitch of stays 14 in Working pressure of plate by rules 126 lb Diameter of tubes 3 1/4 inPitch of tubes 4 4/8 in Material of tube plates Steel Thickness: Front 4 5/16 in Back 4 5/16 in Mean pitch of stays 13 1/8 in Pitch across widewater spaces 1 1/2 in Working pressures by rules 212 lb Girders to Chamber tops: Material Steel Depth and thickness ofgirder at centre 8 1/2 in Length as per rule 3 1/4 in Distance apart 9 1/2 in Number and pitch of Stays in each Three 8 inWorking pressure by rules 124 lb Steam dome: description of joint to shell Yes % of strength of jointDiameter 18 in Thickness of shell plates 1 1/2 in Material Steel Description of longitudinal joint butt Diam. of rivet holes 1 inPitch of rivets 5 1/2 in Working pressure of shell by rules 81.81 Crown plates Yes Thickness 1 1/2 in How stayed YesSUPERHEATER. Type Horizontal Date of Approval of Plan 1917 Tested by Hydraulic Pressure to 240 lbDate of Test 1917 Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler YesDiameter of Safety Valve 1 1/2 in Pressure to which each is adjusted 125 lb Is Easing Gear fitted Yes

The foregoing is a correct description,

HANKIN &amp; BLACKMORE, LTD.

Manufacturer.

H. J. Jones

Director.

Dates of Survey { During progress of work in shops - - - } (1<sup>st</sup> Entry - Machinery) Is the approved plan of boiler forwarded herewith Yes{ while building } { During erection on board vessel - - - } Total No. of visits 114GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) Workmanship good.

This boiler has been constructed under special survey in accordance with the approved Plans. Tested by hydraulic pressure and efficiently fitted on board the above named steamer in Eltham.

Survey Fee ... £ 100 : : When applied for, 1917  
 Travelling Expenses (if any) £ 10 : : When received, 1917

Committee's Minute GLASGOW. 22 JAN 1918Assigned See accompanying machinery report.

James Jones  
 Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register  
 Foundation  
 004579-004590-0260