

REPORT ON BOILERS.

No. 82006

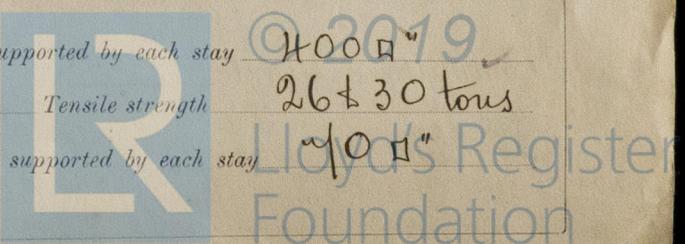
Received at London Office 10 NOV 1927

Date of writing Report 1927 When handed in at Local Office Nov 3rd 1927 Port of Newcastle-on-Tyne
 No. in Survey held at Wallsend-on-Tyne Date, First Survey 20th March Last Survey 3rd Nov. 1927
 on the New Steel S.S. British Progress. (Number of Visits) Gross 4581.
 Tons Net 2639
 Built at Walker By whom built Armstrong & Co Ltd Yard No. 1026 When built 1927
 Engines made at Wallsend By whom made Wallsend Slipways & Co Ltd Engine No. 874 When made 1927
 Boilers made at Wallsend By whom made Wallsend Slipways & Co Ltd Boiler No. 350. When made 1927
 Indicated Horse Power 422 Owners British Tanker Company Ltd Part belonging to Southern

MULTITUBULAR BOILERS MAIN, AUXILIARY OR DONKEY.

Manufacturers of Steel Steel Company of Scotland Ltd (Letter for Record S.)
 Total Heating Surface of Boilers 1022 Is forced draught fitted No Coal or Oil fired oil
 No. and Description of Boilers One single ended Working Pressure 120 lbs
 Tested by hydraulic pressure to 230 lbs Date of test 21-1-27 No. of Certificate 141 Can each boiler be worked separately yes
 Area of Firegrate in each Boiler 0 ft. only No. and Description of safety valves to each boiler Two spring loaded
 Area of each set of valves per boiler per Rule Pressure to which they are adjusted 125 lbs. Are they fitted with easing gear yes
 (as fitted) 6.28 high lift type
 In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler no
 Smallest distance between boilers or uptakes and bunkers or woodwork 2-3 Is oil fuel carried in the double bottom under boilers yes
 Smallest distance between shell of boiler and tank top plating 2'-0" Is the bottom of the boiler insulated yes
 Largest internal dia. of boilers 10'-4 3/8" Length 10'-6" Shell plates: Material Steel Tensile strength 28 to 32 tons
 Thickness 1/2" Are the shell plates welded or flanged no Description of riveting: circ. seams { end P.R.
 { inter. 3.08
 g. seams D.R.D.B.S. Diameter of rivet holes in { circ. seams 13/16" Pitch of rivets { 1 1/2"
 { long. seams 13/16"
 Percentage of strength of circ. end seams { plate 83.4 Percentage of strength of circ. intermediate seam { plate 83.7
 { rivets 83.7
 Percentage of strength of longitudinal joint { rivets 94 Working pressure of shell by Rules 123.6 lbs
 { combined 94
 Thickness of butt straps { outer 1/2" No. and Description of Furnaces in each Boiler Two corrugated (Deighton)
 { inner 1/2" Tensile strength 26 to 30 tons Smallest outside diameter 2'-11 1/4"
 Material Steel Thickness of plates { crown 3/8" Description of longitudinal joint weld
 { bottom 3/8"
 Dimensions of stiffening rings on furnace or c.c. bottom none Working pressure of furnace by Rules 149.5 lbs
 End plates in steam space: Material Steel Tensile strength 26 to 30 tons Thickness 1" Pitch of stays 19 1/2" x 20 1/2"
 How are stays secured Double nuts Working pressure by Rules 121.2 lbs
 Tube plates: Material { front Steel Tensile strength { 26-30 tons Thickness { 3/4"
 { back Steel { 26-30 tons { 1/16"
 Mean pitch of stay tubes in nests 12 3/4" x 8 1/4" Pitch across wide water spaces 13 1/4" x 8 1/4" Working pressure { front 122.5 lbs
 { back 135 lbs
 Girders to combustion chamber tops: Material Steel Tensile strength 28 to 32 tons Depth and thickness of girder
 centre 20 5/8" x 6 5/8" Length as per Rule 2'-6" Distance apart 9 1/8" No. and pitch of stays
 each 2 @ 8 5/8" Working pressure by Rules 124 lbs Combustion chamber plates: Material Steel
 Tensile strength 26 to 30 tons Thickness: Sides 9/16" Back 5/8" Top 9/16" Bottom 9/16"
 Pitch of stays to ditto: Sides 9 1/2" x 8 5/8" Back 8 1/4" x 8 5/8" Top 8 5/8" x 9 1/8" Are stays fitted with nuts or riveted over both
 Working pressure by Rules 128 lbs Front plate at bottom: Material Steel Tensile strength 26 to 30 tons
 Thickness 3/4" Lower back plate: Material Steel Tensile strength 26 to 30 tons Thickness 1/16"
 Pitch of stays at wide water space 14" x 8 1/4" Are stays fitted with nuts or riveted over nuts
 Working Pressure 144 lbs Main stays: Material Steel Tensile strength 28 to 32 tons
 Diameter { At body of stay, 2 3/4" No. of threads per inch 6 Area supported by each stay 400 sq in
 { Over threads 2 3/4"
 Working pressure by Rules 142.5 lbs Screw stays: Material Steel Tensile strength 26 to 30 tons
 Diameter { At turned off part, 1 3/8" No. of threads per inch 9 Area supported by each stay 400 sq in
 { Over threads 1 3/8"

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Working pressure by Rules 130 lbs Are the stays drilled at the outer ends no Margin stays: Diameter ^{At turned off part,} 1 1/2" ^{or} Over threads

No. of threads per inch 9 Area supported by each stay 11 1/4" x 8 1/4" Working pressure by Rules 135 lbs

Tubes: Material Iron External diameter ^{Plain} 3" Thickness ^{Stay} 5/16" x 1/4" No. of threads per inch 9

Pitch of tubes 1 1/8" x 1 1/4" Working pressure by Rules 138 lbs Manhole compensation: Size of opening in shell plate 20" x 16" Section of compensating ring 16 1/2" x 16" No. of rivets and diameter of rivet holes 50 @ 13/16"

Outer row rivet pitch at ends 1 1/2" Depth of flange if manhole flanged 2 1/16" Steam Dome: Material none

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

How connected to shell Inner radius of crown Working pressure by Rules

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 none Manufacturers of ^{Tubes} ^{Steel castings}

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 23 inclusive for boilers been complied with yes

FOR THE WALLSEND SLIPWAY & ENGINEERING CO. LIMITED
The foregoing is a correct description,
W. A. B. [Signature] Manufacturer.

Dates of Survey ^{During progress of work in shops - - -} See Mchly Report Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.)

^{while building} ^{During erection on board vessel - - -} See Mchly Report Total No. of visits

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This Boiler has been built under Special Survey. Materials & Workmanship good. Hydraulic tests satisfactory. It has been efficiently installed & fixed in the vessel & its safety valves have been adjusted under steam.

Survey Fee £ : ✓ : When applied for, 192

Travelling Expenses (if any) £ : ✓ : When received, 192

William [Signature]
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUES. 15 NOV 1927

Assigned See Sp. Rpt. attached

