

REPORT ON BOILERS.

No. 104060

8 NOV 1946

Received at London Office

Date of writing Report

19

When handed in at Local Office

11. 46

Port of

NEWCASTLE-ON-TYNE

No. in Reg. Book.

Survey held at Newcastle on Tyne

Date, First Survey

(1945) Oct. 30

Last Survey

Oct. 26th 1946

19

88764 on the

M.V. REGENT TIGER

(Number of Visits

Tons

Gross 4960.24

Net 5930.59

Built at Wallsend

By whom built

Swan Hunter & Wigham Richard Ltd

Vard No. 1743

When built

1946

Engines made at

Walker

By whom made

"

"

Engine No. 1834

When made

1946

Boilers made at

Walker

By whom made

"

"

Boiler No. 1834

When made

1946

Nominal Horse Power

270

Owners

Oil Tank Steamship Co Ltd

Port belonging to

London

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

Manufacturers of Steel

C. J. L. L. L. Ltd

(Letter for Record

S.

Total Heating Surface of Boilers

4030 sq ft

Is forced draught fitted

Yes

Coal

Oil

fired

waste

heat

No. and Description of Boilers

Two single ended multitubular

Working Pressure

180 lb/sq in

Tested by hydraulic pressure to

320 lb/sq in

Date of test

10-7-46

No. of Certificate

S-1213

Can each boiler be worked separately

Yes

Area of Firegrate in each Boiler

✓

No. and Description of safety valves to each boiler

2 Spring Loaded Lockburns Improved

Area of each set of valves per boiler

{per Rule

6.46 sq ft

{as fitted

7.95 sq ft

Pressure to which they are adjusted

180 lb/sq in

Are they fitted with easing gear

Yes

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

2' - 0"

Is oil fuel carried in the double bottom under boilers

No

Smallest distance between shell of boiler and tank top plating

2' - 11 1/2"

Is the bottom of the boiler insulated

Yes

Largest internal dia. of boilers

13' - 4 1/16"

Length

11' - 0"

Shell plates: Material

Steel

Tensile strength

29-33 Tons/sq in

Thickness

1 1/16"

Are the shell plates welded or flanged

No

Description of riveting: circ. seams

{end

D.R.L.J.

long. seams

T.R.D.B.S.

Diameter of rivet holes in

{circ. seams

1 1/8"

{long. seams

1 1/8"

Pitch of rivets

{circ. seams

3.438"

Percentage of strength of circ. end seams

{plate

67.27

{rivets

43.16

Percentage of strength of circ. intermediate seam

{plate

✓

{rivets

Percentage of strength of longitudinal joint

{plate

85.937

{rivets

86.94

Thickness of butt straps

{outer

1 3/16"

{inner

1 5/16"

No. and Description of Furnaces in each Boiler

3 Doughton Type

Material

Steel

Tensile strength

26-30 Tons/sq in

Smallest outside diameter

3' - 1 3/32"

Length of plain part

{top

✓

Thickness of plates

{crown

3/4"

{bottom

3/4"

Description of longitudinal joint

✓

Dimensions of stiffening rings on furnace or c.c. bottom

✓

End plates in steam space: Material

Steel

Tensile strength

26-30 Tons/sq in

Thickness

FRONT - 1 3/32"

BACK - 1 1/8"

Pitch of stays 17 1/4" x 17 5/8"

How are stays secured

Nuts inside & outside & washers outside only

Tube plates: Material

{front

Steel

{back

Steel

Tensile strength

26-30 Tons/sq in

Thickness

25/32" CENTRE.

