

REPORT ON BOILERS.

No. 9015

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Date of writing Report 191 When handed in at Local Office 191 Port of Belfast

No. in Survey held at Belfast Date, First Survey Last Survey 191

Reg. Book. 21124 on the Thm 5/5 "GRAPHIC" (Number of Visits) Gross 1871 Tons Net 865

Master ✓ Built at Belfast By whom built Harland & Wolff When built 1906

Engines made at Belfast By whom made Harland & Wolff, Ltd. When made 1906

Boilers made at " By whom made " When made 1923

Registered Horse Power 552 Owners Belfast S.S. Co. Ltd. Port belonging to Belfast

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY. Manufacturers of Steel O. Colville & Sons

(Letter for record S.) Total Heating Surface of Boilers 4836 sq. ft. Is forced draft fitted Yes No. and Description of Boilers 1 - double ended Multitubular Working Pressure 215 Tested by hydraulic pressure to 373 Date of test 13/9/23

No. of Certificate ✓ Can each boiler be worked separately Yes Area of fire grate in each boiler oil fuel No. and Description of safety valves to each boiler 3 - direct spring Area of each valve 9.620" Pressure to which they are adjusted 220

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 27" Mean dia. of boilers 15'-8" Length 19'-10 3/4"

Material of shell plates Steel Thickness 1 1/2" Range of tensile strength 80/34 Are the shell plates welded or flanged No

Descrip. of riveting: cir. seams straddle long. seams O. & H. T. seam Diameter of rivet holes in long. seams 1 5/8" Pitch of rivets 10 1/2"

width of butt straps 1'-1 1/4" Per centages of strength of longitudinal joint rivets 94.6 plate 84.5 Working pressure of shell by rules 215.82 Size of manhole in shell 16" x 12" Size of compensating ring 36" x 32" No. and Description of Furnaces in each boiler 6 - conyated Material Steel Outside diameter 4'-2 3/16" Length of plain part top 3" bottom 8" Thickness of plates crown 2" bottom 3/32"

Description of longitudinal joint ✓ No. of strengthening rings ✓ Working pressure of furnace by the rules 220-24 Combustion chamber plates: Material Steel Thickness: Sides 3/32" Back ✓ Top 3/32" Bottom ring 3/4" Pitch of stays to ditto: Sides 7 3/4" x 8 1/4" Back ✓

Top 8" x 8" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 234.4 Material of stays Steel Diameter at smallest part 1.76" Area supported by each stay 64" Working pressure by rules 237.7 End plates in steam space: Material Steel Thickness 1 1/8"

Pitch of stays 16 1/4" x 16 3/4" How are stays secured secured through washers on outside Working pressure by rules 250 Material of stays Steel Diameter at smallest part 7.07"

Area supported by each stay 272" Working pressure by rules 289 Material of Front plates at bottom Steel Thickness 7/8" Material of Lower back plate ✓ Thickness ✓ Greatest pitch of stays ✓ Working pressure of plate by rules ✓ Diameter of tubes 2 3/4"

Pitch of tubes 4" x 4" Material of tube plates Steel Thickness: Front 7/8" Back 1 1/16" Mean pitch of stays 8" x 8" Pitch across wide water spaces 14" Working pressures by rules 266.7 Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 10" x 7 1/8" x 2" Length as per rule 2'-8" Distance apart 8" Number and pitch of Stays in each 6-8"

Working pressure by rules 342.6 Superheater or Steam chest not 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

For HARLAND & WOLFF Ltd. The foregoing is a correct description, F. Lebeck Manufacturer.

Dates of Survey } During progress of work in shops - - } Is the approved plan of boiler forwarded herewith Yes ✓
 while building } During erection on board vessel - - }
 Total No. of visits

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)
The material & workmanship of this boiler, so far as could be seen, is good.

Survey Fee ... £ : : When applied for, 191
 Travelling Expenses (if any) £ : : When received, 191

H. P. Southwell
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute FRI. JAN. 4 1924
 Assigned

