

REPORT ON BOILERS.

No.

94362

Received at London Office

-7 OCT 1929

Date of writing Report

Oct 5th 1929

When handed in at Local Office

-7 OCT 1929

Port of

London

No. in
Reg. Book

Survey held at

Hitchin

Date, First Survey

13th June 1929

Last Survey

Oct 4th 1929

(Number of Visits)

3

Gross

684.07

Tons

Net 201

Built at

Bristol

By whom built

C. Hill & Son Ltd

Yard No.

173

When built

1929

Engines made at

Augsburg

By whom made

Maschinenfabrik Augsburg-Nürnberg

Engine No.

When made

1918

Boilers made at

Hitchin

By whom made

Spencer Hopwood & Co Ltd

Boiler No.

10355

When made

1929

Owners

Channel Tankers Ltd

Port belonging to

London

VERTICAL DONKEY BOILER.

Made at

Hitchin

By whom made

Spencer Hopwood

Boiler No.

10355

When made

1929

Where fixed

Manufacturers of Steel

Newtons & Co Ltd

Total Heating Surface of Boiler

324 sq ft

Is forced draught fitted

no

Coal or Oil fired

oil

No. and Description of Boilers

One No. 20 Spencer Hopwood Patent

Working pressure

120 lb/sq in

Tested by hydraulic pressure to

230 lb/sq in

Date of test

Oct 4th 1929

No. of Certificate

1344

Area of Firegrate in each Boiler

No. and Description of safety valves to each boiler

2 - Spring loaded

Area of each set of valves per boiler

per rule 3.56
as fitted 6.28

Pressure to which they are adjusted

125 lb

Are they fitted with easing gear

yes

State whether steam from main boilers can enter the donkey boiler

Smallest distance between boiler or uptake and bunkers

or woodwork

Is oil fuel carried in the double bottom under boiler

Smallest distance between base of boiler and tank top plating

Is the base of the boiler insulated

Largest internal dia. of boiler

5' 3"

Height

12 ft 6"

Shell plates: Material

Steel

Tensile strength

26-32

Thickness

7/16"

Are the shell plates welded or flanged

Description of riveting: circ. seams

end SR Lap
inter SR Lap

long. seams

SR Lap

Dia. of rivet holes in

circ. seams 13/16
long. seams 13/16

Pitch of rivets

2" / 2 3/4"

Percentage of strength of circ. seams

plate 56.5%
rivets 56.5%

of Longitudinal joint

plate 69%
rivets 73.5%
combined

Working pressure of shell by rules

228

Thickness of butt straps

outer

inner

Shell Crown: Whether complete hemisphere, dished partial spherical, or flat

Flat

Material

Steel

Tensile strength

26-30

Thickness

1 1/16"

Radius

Working pressure by rules

120

Description of Furnace: Plain, spherical, or dished crown

Flat top

Material

Steel

Tensile strength

26-30

Thickness

1 1/16"

External diameter

top 4' 3 3/8"
bottom 4' 9"

Length as per rule

Working pressure by rules

120

Pitch of support stays circumferentially

and vertically

Are stays fitted with nuts or riveted over

Diameter of stays over thread

Radius of spherical or dished furnace crown

Working pressure by rule

Thickness of Ogee Ring

Diameter as per rule

D

Working pressure by rule

Combustion Chamber: Material

Tensile strength

Thickness of top plate

Radius if dished

Working pressure by rule

Thickness of back plate

Diameter if circular

Length as per rule

Pitch of stays

Are stays fitted with nuts or riveted over

Diameter of stays over thread

Working pressure of back plate by rules

Tube Plates: Material

front Steel
back Steel

Tensile strength

26-30

Thickness

1 1/16"

Mean pitch of stay tubes in nests

9 1/2"

If comprising shell, Dia. as per rule

front
back

Pitch in outer vertical rows

Dia. of tube holes FRONT

stay
plain

BACK

stay
plain

Is each alternate tube in outer vertical rows a stay tube

Working pressure by rules

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 rule

Crown 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 _____ Working pressure by rules _____ Are the stays drilled at the outer ends _____

Tubes: Material *Solid drawn steel* External diameter { plain *2 1/4* ✓ stay *2 1/4* ✓ Thickness { *11 208* ✓ *14* ✓

No. of threads per inch *11* Pitch of tubes *3 1/8 16v. 3-Vert* ✓ Working pressure by rules *120*

Manhole Compensation: Size of opening in shell plate *14x11* ✓ Section of compensating ring *2' dia x 1/2"* No. of rivets and diameter of rivet holes *24 - 13/16* ✓ Outer row rivet pitch at ends *5 1/2* ✓ Depth of flange if manhole flanged _____

Uptake: External diameter *1' 11 5/8* ✓ Thickness of uptake plate *1/16* ✓

Cross Tubes: No. _____ External diameters { _____ Thickness of plates _____

Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with *Yes*

SPENCER-HOPWOOD, LTD.
The foregoing is a correct description,

J. Hadley Manufacturer.

Dates of Survey { During progress of *1929 SEP 13.20 Oct 4* work in shops - - }
while building { During erection on *1929 Oct. 9, 15.* board vessel - - }

Is the approved plan of boiler forwarded herewith *Yes*
(If not state date of approval.)
Total No. of visits *3 (In Shop)* *2 (On Board)*

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

This boiler has been built under Special Survey in accordance with the plan and the Society's Rules -
The material has been tested by the Society's Surveyors.
The workmanship is good.

Upon completion the boiler was tested by hydraulic pressure to 230 lbs per sq. inch and was tight & sound at that pressure.

The boiler is stamped:

No. 1344

Lloyd's Test 230 lbs

WP. 120 lbs

4-10-29 H.P.C.

This boiler has now been fitted & secured on board the Motor vessel "Elthorne" according to the Rules & tested under steam found satisfactory

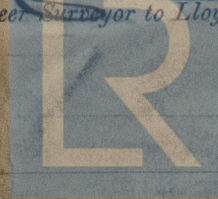
John W. Gwynne

Survey Fee ... £ *4 : 4 : -* When applied for *- 7 OCT 1929*
Travelling Expenses (if any) £ *: 17 - 6* When received *17/4 pt 9.10.29 JW*
24.4.0 pt 20.00 JW

J. T. Cornish
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute *TUE. 12 NOV 1929*

Assigned *See Pro Report No 12282*



Lloyd's Register
Foundation