

# REPORT ON BOILERS.

No. 50170

Received at London Office 26 FEB 1930

Date of writing Report Feb 21<sup>st</sup> 1930 When handed in at Local Office Feb 22<sup>nd</sup> 1930 Port of GLASGOW.

No. in Survey held at Yroon Date, First Survey 29 10 29 Last Survey Feb 20<sup>th</sup> 1930

on the SS. THE EMPEROR (Number of Visits 20) Gross 824 Tons Net 405

Master Built at Yroon By whom built Ailsa S.B. Co Ltd Yard No. 414 When built 1930

Engines made at Yroon By whom made Ailsa S B Co Ltd Engine No. 149 When made 1930

Boilers made at Glasgow By whom made Barclay Curle & Co Ltd Boiler No. A 10 When made 1930

Nominal Horse Power Owners J. Hay and Sons Ltd Port belonging to

## MULTITUBULAR BOILERS - MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel (Letter for Record)

Total Heating Surface of Boilers 2021 sq Is forced draught fitted No Coal or Oil fired Coal.

No. and Description of Boilers One S.B. Working Pressure 200 lbs.

Tested by hydraulic pressure to Date of test No. of Certificate Can each boiler be worked separately

Area of Firegrate in each Boiler No. and Description of safety valves to each boiler One pair Cockburns Improved High Lift

Area of each set of valves per boiler per Rule 5.88 as fitted 6.28 Pressure to which they are adjusted 200 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 or woodwork 6'-0" Is oil fuel carried in the double bottom under boilers

Smallest distance between shell of boiler and tank top plating Open floors. Is the bottom of the boiler insulated No.

Largest internal dia. of boilers Length Shell plates: Material Tensile strength

Thickness Are the shell plates welded or flanged Description of riveting: circ. seams end inter.

Long. seams Diameter of rivet holes in circ. seams long. seams Pitch of rivets

Percentage of strength of circ. end seams plate rivets Percentage of strength of circ. intermediate seam plate rivets

Percentage of strength of longitudinal joint plate rivets combined Working pressure of shell by Rules

Thickness of butt straps outer inner No. and Description of Furnaces in each Boiler

Material Tensile strength Smallest outside diameter

Length of plain part top bottom Thickness of plates crown bottom Description of longitudinal joint

Dimensions of stiffening rings on furnace or c.c. bottom Working pressure of furnace by Rules

End plates in steam space: Material Tensile strength Thickness Pitch of stays

How are stays secured Working pressure by Rules

Tube plates: Material front back Tensile strength Thickness

Mean pitch of stay tubes in nests Pitch across wide water spaces Working pressure 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 Rules Combustion chamber plates: Material

Tensile strength Thickness: Sides Back Top Bottom

Pitch of stays to ditto: Sides Back Top Are stays fitted with nuts or riveted over

Working pressure by Rules Front plate at bottom: Material Tensile strength

Thickness Lower back plate: Material Tensile strength Thickness

Pitch of stays at wide water space Are stays fitted with nuts or riveted over

Working Pressure Main 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

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Working pressure by Rules *Are the stays drilled at the outer ends* Margin stays: Diameter <sup>At turned off part,</sup> <sub>or</sub> <sup>Over threads</sup>  
 No. of threads per inch Area supported by each stay Working pressure by Rules  
**Tubes:** Material External diameter <sup>Plain</sup> <sub>Stay</sub> Thickness <sup>No. of threads per inch</sup>  
 Pitch of tubes Working pressure by Rules **Manhole compensation:** Size of opening in  
 shell plate Section of compensating ring No. of rivets and diameter of rivet holes  
 Outer row rivet pitch at ends Depth of flange if manhole flanged **Steam Dome:** Material  
 Tensile strength Thickness of shell Description of longitudinal joint  
 Diameter of rivet holes Pitch of rivets Percentage of strength of joint <sup>Plate</sup> <sub>Rivets</sub>  
 Internal diameter Working pressure by Rules Thickness of crown No. and diameter of  
 stays Inner radius of crown Working pressure by Rules  
 How connected to shell Size of doubling plate under dome Diameter of rivet holes and pitch  
 of rivets in outer row in dome connection to shell

**Type of Superheater** Manufacturers of <sup>Tubes</sup> <sub>Steel castings</sub>  
 Number of elements Material of tubes Internal diameter and thickness of tubes  
 Material of headers Tensile strength Thickness Can the superheater be shut off and  
 the boiler be worked separately Is a safety valve fitted to every part of the superheater which can be shut off from the boiler  
 Area of each safety valve Are the safety valves fitted with easing gear Working pressure as per  
 Rules Pressure to which the safety valves are adjusted Hydraulic test pressure:  
 tubes, castings and after assembly in place Are drain cocks or valves fitted  
 to free the superheater from water where necessary  
 Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with

The foregoing is a correct description,  
 Manufacturer.

Dates of Survey <sup>During progress of</sup> <sub>work in shops - -</sub> Are the approved plans of boiler and superheater forwarded herewith  
 while building <sup>During erection on</sup> <sub>board vessel - -</sub> (If not state date of approval.)  
 See Accompanying *Trachy Report* Total No. of visits 20

Is this Boiler a duplicate of a previous case If so, state Vessel's name and Report No.

**GENERAL REMARKS** (State quality of workmanship, opinions as to class, &c.) *The boiler has been securely fitted on board and tried under steam with satisfactory results*

*No. 2002-14*  
*Report*  
*Per Glasgow*

*a.g.*  
*22/2/30.*

Survey Fee ... .. £ : : When applied for, 19  
 Travelling Expenses (if any) £ : : When received, 19

*D. C. Barr.*  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **GLASGOW** 25 FEB 1930

Assigned *See Accompanying Trachy Report*

