

REPORT ON BOILERS.

No. 89465

Received at London Office 25 NOV 1932

Writing Report 19 When handed in at Local Office 23/11/1932 Port of NEWCASTLE-ON-TYNE

Survey held at Wallsend-on-Tyne Date, First Survey 28 Oct Last Survey 19 Nov 1932
 (Number of Visits 8) Gross 6588
 on the D.D. Blythmoor Tons Net 4038

Built at Sunderland By whom built W Doxford & Sons Ltd Yard No. ✓ When built 1928
 Plates made at Sunderland By whom made W Doxford & Sons Ltd Engine No. ✓ When made ✓
 Rivets made at do By whom made do Boiler No. ✓ When made ✓
 Indicated Horse Power 5 1/2 Owners Moore Line Ltd Port belonging to London

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Fitting of Superheaters in the P & S Bhs (Letter for Record ✓)

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

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 ✓

No. 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. ✓

Diag. 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 ✓

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

How are stays secured ✓ Working pressure by Rules ✓

Head plates: Material { front ✓ back ✓ Tensile strength { ✓ Thickness { ✓

Span pitch of stay tubes in nests ✓ Pitch across wide water spaces ✓ Working pressure { front ✓ back ✓

Orders to combustion chamber tops: Material ✓ Tensile strength ✓ Depth and thickness of girder ✓

centre ✓ Length as per Rule ✓ Distance apart ✓ No. and pitch of stays ✓

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 ✓

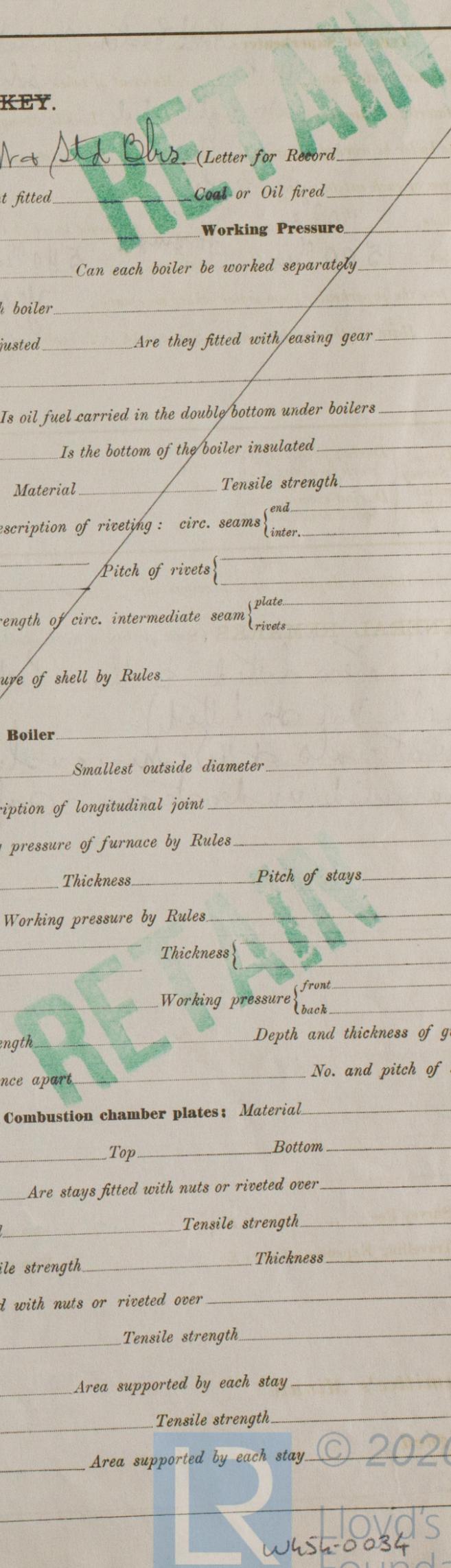
Diameter { At body of stay, ✓ or ✓ No. of threads per inch ✓ Area supported by each stay ✓

Over threads ✓ Screw stays: Material ✓ Tensile strength ✓

Working pressure by Rules ✓ No. of threads per inch ✓ Area supported by each stay ✓

Diameter { At turned off part, ✓ or ✓

Over threads ✓



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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 Thickness { No. of threads per inch Stay

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 Smoke Tube Manufacturers of Stewart & Lloyd Ltd Tubes Steel castings Wideningham Steel Coy.

Number of elements 144 Material of tubes Solid drawn steel Internal diameter and thickness of tubes 15 1/4" x 2 1/4" thick

Material of headers wrought steel Tensile strength 26 to 30 tons Thickness 1 1/2" 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 Are the safety valves fitted with easing gear yes Working pressure as per Rules 180 lbs. Pressure to which the safety valves are adjusted 185 lbs Hydraulic test pressure: tubes 1500 lbs. forgings & castings 540 lbs. and after assembly in place 450 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 while building { During progress of work in shops - - } Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.)

{ 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 Port & Starboard main boilers (Centre boiler not so fitted).

Materials & workmanship good. Hydraulic tests satisfactory.

Examined under steam & safety valves adjusted.

Survey Fee £ 10 :- :- } When applied for, 19

Travelling Expenses (if any) £ : : } When received, 12/12/1932

William Bates
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 2 DEC 1932

Assigned

