

## REPORT ON BOILERS.

No. 9046.

Received at London 18 FEB. 1924

Date of writing Report Feb 4 1924 When handed in at Local Office Feb 16 1924 Port of Belfast

No. in Survey held at Belfast Date, First Survey Mar 5 1924 Last Survey Feb 6 1924

Reg. Book. on the M.D. INVERBANK (Number of Visits 12) Gross 5149 Tons Net 3158

Master Built at Glasgow By whom built Harland & Wolff Ltd 6439. When built 1921

Engines made at Glasgow By whom made Harland & Wolff Ltd When made 1921

Boilers made at Belfast By whom made Harland & Wolff Ltd When made 1921

NOMINAL Registered Horse Power of Boiler 101 Owners Andrew White Ltd. (Bank Line Ltd) Port belonging to

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

(Letter for record S) Total Heating Surface of Boilers 1510 Is forced draft fitted No No. and Description of Boilers One single Ended. 15B Working Pressure 110 lbs Tested by hydraulic pressure to 215 lbs Date of test 6-2-24

No. of Certificate 834 Can each boiler be worked separately Yes Area of fire grate in each boiler 44 sq ft No. and Description of safety valves to each boiler Two spring loaded. dia 3 1/2" Pressure to which they are adjusted 110 LBS/sq

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 1'-9" Mean dia. of boilers 13'-0 3/4" Length 11'-0"

Material of shell plates Steel Thickness 2 1/4" Range of tensile strength 28 to 32 tons Are the shell plates welded or flanged No

Descrip. of riveting: cir. seams D.R. long. seams T.R.D.B.S. Diameter of rivet holes in long. seams 1 1/2" Pitch of rivets 6 1/8"

Lap of plates or width of butt straps 1-2 1/4" Per centages of strength of longitudinal joint rivets 116 Working pressure of shell by rules 120 lbs Size of manhole in shell 16" x 12" Size of compensating ring 2 @ 3'-0" x 2'-8" No. and Description of Furnaces in each boiler 3 cr. Material Steel Outside diameter 3'-4 1/4" Length of plain part top 8 1/2" Thickness of plates crown 16" bottom 16"

Description of longitudinal joint Weld No. of strengthening rings Working pressure of furnace by the rules 156 lbs Combustion chamber plates: Material Steel Thickness: Sides 9/16" Back 9/16" Top 9/16" Bottom 2 1/4" Pitch of stays to ditto: Sides 8'4" x 8'2" Back 9' x 8'2"

Top 9'2" x 8'2" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 15 1/2 lbs Material of stays Steel Diameter at smallest part 1.22 Area supported by each stay 46.5 Working pressure by rules 143 lbs End plates in steam space: Material Steel Thickness 1/4"

Pitch of stays 8' x 8' How are stays secured nuts & washers Working pressure by rules 130 lbs Material of stays Steel Diameter at smallest part 4.115

Area supported by each stay 324 Working pressure by rules 140 lbs Material of Front plates at bottom Steel Thickness 3 1/4" Material of Lower back plate Steel Thickness 3 1/4" Greatest pitch of stays 12 3/4" x 8' Working pressure of plate by rules 193 lbs Diameter of tubes 3 1/4"

Pitch of tubes 4' x 4" Material of tube plates Steel Thickness: Front 3 1/4" Back 3 1/4" Mean pitch of stays 8.92 Pitch across wide water spaces 1-2 1/4" Working pressures by rules W.N.S. 130 lbs Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 2 @ 4' x 3 1/4" Length as per rule 2'-6" Distance apart 9'9" Number and pitch of Stays in each 3 @ 8'4"

Working pressure by rules 141 Superheater or Steam chest: how connected to boiler none 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

Pitch of rivets	Working pressure of shell by rules	Diameter of flue	Material of flue plates	Thickness

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 HARLAND & WOLFF Ltd.

J. O. Ray Manufacturer.

Dates of Survey During progress of work in shops - - - 1923 5-22-27-30 Dec 12-19 Jan 3-11-16-23-1

while building During erection on board vessel - - - Feb 6 1924

Is the approved plan of boiler forwarded herewith No. Completion of order.

Total No. of visits

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

This Boiler has been built under Special Survey. Materials & Workmanship good. Hydraulic test satisfactory. It is being shipped to Glasgow for installation in the vessel. This boiler has now been fitted on board the above vessel in an efficient manner, it has been examined under steam & found satisfactory, safety valves adjusted to 110 LBS/sq. Washen 1/2" each.

Survey Fee ... £ 10 : 2 : 0

Travelling Expenses (if any) £ :

When applied for 191

When received, 191

Per Long Letter 4/4/24

William Butler & H. C. Grinick  
Engineer Surveyors to Lloyd's Register of British and Foreign Shipping.

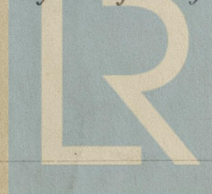
Committee's Minute

GLASGOW

10 JUN 1924

Assigned

See G.C. Rpt. No. 43701



Lloyd's Register  
Foundation

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