

## REPORT ON BOILERS.

No. 89569

Received at London Office

14 DEC 1932

Date of writing Report

19

When handed in at Local Office

12/12/1932

Port of

NEWCASTLE-ON-TYNE

No. in Reg. Book.

60846

Survey held at

Walsend-on-Tyne

Date, First Survey

7 hours

Last Survey

8 Dec 1932

1932

(Number of Visits 8)

(Gross

4046

Tons

Net 2443.

Master

Built at Stockton-on-Tees

By whom built Smiths &amp; Co Ltd

Yard No. ✓

When built 1930-10

Engines made at

Stockton-on-Tees

By whom made

Blair &amp; Co (1926) Ltd

Engine No. ✓

When made do

Boilers made at

do

By whom made

do

Boiler No. ✓

When made do

Nominal Horse Power

368

Owners

Britain &amp; Co Ltd

Port belonging to

London

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

Manufacturers of Steel

Fitting 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  
rivetsPercentage of strength of circ. intermediate seam { plate  
rivetsPercentage 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  
bottomThickness 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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W163-0014

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 Tubes *Weldless Steel Tube Coy*  
*Forgings* *Widgaham Steel Coy*  
Number of elements *138* Material of tubes *Solid drawn steel* Internal diameter and thickness of tubes *1 1/4" x 2.5" thk.*  
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 *2.1416 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 *465 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 - - }  
while building { During erection on  
board vessel - - - }

Are the approved plans of boiler and superheater forwarded herewith  
(If not state date of approval.)

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 : 0 : 0

When applied for, *13 DEC 1932*

Travelling Expenses (if any) £ : ✓ :

When received, *30.12.32*

*William Butler*

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

*FRI. 23 DEC 1932*

Assigned



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