

# AIR RESERVOIRS. REPORT ON BOILERS.

No. 8851

Received at London Office

THU. DEC. 21 1922

Date of writing Report 7/12/1922 When handed in at Local Office 191 Port of Belfast

No. in Survey held at Belfast Date, First Survey 1922 Oct 5 Last Survey Dec 6 1922

Reg. Book. ARABY (Number of Visits Four) Gross 4936

on Air Reservoirs for Harland & Wolff's No 630D. Tons Net 2944

Master DUMBARTON Built at Glasgow By whom built Harland & Wolff Ltd. When built 1923

Engines made at Glasgow By whom made Harland & Wolff Ltd. When made 1923

Reservoirs Belfast Boilers made at Belfast By whom made Harland & Wolff Ltd. When made 1922

Registered Horse Power 489 Owners David Mac Iver & Co Ltd. Port belonging to Liverpool.

~~MULTITUBULAR BOILERS MAIN, AUXILIARY OR DONKEY.~~ Manufacturers of Steel D. Colville & Sons Ltd.

(Letter for record) RESERVOIRS. 2-cylindrical Total Heating Surface of Boilers 585 sq ft Is forced draft fitted No. No. and Description of Boilers 5/12/22 Date of test 6/12/22

No. of Certificate ✓ Can each boiler be worked separately Area of fire grate in each boiler No. and Description of safety valves to each boiler 2 SPRING LOADED Area of each valve Pressure to which they are adjusted 360 lb/sq in.

Are they fitted with casing gear ✓ 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 Mean dia. 6'-0 3/8" Length 21'-0 1/16"

Material of shell plates Steel Thickness 1 1/2" Range of tensile strength 27-32 Are the shell plates welded or flanged No.

Descrip. of riveting: cir. seams Lap 266 long. seams D. butt Diameter of rivet holes in long. seams 1 1/8" Pitch of rivets 7 1/16"

width of butt straps 16 5/8" Per centages of strength of longitudinal joint rivets 89.5 Working pressure of shell by rules 85.5

Size of manhole in shell 16" x 12" Size of compensating ring End flanged No. and Description of Furnaces in each boiler

Description of longitudinal joint	Material		Outside diameter		Length of plain part		Thickness of plates		Working pressure of furnace by the rules	Combustion chamber
	Sides	Back	Top	Bottom	Top	Bottom	Top	Bottom		
plates: Material	Thickness	Sides	Back	Top	Bottom	Pitch of stays to ditto:	Sides	Back		

Top If stays are fitted with nuts or riveted heads Working pressure by rules Material of stays Diameter at smallest part Area supported by each stay Working pressure by rules End plates in steam space: Material Steel Thickness 1 1/2" 1/32"

Pitch of stays Ends pressed to 4" radius. Working pressure by rules As approved. Diameter at smallest part Area supported by each stay Working pressure by rules Material of Front plates at bottom Thickness Material of

Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules Diameter of tubes Pitch of tubes Material of tube plates Thickness: Front Back Mean pitch of stays Pitch across wide

water spaces Working pressures by rules Girders to Chamber tops: Material Depth and thickness of girder at centre Length as per rule Distance apart Number and pitch of Stays in each Working pressure by rules 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 casing gear

Marks: - 

LLOYDS TEST No 819 585 lbs. 356 lbs. W.P. S.O.K. 5/12/22	LLOYDS TEST. No 820. 585 lbs. 356 lbs. W.P. H.P.S. 6/12/22
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 The foregoing is a correct description, For HARLAND & WOLFF Ltd. Fechebeck 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 2-2-23

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These Air Reservoirs, which are intended for a Diesel Engine vessel, have been built under Special Survey, & the materials and workmanship are of good description. They have been forwarded to Glasgow for fitting on board.

Survey Fee ... £ 8 : 8 : 0 When applied for, 20-12-1922 When received, 22-2-1923

Travelling Expenses (if any) £ : : : 23-1-1923

H. G. Southwell Engineer Surveyor to Lloyd's Register of Shipping. G. Kendall

Committee's Minute GLASGOW 28 MAR 1923

Assigned See G.L. Rpt. No. 42568.

Lloyd's Register Foundation