

REPORT ON BOILERS.

No. 7359
MON. APR. 20. 1914

Registered at London Office

Date of writing Report 15th April 14 When handed in at Local Office 19 Port of Belfast

No. in Survey held at Belfast Date, First Survey 5 Feb^r 1913 Last Survey 8 April 1914

Reg. Book. on the S.S. Star of England (Number of Visits 105) Gross 9136 Tons Net 5834

Master Built at Belfast By whom built Workman Clark & Co. Ltd. When built 1914

Engines made at Belfast By whom made - when made -

Boilers made at - By whom made - when made -

Registered Horse Power - Owner Commonwealth Dominion Port belonging to London

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

(Letter for record S) Total Heating Surface of Boilers 3026 sq ft Is forced draft fitted Yes No. and Description of Boilers 1 Single End Cylind^r Working Pressure 200 lbs Tested by hydraulic pressure to 400 lbs Date of test 21-1-14

No. of Certificate 460 Can each boiler be worked separately ✓ Area of fire grate in each boiler 73½ sq ft No. and Description of safety valves to each boiler 2- Direct Spring Area of each valve 11'04 sq" Pressure to which they are adjusted 200 lbs

Are they fitted with easing gear Yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler ✓

Smallest distance between boilers or uptakes and bunkers or woodwork about 30" Mean dia. of boilers 16'-3" Length 11'-10"

Material of shell plates Steel Thickness 1/8" Range of tensile strength 40-33½ Are the shell plates welded or flanged No

Descrip. of riveting: cir. seams Lap D. & T. long. seams D. Butt Seams Diameter of rivet holes in long. seams 1/8" Pitch of rivets 10"

Top of plates or width of butt straps 23 7/8" Per centages of strength of longitudinal joint rivets 91.9 plate 84.8 Working pressure of shell by rules 233 lbs

Size of manhole in shell 16" x 12" Size of compensating ring 12" No. and Description of Furnaces in each boiler 4-Morrison's Material Steel Outside diameter 45 1/2" Length of plain part top ✓ bottom ✓ Thickness of plates crown 3 1/4" bottom 3 1/4"

Description of longitudinal joint Weld No. of strengthening rings ✓ Working pressure of furnace by the rules 229 lbs Combustion chamber plates: Material Steel Thickness: Sides 3/32" Back 43-64-64" Top 3/32" Bottom 3/32" Pitch of stays to ditto: Sides 8 1/4" x 8 1/4" Back Various

Top 8 1/2" x 7 1/2" stays are fitted with nuts or riveted heads Nuts Working pressure by rules 201 lbs Material of stays Steel Diameter at smallest part 1 1/2" Area supported by each stay Various Working pressure by rules 225 lbs plates in steam space: Material Steel Thickness 1/8"

Pitch of stays 4 1/2" x 15 1/2" How are stays secured Nuts & Washers Working pressure by rules 203 lbs Material of stay Steel Diameter at smallest part 2 1/2" x 3 1/2"

Area supported by each stay 321 sq ft Working pressure by rules 235 lbs Material of Front plates at bottom Steel Thickness 1" Material of Lower back plate Steel Thickness 1/4" Greatest pitch of stays 15 1/4" Working pressure of plate by rules 227 lbs Diameter of tubes 2 1/2"

Pitch of tubes 3 1/2" x 3 5/8" Material of tube plate Steel Thickness: Front 1/8" Back 1/16" Mean pitch of stays 7 1/2" x 7 1/4" Pitch across wide water spaces 13 1/2"

Working pressures by rules 206 lbs Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 9 1/8" x (7 1/2" x 2) Length as per rule 34" Distance apart 8 1/2" Number and pitch of Stays in each 3-7 1/2"

Working pressure by rules 207 lbs Superheater or Steam chest: how connected to boiler 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, FOR WORKMAN, CLARK & CO., LIMITED.

W. H. Bell Manufacturer.

Dates of Survey: During progress of work in shops - - - while building: During erection on board vessel - - -

See other sheet

Is the approved plan of boiler forwarded herewith No - Sent with plans of S.S. Star of Victoria Total No. of visits

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

See other sheet

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

R. J. Beveridge
Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute TUE. APR. 21. 1914

Assigned



W412-0261

W412-0262

List of Donkey Pumps

- | | | |
|---|-------------|---------------------|
| 1 | Balast | 10" x 12" x 12" |
| 2 | Weir Feed | 13 1/2" x 10" x 26" |
| 1 | General | 9" x 6" x 10" ✓ |
| 1 | Sanitary | 6" x 4" x 8" |
| 2 | Fresh Water | 5" x 5" x 8" |

List of Spare Gear

- | | |
|----|---|
| 1 | Propeller shaft complete |
| 4 | Propeller blades |
| 50 | Main Condenser tubes |
| 2 | Pair crank pin bushes |
| 2 | Crosshead |
| 1 | Air Pump bucket |
| 2 | Rods |
| 4 | Slide Valve spindle |
| 2 | Sets H. P. piston rings + springs |
| 1 | Set I. P. + L. P. piston rings |
| 2 | - rings + 1 set springs H. P. piston valves |
| 1 | Centrifugal Pump impeller + spindle |
| 30 | Boiler Tubes |
| 1 | Combination Breakdown coupling |
| | and all gear to Lloyd's Rules ✓ |