13/16" WINGS

Mean pitch of stay tubes in nests

10.625"

Pitch across wide water spaces

14"

Girders to combustion chamber tops: Material

Steel

Tensile strength

28-32 Tons/sq in

Depth and thickness of girder

at centre

8 1/2" x 1 1/4"

Length as per Rule

2' - 7 19/32"

Distance apart

8 7/16"

No. and pitch of stays

C.L. on each

209 3/4"

Combustion chamber plates: Material

Steel

Tensile strength

26-30 Tons/sq in

Thickness: Sides

2 1/32"

Back

5/8"

Top

2 1/32"

Bottom

2 1/32"

Pitch of stays to ditto: Sides

8 7/16" x 9 3/4"

Back

8 1/2" x 8 3/4"

Top

8 7/16" x 9 3/4"

Are stays fitted with nuts or riveted over

Nuts

Front plate at bottom: Material

Steel

Tensile strength

26-30 Tons/sq in

Thickness

1"

Lower back plate: Material

Steel

Tensile strength

26-30 Tons/sq in

Thickness

2 1/32"

Pitch of stays at wide water space

14" x 8 3/4"

Are stays fitted with nuts or riveted over

Nuts

Main stays: Material

Steel

Tensile strength

28-32 Tons/sq in

Diameter

{At body of stay,

3" - 2 3/4"

No. of threads per inch

6

crew stays: Material

Steel

Tensile strength

26-30 Tons/sq in

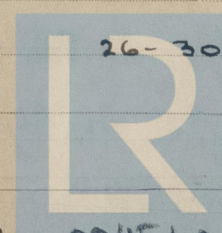
Diameter

{At turned off part,

1 5/8"

No. of threads per inch

9



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Are the stays drilled at the outer ends No Margin stays: Diameter $\left\{ \begin{array}{l} \text{At turned off part,} \\ \text{or} \\ \text{Over threads} \end{array} \right\} 1\frac{3}{4}"$
No. of threads per inch 9
Tubes: Material Seamless Steel External diameter $\left\{ \begin{array}{l} \text{Plain} \\ \text{Stay} \end{array} \right\} 3"$ Thickness $\left\{ \begin{array}{l} 9 \text{ W.G.} \\ 5/16 + 1/4 \end{array} \right\}$ No. of threads per inch 9
Pitch of tubes 4 1/4" x 4 1/4" Manhole compensation: Size of opening in shell plate 20" x 16" Section of compensating ring 1 1/16" x 20 1/8" No. of rivets and diameter of rivet holes 32 x 1 3/8"
Outer row rivet pitch at ends 9 7/8" Depth of flange if manhole flanged 2 1/2" Steam Dome: Material ✓
Tensile strength ✓ Thickness of shell ✓ Description of longitudinal joint ✓
Diameter of rivet holes ✓ Pitch of rivets ✓ Percentage of strength of joint $\left\{ \begin{array}{l} \text{Plate} \\ \text{Rivets} \end{array} \right\} \text{✓}$
Internal diameter ✓ Thickness of crown ✓ No. and diameter of stays ✓ Inner radius of crown ✓
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

Manufacturers of

$\left\{ \begin{array}{l} \text{Tubes} \\ \text{Steel forgings} \\ \text{Steel castings} \end{array} \right\}$

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
Pressure to which the safety valves are adjusted Hydraulic test pressure
tubes forgings and castings and after assembly in place Are drain cocks
valves fitted to free the superheater from water where necessary

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with

The foregoing is a correct description,

SWAN, HUNTER, & WILSON P.L. Jones Manufacturers

Dates of Survey $\left\{ \begin{array}{l} \text{During progress of} \\ \text{work in shops - -} \\ \text{while building} \end{array} \right\} \text{See Machinery Report}$ Are the approved plans of boiler and superheater forwarded herewith Yes
(If not state date of approval) Total No. of visits ✓

Is this Boiler a duplicate of a previous case Yes If so, state Vessel's name and Report No. REGENT TIGER. 96545

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

These boilers have been built under special survey in accordance with rule requirements & approved plans. Materials & workmanship are good. Hydraulic test satisfactory. They have been efficiently installed & fixed in vessel, examined under steam their safety valves adjusted to the approved pressure.

Survey Fee ... £ See Machinery Report When applied for, 19
Travelling Expenses (if any) £ See Machinery Report When received, 19

J. H. Matthews
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 13 DEC 1946

Assigned Su F.E. mchey. rph.



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