

REPORT ON BOILERS.

No. 17326

Received at London Office

WED. JUL. 10. 1918

Date of writing Report 25 June 1918 When handed in at Local Office 1 July 1918 Port of Greenock

No. in Survey held at Greenock Date, First Survey 2nd October, 1916; Last Survey 5 July 1918.

Reg. Book. on the Steel Steamer "Argowan" (Number of Visits) Gross 5334.24 Tons Net 3415.02

Master Built at St Helens By whom built W Hamilton & Co When built 1918

Engines made at Greenock By whom made John G. Kincaid & Co, Ltd. when made 1918

Boilers made at Greenock By whom made John G. Kincaid & Co Ltd when made 1918

Registered Horse Power Owners Ard Steamers Ltd. Port belonging to Greenock

MULTITUBULAR BOILERS - MAIN, AUXILIARY OR DONKEY. - Manufacturers of Steel Glasgow Iron & Steel Co Ltd

(Letter for record Q) Total Heating Surface of Boilers 563 sq ft Is forced draft fitted Yes No. and Description of Boilers one single ended Working Pressure 100 lb Tested by hydraulic pressure to 200 lb Date of test 30/5/18

No. of Certificate 1348 Can each boiler be worked separately Yes Area of fire grate in each boiler 10.7 sq ft No. and Description of safety valves to each boiler Two opening Area of each valve 5.94 sq in 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 Yes

Smallest distance between boilers or uptakes and bunkers or woodwork None diam. of boilers 10.6 Length 9.6

Material of shell plates Steel Thickness 10/16 Range of tensile strength 28-32 Are the shell plates welded or flanged Yes

Descrip. of riveting: cir. seams Yes long. seams Lap steel riv Diameter of rivet holes in long. seams 15/16 Pitch of rivets 4 1/2

Lap of plates or width of butt straps 6 3/8 Per centages of strength of longitudinal joint rivets 83.4 Working pressure of shell by rules 103 lb Size of manhole in shell 16 x 12 Size of compensating ring Flanged 1 1/16 No. and Description of Furnaces in each boiler Two plain Material Steel Outside diameter 18 Length of plain part 70 3/16 Thickness of plates 17/32

Description of longitudinal joint Butted No. of strengthening rings Yes Working pressure of furnace by the rules 115 lb Combustion chamber plates: Material Steel Thickness: Sides 17/32 Back 17/32 Top 17/32 Bottom 14/16 Pitch of stays to ditto: Sides 10 1/4 x 7 1/2 Back 9 1/2 x 9

Top 10 1/4 x 7 1/2 If stays are fitted with nuts or riveted heads None Working pressure by rules 100 lb Material of stays Steel Diameter at smallest part 1.01 Area supported by each stay 80.6 Working pressure by rules 100 lb End plates in steam space: Material Steel Thickness 27/32

Pitch of stays 2 1/2 x 1 1/2 How are stays secured None Working pressure by rules 100 lb Material of stays Steel Diameter at smallest part 5.77

Area supported by each stay 1950 Working pressure by rules 109 lb Material of Front plates at bottom Steel Thickness 27/32 Material of Lower back plate Steel Thickness 27/32 Greatest pitch of stays 14 Working pressure of plate by rules 177 lb Diameter of tubes 3 1/4

Pitch of tubes 4 1/2 Material of tube plates Steel Thickness: Front 27/32 Back 1 1/16 Mean pitch of stays 13 1/2 x 9 Pitch across wide water spaces 14 Working pressures by rules 111 lb Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 6 1/4 x 1 1/4 Length as per rule 27 1/4 Distance apart 10 1/4 Number and pitch of Stays in each Two 7 1/2

Working pressure by rules 100 lb Superheater or Steam chest; how connected to boiler None Can the superheater be shut off and the boiler worked separately Yes Diameter None Length None Thickness of shell plates None Material None Description of longitudinal joint None Diam. of rivet holes None Pitch of rivets None Working pressure of shell by rules None Diameter of flue None Material of flue plates None Thickness None

If stiffened with rings None Distance between rings None Working pressure by rules None End plates: Thickness None How stayed None

Working pressure of end plates None Area of safety valves to superheater None Are they fitted with easing gear None

The foregoing is a correct description,
FOR JOHN G. KINCAID & CO., LIMITED.
Robert Green. Manufacturer.

Dates of Survey: During progress of work in shops (1916) Oct. 2, Nov. 10, 17, (1917) Jan. 7, 16, 30, Feb. 16, Mar. 9, 12, 15, Apr. 24, May 24, Aug. 28, 30, Oct. 17, 26, 29, 30, Dec. 13, 17, (1918) Jan. 21, Feb. 20, 22, Mar. 6, 8, 13, 18, 20, 21, 26, 28, Apr. 2, 3, 5, 11, 15, 19, 23, 26, May 1. While building: During erection on board vessel 2, 5, 7, 9, 17, 23, 29, 30, June 3, 5, 7, 11, 12, 18. Total No. of visits 55

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) Workmanship good.

This Donkey Boiler has been constructed under special survey in accordance with the approved Rules of the Board. Tested by hydraulic pressure and found good. It has now been apparently fitted on board the above named Steamer.

Survey Fee ... £ : When applied for. 19.
Travelling Expenses (if any) £ : When received. 19.

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

Committee's Minute GLASGOW. 9 JUL 1918

Assigned See attached machinery report

