

REPORT ON AIR RECEIVERS BOILERS.

GLASGOW REPORT No. 47350

No. 9765

Received at London Office

29 JUN 1927

REC 1927

Date of writing Report 19 When handed in at Local Office 28-6-1927 Port of Belfast

No. in Reg. Book. Survey held at Belfast on the M.V. "PAULA" Date, First Survey 25th March Last Survey 24th June 1927 (Number of Visits 5) Tons Gross Net

Built at By whom built Yard No. 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

AIR RECEIVERS VERTICAL DONKEY BOILER.

Made at Belfast By whom made Starland & Wolff Ltd Boiler No. 748 G. When made 1927 Where fixed

Manufacturers of Steel David Colville & Sons Ltd.

Capacity of each Receiver 250 f Is forced draught fitted Coal or Oil fired

Total Heating Surface of Boiler No. and Description of Boilers Three dome-ended cylindrical riveted Working pressure 356 lb

Tested by hydraulic pressure to 712 lbs sq in Date of test 22.6.27 Lloyd's No. of Certificate 47

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 or woodwork Smallest distance between boiler or uptake and bunkers

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 60" Height 14'-3"

Shell plates: Material Steel Tensile strength 28-32 Tons Thickness 3/32"

Are the shell plates welded or flanged Description of riveting: circ. seams end double inter long. seams heble d. b.s.

Dia. of rivet holes in circ. seams 1 1/16" long. seams 15/16" Pitch of rivets 2.98" 6 1/16" Percentage of strength of circ. seams plate 64.3 rivets 59.7 of Longitudinal joint plate 87.9 rivets 94.1 combined 100

Working pressure of shell by rules 37 1/2 lbs Thickness of butt straps outer 21/32" inner 25/32"

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

Tensile strength 26-30 Tons Thickness 7/8" and 1" Radius 36" Working pressure by rules 364 lb

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

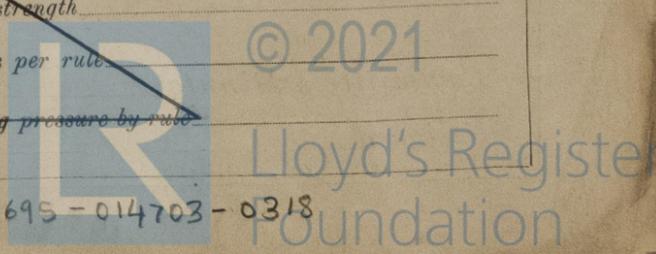
If comprising shell, Dia. as per rule front back Pitch in outer vertical rows Dia. of tube holes FRONT stay plain BACK stay plain

Is 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



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 shell ^{end} ~~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 3 1/2"

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,
FOR HARLAND AND WOLFF, LIMITED.
A. Marshall Manufacturer.
 Assistant Secretary.

Dates of Survey { During progress of work in shops - - } ¹⁹²⁷ Mar 25 May 2 11 June 23 24 = 5 Is the approved plan of boiler forwarded herewith Approved (If not state date of approval.) 18. 6. 26.
 while building { During erection on board vessel - - } Total No. of visits _____

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

These receivers have been built under special survey. The material and workmanship are sound and good. They have been satisfactorily tested by hydraulic pressure. In my opinion these receivers are eligible for fitting on a classed vessel.

The receivers have been shipped to Glasgow for installing on the vessel.
 These three air reservoirs have been properly fitted on board the ship at Glasgow. The safety valves have been adjusted to the working pressure of 356 lbs./in².
J. Boyle
 28/11/27.

Survey Fee £ 9 : 9 - } When applied for, 28 - 6 - 19 27.
 Travelling Expenses (if any) £ : : } When received, 8. 9. 19 27. paid.
person to.

R. Lee Amers
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **GLASGOW 6 - DEC 1927**
 Assigned Sec 26. Rpt. No. 47350.

