

REPORT ON BOILERS.

No. 89704

19 JAN 1933

Received at London Office

Date of writing Report 19 When handed in at Local Office 18/11 1933 Port of NEWCASTLE-ON-TYNE

No. in Survey held at Wallsend-on-Tyne Date, First Survey 20 Dec 1932 Last Survey 13 Jan 1933

1959 on the S. Dulwich (Number of Visits) Tons {Gross 4040 Net 2443}

Master Built at Stockton-on-Tees By whom built Smiths & Co Ltd Yard No. ✓ When built 1931-3

Engines made at Stockton-on-Tees By whom made Blair & Co Engine No. ✓ When made do

Boilers made at do By whom made do Boiler No. ✓ When made do

Nominal Horse Power 368 Owners Britain S & Co Ltd Port belonging to London

MULTITUBULAR BOILERS—MAIN, ~~AUXILIARY~~, OR DONKEY.

Manufacturers of Steel *Siting of superheaters to Main Boilers* (Letter for Record)

Total Heating Surface of Boilers Is forced draught fitted Coal or Oil fired

No. and Description of Boilers Working Pressure

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

Area of each set of valves per boiler {per Rule as fitted} Pressure to which they are adjusted Are they fitted with easing 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 Is oil fuel carried in the double bottom under boilers

Smallest distance between shell of boiler and tank top plating Is the bottom of the boiler insulated

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

Lean 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 { At turned off part, or Over threads _____ }
 No. of threads per inch _____ Area supported by each stay _____ Working pressure by Rules _____
 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 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 { Plate _____ Rivets _____ }
 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 North Eastern Iron Tube Manufacturers of { Tubes Yalbot Steel Sd Steel castings forgings Wideningham Steel Coy }
 Number of elements 138 Material of tubes solid drawn steel Internal diameter and thickness of tubes 1 1/4" x 2 1/2" M
 Material of headers wrought steel Tensile strength 26 to 30 tons Thickness 1 1/8" Can the superheater be shut off and the boiler be worked separately no Is a safety valve fitted to every part of the superheater which can be shut off from the boiler yes
 Area of each safety valve 3.1416 sq" Are the safety valves fitted with easing gear yes Working pressure as per Rules 185 lbs Pressure to which the safety valves are adjusted 190 lbs Hydraulic test pressure: tubes 1500 lbs forgings 555 lbs and after assembly in place 463 lbs Are drain cocks or valves fitted to free the superheater from water where necessary yes
 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 { During progress of work in shops - - } Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.)
 while building { During erection on board vessel - - } Total No. of visits _____

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.)
Superheaters fitted to the three main boilers.
Materials & workmanship good. Hydraulic tests satisfactory.
Safety valves adjusted under steam as above.

Survey Fee £ 15 : - : - When applied for, 18 JAN 1933
 Travelling Expenses (if any) £ : : : When received, 11.2.1933

 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE. 31 JAN 1933
 Assigned _____

