

# REPORT ON BOILERS.

Std. No. 29312  
Lon No. 90342

Received at London Office

30 SEP. 1926

Date of writing Report Aug 3<sup>rd</sup> 1926 When handed in at Local Office 6 AUG. 1926 Port of London

No. in Survey held at Stitchin Date, First Survey July 7<sup>th</sup> Last Survey July 22<sup>nd</sup> 1926  
 Reg. Book. M. S.M. "SILVERASH"

on the Spencer Bonecourt Works Strat Boilers No. 5820 (Number of Visits 4) Gross 5299  
 Tons Net 3091

Built at Sunderland By whom built J. S. Thompson Donold Yard No. 555 When built 1926

Engines made at Sunderland By whom made (Wm. Duxford Iron) Engine No. (157) When made 1926

Boilers made at Stitchin By whom made Spencer Bonecourt & Co Boiler No. 5820 When made 1926

Owners Silver Line, Ltd. Port belonging to London

## VERTICAL DONKEY BOILER.

Made at Stitchin By whom made Spencer Bonecourt & Co Boiler No. 5820 When made 1926 Where fixed on exhaust manifold above top grate

Manufacturers of Steel The Leeds Forge Co - Stewart & Lloyd

Total Heating Surface of Boiler 143 sq ft Is forced draught fitted  Coal or Oil fired Waste Heat

No. and Description of Boilers One, Spencer Bonecourt, Kirk's Patent Working pressure 100

Tested by hydraulic pressure to 200 lbs Date of test 30-7-26 No. of Certificate 1299

Area of Firegrate in each Boiler Nil. No. and Description of safety valves to each boiler 2 Spring loaded.

Area of each set of valves per boiler { per rule 3.50 as fitted 3.50 Pressure to which they are adjusted 105 lbs Are they fitted with easing gear Yes

State whether steam from aux boilers can enter the donkey boiler No 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 Waste Heat open sided. Largest internal dia. of boiler 3 ft Height 6'-9"

Shell plates: Material Steel Tensile strength 28-32 Thickness 3/4

Are the shell plates welded or flanged no Description of riveting: circ. seams { end SR inter SR long. seams 5R lap

Dia. of rivet holes in { circ. seams 13/16 Pitch of rivets { 2" Percentage of strength of circ. seams { plate 59.3 rivets 55.7 of Longitudinal joint { plate 58.4 rivets 84.2 combined

Working pressure of shell by rules 150 Thickness of butt straps { outer inner

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

Tensile strength \_\_\_\_\_ Thickness \_\_\_\_\_ Radius \_\_\_\_\_ Working pressure by rules \_\_\_\_\_

Description of Furnace: Plain, spherical, or dished crown \_\_\_\_\_ Material \_\_\_\_\_ Tensile strength \_\_\_\_\_

Thickness \_\_\_\_\_ External diameter { top bottom \_\_\_\_\_ Length as per rule \_\_\_\_\_ Working pressure by rules \_\_\_\_\_

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 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 back Steel Tensile strength { 28-32 Thickness { 5/8 Mean pitch of stay tubes in nests \_\_\_\_\_

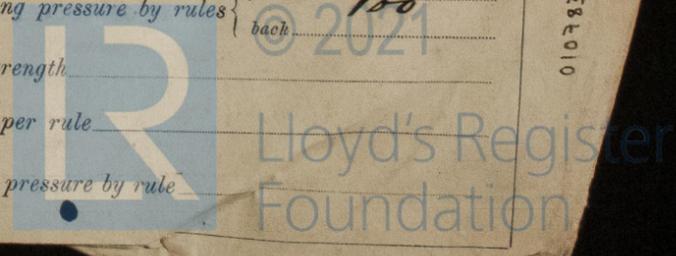
If comprising shell, Dia. as per rule { front back \_\_\_\_\_ Pitch in outer vertical rows { \_\_\_\_\_ Dia. of tube holes FRONT { stay plain 2 1/8 BACK { stay plain 2"

Is each alternate tube in outer vertical rows a stay tube ✓ Working pressure by rules { front 150 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 \_\_\_\_\_



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**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"* or *drilled to 2 1/4"* } Thickness { *10 lbs.* }  
 No. of threads per inch \_\_\_\_\_ Pitch of tubes *3" x 3"* Working pressure by rules *100*

**Manhole Compensation:** Size of opening in shell plate *14 x 11 + 13 x 10* Section of compensating ring *24 x 21 x 9/16* No. of rivets and diameter *1/2"*  
 of rivet holes *24 x 13/16* Outer row rivet pitch at ends *5 3/4* Depth of flange if manhole flanged \_\_\_\_\_

**Uptake:** External diameter \_\_\_\_\_ Thickness of uptake plate \_\_\_\_\_

**Cross Tubes:** No. \_\_\_\_\_ External diameters { \_\_\_\_\_ } Thickness of plates \_\_\_\_\_

Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with \_\_\_\_\_

The foregoing is a correct description,  
*A. G. J. Spencer* Manufacturer.

Dates of Survey { During progress of work in shops - - } *July 7, 19, 21, 30.* Is the approved plan of boiler forwarded herewith *Yes*  
 { while building } { During erection on board vessel - - } { (If not state date of approval.) }  
 Total No. of visits *4*

**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 workmanship is good. The material has been tested in per Rule. Upon completion the boiler was tested by hydraulic pressure to 200 lbs per sq. inch and showed no sign of weakness or defect.*

*The boiler is stamped: - No. 1299.*  
*Hydro test 200 lbs*  
*wp. 100 lbs.*  
*20-7-26 H.P.C.*

*This boiler has been satisfactorily fitted in the vessel & the safety valves adjusted under steam to the pressure stated below for installation see machinery report.*

Survey Fee ... .. £ *4 : 4* : } When applied for, *6. 8. 19 26.*  
 Travelling Expenses (if any) £ *2 : 11* : } When received, *11. 8. 19 26*

*J. J. Cornish*  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **TUES. 5 OCT 1926**  
 assigned *see minute on*  
*Std J. E. Rpt 29312*  
**TUES. 15 NOV 1927**

