

REPORT ON BOILERS

No. 17236.

Received at London Office

WED. 23. JAN. 1918

Date of writing Report *31 Dec 1917* When handed in at Local Office *3rd Jan, 1918*, Port of *Greenock*
 No. in Survey held at *Greenock* Date, First Survey *30th Nov, 1915*; Last Survey *2 Jan 1918*.
 Reg. Book. *6055* on the *Steel Steamer Sheridan* (Number of Visits *114*.) Gross Tons }
 Net Tons }
 Master Built at *Dumfries* 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 *In Royal & State & Co. (Lancaster & Co)* Port belonging to *Liverpool*

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel *Beardmore*

(Letter for record *S*) Total Heating Surface of Boilers *14783 sq ft* Is forced draft fitted *No* No. and Description of Boilers *One Single Ended* Working Pressure *170 lb* Tested by hydraulic pressure to *240 lb* Date of test *4/9/17*

No. of Certificate *1304* Can each boiler be worked separately *No* Area of fire grate in each boiler *194 sq ft* No. and Description of safety valves to each boiler *Two Spring* Area of each valve *7.07 sq in* Pressure to which they are adjusted *125 lb*

Are they fitted with easing gear *No* 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 *18 in* ^{EYE} Mean dia. of boilers *12.6 in* Length *10.6 in*

Material of shell plates *Steel* Thickness *12/16 in* Range of tensile strength *28/32* Are the shell plates welded or flanged *No*

Descrip. of riveting: cir. seams *No* long. seams *All with steel* Diameter of rivet holes in long. seams *1 in* Pitch of rivets *5 1/2 in*

Lap 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 *81.81*

rules *12 lb* Size of manhole in shell *16 in dia* Size of compensating ring *30 in dia* No. and Description of Furnaces in each boiler *Two* Material *Steel* Outside diameter *44 in* Length of plain part ^{top} *6.0 in* Thickness of plates ^{bottom} *2 1/2 in*

Description of longitudinal joint *Butt* No. of strengthening rings *Two* Working pressure of furnace by the rules *143 lb* Combustion chamber plates: Material *Steel* Thickness: Sides *9/16 in* Back *5/16 in* Top *9/16 in* Bottom *1/4 in* Pitch of stays to ditto: Sides *9 1/4 in* Back *9 1/4 in*

Top *9 1/4 in* If stays are fitted with nuts or riveted heads *No* Working pressure by rules *123 lb* Material of stays *Steel* Area at smallest part *1227 sq in* Area supported by each stay *780 sq in* Working pressure by rules *126 lb* End plates in steam space: Material *Steel* Thickness *1 1/2 in*

Pitch of stays *18 in* How are stays secured *All nut* Working pressure by rules *158 lb* Material of stays *Steel* Area at smallest part *3850 sq in*

Area supported by each stay *3100 sq in* Working pressure by rules *129 lb* Material of Front plates at bottom *Steel* Thickness *4 5/16 in* Material of Lower back plate *Steel* Thickness *1 1/16 in* Greatest pitch of stays *14 in* Working pressure of plate by rules *126 lb* Diameter of tubes *3 1/2 in*

Pitch of tubes *4 1/2 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 wide water spaces *14 in* Working pressures by rules *212 lb* Girders to Chamber tops: Material *Steel* Depth and thickness of girder at centre *8 1/2 in x 1 1/2 in* Length as per rule *32 1/4 in* Distance apart *9 1/2 in* Number and pitch of Stays in each *Three 8 in*

Working pressure by rules *124 lb* Steam dome: description of joint to shell _____ % 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 _____

SUPERHEATER. Type _____ Date of Approval of Plan _____ Tested by Hydraulic Pressure to _____

Date of Test _____ Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler _____

Diameter of Safety Valve _____ Pressure to which each is adjusted _____ Is Easing Gear fitted _____

The foregoing is a correct description,
HANKIN & BLACKMORE, LTD. Manufacturer.
H. J. Jones Director.

Dates of Survey } During progress of } *(1st Entry - Machinery)* Is the approved plan of boiler forwarded herewith *Yes*
while building } work in shops - - }
} During erection on }
} board vessel - - - }

Total No. of visits _____

GENERAL 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 ... £ _____ : : When applied for, 191
Travelling Expenses (if any) £ _____ : : When received, 191

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

Committee's Minute **GLASGOW. 22 JAN 1918**

Assigned *See accompanying machinery report.*