

REPORT ON BOILERS.

AIR RESERVOIRS.

No. 10,184

Received at London Office 4 JUN 1929

Date of writing Report 19 When handed in at Local Office 3rd June 1929 Port of Belfast

No. in Survey held at Belfast Date, First Survey 1st May Last Survey 28th May 1929

Reg. Book. on the (Number of Visits 5) Gross Tons Net

Built at Rotterdam By whom built Millers Engine & Shipway Co. Yard No. 318 When built

Engines made at By whom made Engine No. When made

Boilers made at By whom made Boiler No. When made

Owners Port belonging to

VERTICAL DONKEY BOILER. Air Reservoirs

Made at Belfast By whom made Harland & Wolff Ltd. No. 93672 When made 1929. Where fixed

Manufacturers of Steel David Colville & Sons Ltd.

Capacity of each Reservoir 800 cubic ft. Is forced draught fitted Coal or Oil fired

No. and Description of Boilers Four dome-ended cylindrical built Reservoirs Working pressure 356 lbs

Tested by hydraulic pressure to 585 lbs sq. in. Date of test 20th, 21st, 24th & 28th May 1929 No. of Certificates 79

Area of Firegrate in each Boiler No. and Description of safety valves to each boiler

Area of each set of valves per boiler per rule as fitted Pressure to which they are adjusted Are they fitted with easing gear

State whether steam from main boilers can enter the donkey boiler Smallest distance between boiler or uptake and bunkers

or woodwork Is oil fuel carried in the double bottom under boiler Smallest distance between base of boiler and tank top plating

Is the base of the boiler insulated Largest internal dia. of boiler 6'-11 5/16" Length 23'-8"

Shell plates: Material Steel Tensile strength 28-32 Tons Thickness 1 7/32"

Are the shell plates welded or flanged No. Description of riveting: circ. seams double end, double inter. long. seams keble

Dia. of rivet holes in circ. seams 1 9/16" Pitch of rivets 3.24" Percentage of strength of circ. seams plate 59.2 rivets 59.2 of Longitudinal joint plate 83.8 rivets 90.3 combined 85.7

Working pressure of shell by rules 358 lbs Thickness of butt straps outer 29/32 inner 1 1/32

Shell Crown: Whether complete hemisphere, dished partial spherical, or flat dished partial spherical Material Steel

Tensile strength 26-30 Tons Thickness 1 3/16" + 1 9/16" Radius 60" Working pressure by rules 358 lbs

Description of Furnace: Plain, spherical, or dished crown Material Tensile strength

Thickness External diameter top bottom Length as per rule Working pressure by rules

Pitch of support stays circumferentially and vertically Are stays fitted with nuts or riveted over

Diameter of stays over thread Radius of spherical or dished furnace crown Working pressure by rule

Thickness of Ogee Ring Diameter as per rule D d Working pressure by rule

Combustion Chamber: Material Tensile strength Thickness of top plate

Radius if dished Working pressure by rule Thickness of back plate Diameter if circular

Length as per rule Pitch of stays Are stays fitted with nuts or riveted over

Diameter of stays over thread Working pressure of back plate by rules

Tube Plates: Material front back Tensile strength Thickness Mean pitch of stay tubes in nests

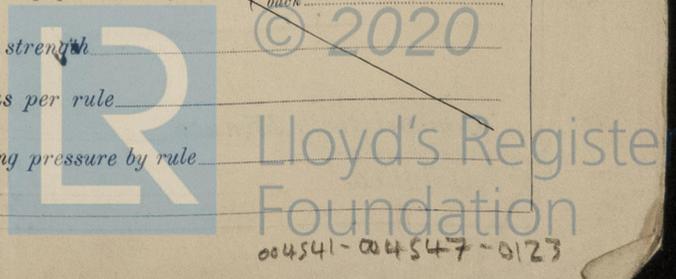
of comprising shell, Dia. as per rule front back Pitch in outer vertical rows Dia. of tube holes FRONT stay plain BACK stay plain

Does each alternate tube in outer vertical rows a stay tube Working pressure by rules front back

Girders to combustion chamber tops: Material Tensile strength

Depth and thickness of girder at centre Length as per rule

Distance apart No. and pitch of stays in each Working pressure by rule



004541-004547-0123

REPORT ON BOILERS

Crown stays: Material _____ Tensile strength _____ Diameter { at body of stay, _____ or over threads _____

No. of threads per inch _____ Area supported by each stay _____ Working pressure by rules _____

Screw stays: Material _____ Tensile strength _____ Diameter { at turned off part, _____ or over threads _____ No. of threads per inch _____

Area supported by each stay _____ Working pressure by rules _____ Are the stays drilled at the outer ends _____

Tubes: Material _____ External diameter { plain _____ stay _____ Thickness { _____

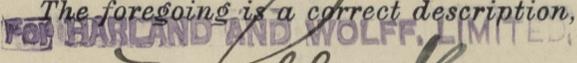
No. of threads per inch _____ Pitch of tubes _____ Working pressure by rules _____

Manhole Compensation: Size of opening in ~~steel~~ ^{Std} plate 16" x 12" ✓ Section of compensating ring ✓ No. of rivets and diameter of rivet holes _____ Outer row rivet pitch at ends _____ Depth of flange if manhole flanged 4 7/8" ✓

Uptake: External diameter _____ Thickness of uptake plate _____

Cross Tubes: No. _____ External diameters { _____ Thickness of plates _____

Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with _____

The foregoing is a correct description,

F. C. Barland Manufacturer.

Dates of Survey { During progress of work in shops - - } ¹⁹²⁹ May 1. 20. 21. 24. 28. Is the approved plan of boiler forwarded herewith (If not state date of approval.) _____

while building { During erection on board vessel - - } Total No. of visits 5

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

These reservoirs have been constructed under special survey and to the approved plan. They were subjected to hydraulic test with satisfactory results. The materials and workmanship are good.

Survey Fee ... £ 16 : 16 : } When applied for, 3rd June 1929.
 Travelling Expenses (if any) £ : : } When received, 15. 6. 1929

R. Lee Aimers

TUE. 5 NOV 1929

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute
 Assigned

See Ret. F.E. up to 18889

