

REPORT ON BOILERS.

No. 82006

Received at London Office

10 NOV 1927

Date of writing Report

192

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

2nd March

Last Survey

3rd Nov. 1927

No. in Book.

New Steel S.S. British Progress.

(Number of Visits)

Gross 4581.
Net 2639

Master

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

Port belonging to

London

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

21-1-24

No. of Certificate

171

Can each boiler be worked separately

yes

Area of Firegrate in each Boiler

0.1 only

No. and Description of safety valves to each boiler

Two spring loaded

yes

Area of each set of valves per boiler

per Rule

as fitted

Pressure to which they are adjusted

125 lbs

Are they fitted with easing gear

yes

In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler

Is oil fuel carried in the double bottom under boilers

yes

Smallest distance between boilers or uptakes and bunkers or woodwork

2'-3"

Is the bottom of the boiler insulated

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

1/4"

Are the shell plates welded or flanged

no

Description of riveting: circ. seams

end

inter.

g. seams

D.R.D.B.S.

Diameter of rivet holes in

circ. seams

long. seams

13/16"

Pitch of rivets

3.08"

1 1/2"

Percentage of strength of circ. end seams

plate

rivets

83.4

Percentage of strength of circ. intermediate seam

plate

rivets

83.7

Percentage of strength of longitudinal joint

plate

rivets

83.7

Working pressure of shell by Rules

123.6 lbs

Thickness of butt straps

outer

inner

1/4"

1/4"

No. and Description of Furnaces in each Boiler

Two corrugated (Deighton)

Material

Steel

Tensile strength

26 to 30 tons

Smallest outside diameter

2'-11 1/4"

Length of plain part

top

bottom

Thickness of plates

crown

bottom

3/8"

Description of longitudinal joint

weld

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

back

Steel

Steel

Tensile strength

26-30 tons

Thickness

3/4"

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

back

122.5 lbs

Orders 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,

or

Over threads

2 3/4"

No. of threads per inch

6

Area supported by each stay

400 sq in

Working pressure by Rules

142.5 lbs

Screw stays: Material

Steel

Tensile strength

26 to 30 tons

Diameter

At turned off part,

or

Over threads

1 3/8"

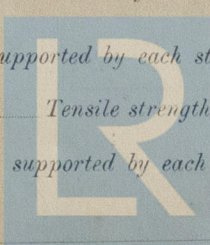
No. of threads per inch

9

Area supported by each stay

400 sq in

W234-0067



Lloyd's Register Foundation

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" Stay } Thickness { 10 wls 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 1/8" 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
 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 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. D. A. M. G. Manufacturer.

Dates of Survey { During progress of work in shops - - } See Ind. Report 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

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This Boiler has been built under Special Survey. Materials & Workmanship good. Hydraulic test 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 B. Bates
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUES. 15 NOV 1927
 Assigned See Ind. rpt. attached