

REPORT ON BOILERS

No. 9015
MUN. D.F.C. 10 1923

Received at London Office

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. 2/124 on the Trin S/S "GRAPHIC" (Number of Visits) Gross Tons Net

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

Engines made at Belfast By whom made Harland & Wolff 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 J. Colville & Son

(Letter for record 5) Total Heating Surface of Boilers 5086 sq. ft. forced draft fitted yes No. and Description of Boilers 2-Single 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 2-direct spring Area of each valve 7.07 sq. in. Pressure to which they are adjusted 220 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 4'-9" Mean dia. of boilers 15'-9 1/2" Length 11'-9 7/8"

Material of shell plates Steel Thickness 1/2" Range of tensile strength 30/34 Are the shell plates welded or flanged No.

Descrip. of riveting: cir. seams Lap. dble. long. seams dble. butt. tests Diameter of rivet holes in long. seams 1 5/8" Pitch of rivets 10 1/4"

Lap of plates or width of butt straps 1-11 3/4" Per centages of strength of longitudinal joint rivets 97 plate 84-14 Working pressure of shell by rules 224.5 Size of manhole in shell 16" x 12" Size of compensating ring 36" x 32" No. and Description of Furnaces in each boiler 3-corrugated Material Steel Outside diameter 4'2 3/8" Length of plain part top 8" bottom 8" Thickness of plates crown 2 1/2" bottom 3 1/2"

Description of longitudinal joint No. of strengthening rings 4 Working pressure of furnace by the rules 220.2 Combustion chamber plates: Material Steel Thickness: Sides 3/32" Back 2/32" Top 2/32" Bottom 3/32" Pitch of stays to ditto: Sides 7 1/2" x 8" Back 8" x 8"

Top 8" x 8" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 234 Material of stays Steel Diameter at smallest part 1.76" Area supported by each stay 64 sq. in. Working pressure by rules 237 End plates in steam space: Material Steel Thickness 7/8"

Pitch of stays 6 1/4" x 6 1/4" How are stays secured scrued through Working pressure by rules 250 Material of stays Steel Diameter at smallest part 7/8"

Area supported by each stay 272 sq. in. Working pressure by rules 289 Material of Front plates at bottom Steel Thickness 7/8" Material of Lower back plate Steel Thickness 7/8" Greatest pitch of stays 8" x 8" Working pressure of plate by rules 489 Diameter of tubes 2 3/4"

Pitch of tubes 4" x 4" Material of tube plates Steel Thickness: Front 7/8" Back 1 3/16" Mean pitch of stays 8" x 8" Pitch across wide water spaces 14" x 4" Working pressures by rules 266.7 Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 11" x 7/8" x 3" Length as per rule 342" Distance apart 8" Number and pitch of Stays in each 4-8"

Working pressure by rules 328 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

For HARLAND & WOLFF Ltd. The foregoing is a correct description,
H. P. Labbeck Manufacturer.

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

Is the approved plan of boiler forwarded herewith yes

Total No. of visits

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

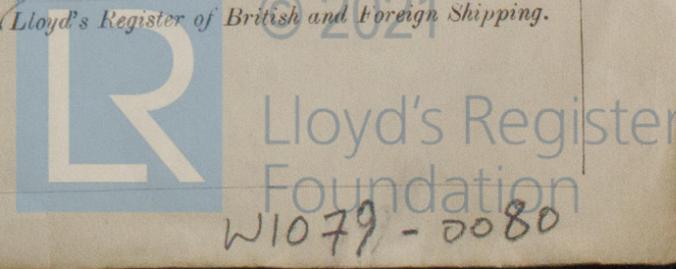
The material & workmanship of these boilers, so far as could be seen, is good.

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

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

FRI JAN. 4 1924

Committee's Minute
Assigned



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