

REPORT ON BOILERS.

No. 91138

b.

MARKS.

Received at London Office 23 MAY 1927

Writing Report May 21st 1927 When handed in at Local Office 23 MAY 1927 Port of London
Survey held at Kitchin Date, First Survey 2nd May 1927 Last Survey May 17th 1927
on the Spencer-Hopwood Boiler for Beng & Burg.
(Number of Visits 3) Tons Gross Net

By whom built Yard No. When built
By whom made Engine No. When made
By whom made Boiler No. When made
Port belonging to

Heating Vertical DONKEY BOILER.
at Kitchin By whom made Spencer-Hopwood Boiler No. 6481 When made 1927 Where fixed
Manufacturers of Steel The Leeds Forge Co. Ltd.

Heating Surface of Boiler 464 sq ft Is forced draught fitted no Coal or Oil fired Oil fired
Description of Boilers One Vertical Spencer-Hopwood patent Working pressure 180 lb/sq in
Tested by hydraulic pressure to 200 lb/sq in Date of test 17-5-27 No. of Certificate 1312
Area of Firegrate in each Boiler 23.76 sq ft No. and Description of safety valves to each boiler 2 Spring loaded.
Pressure to which they are adjusted 6.0 lb/sq in Are they fitted with easing gear
Whether steam from main boilers can enter the donkey boiler Smallest distance between boiler or uptake and bunkers

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 6 ft Height 14' 8"
Material Steel Tensile strength 28-32 Thickness 1 1/32
Description of riveting: circ. seams 4th CR long. seams 5th CR
Pitch of rivets 2 5/8" Percentage of strength of circ. seams plate 59.6% rivets 49.7% of Longitudinal joint plate 71% rivets 120% combined
Working pressure of shell by rules 130 Thickness of butt straps outer 1/2" inner 1/2"

Crown: Whether complete hemisphere, dished partial spherical, or flat Flat Material Steel
Tensile strength 28-32 Thickness 3/4" Radius Working pressure by rules 100

Description of Furnace: Plain, spherical, or dished crown plain Material Steel Tensile strength 26-30
Thickness 3/4" External diameter top 4' 10" 4' 3" Length as per rule 5' 10" Working pressure by rules 129
of support stays circumferentially and vertically Are stays fitted with nuts or riveted over

Radius of spherical or dished furnace crown Working pressure by rule
Diameter as per rule Working pressure by rule
Material Tensile strength Thickness of top plate
Working pressure by rule Thickness of back plate Diameter if circular

Pitch of stays Are stays fitted with nuts or riveted over
Working pressure of back plate by rules
Material Tensile strength Thickness 3/4" Mean pitch of stay tubes in nests 10 1/8"
Pitch in outer vertical rows Dia. of tube holes FRONT BACK

Working pressure by rules
Material Tensile strength Length as per rule
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 *Steel* ✓ External diameter { plain *2 1/4* ✓ 5 1/2 ✓ stay " " " Thickness { *11/16* ✓ 1/4 ✓

No. of threads per inch *11* ✓ Pitch of tubes *3 1/8 x 3* ✓ Working pressure by rules *100* ✓

Manhole Compensation: Size of opening in shell plate *14 x 11* ✓ Section of compensating ring *2 1/4 dia x 9/16* ✓ No. of rivets and diameter of rivet holes *24 - 7/8* ✓ Outer row rivet pitch at ends *5 1/2* ✓ Depth of flange if manhole flanged _____ ✓

Uptake: External diameter *27* ✓ Thickness of uptake plate *3/4* ✓

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. P. Bradley

Manufacturer.

WORKS MANAGER.

Dates of Survey { During progress of work in shops - - *1927* *MAY 2. 6. 17* while building { During erection on board vessel - -

Is the approved plan of boiler forwarded herewith (If not state date of approval.) *Yes* ✓

Total No. of visits *3 (IN SHOPS)*

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

This boiler has been built under Special Survey, in accordance with the plan & the Society's Rules - The Steel used in its construction has been tested according to the Rules.

The workmanship is good.

Upon completion the boiler was tested by hydraulic pressure to 200 lbs. and showed no sign of weakness or defect.

The boiler is stamped: -

No. 1312

Hydr. test

200 lbs.

WP. 100 lbs.

17-5-27 S.P.C.

Survey Fee £ *4. 4. -* Travelling Expenses (if any) £ *1. 19/8*

When applied for, *23 MAY 1927*

When received, *11. 8. 1927*

Committee's Minute

Assigned

Not for classing Committee

S. P. Cornish

Engineer in Charge to Lloyd's Register of Shipping.

TUES. 15 NOV 1927

Lloyd's Register Foundation