

# REPORT ON BOILERS.

No. 88620

Received at London Office - 9 FEB 1925

Date of writing Report - 9 FEB 1925 When handed in at Local Office 9 FEB 1925 Port of London

No. in Reg. Book. Survey held at Hitchin Date, First Survey 16 JANUARY Last Survey Feb. 2nd 1925

on the Steel Breech-back Boiler No. 3288 (Number of Visits 3) Tons { Gross Net

Master \_\_\_\_\_ Built at Rotterdam By whom built My van Scheem & Wijk Yard No. 299 When built 1925

Engines made at Rotterdam By whom made \_\_\_\_\_ Engine No. \_\_\_\_\_ When made 1925

Boilers made at \_\_\_\_\_ By whom made \_\_\_\_\_ Boiler No. 1295-96 When made 1925

Nominal Horse Power 438 Owners Hoomer My De Maas Port belonging to Rotterdam

Heating Boilers See letter Rot dated 26/8/27 stating the boiler is used in connection with machinery  
**MULTITUBULAR BOILERS - MAIN, AUXILIARY, OR DONKEY.**

Manufacturers of Steel Lars Berg Co. & Rotherham Forge Co. (Letter for Record 5)

Total Heating Surface of Boilers 923 sq ft Is forced draught fitted No Coal or Oil fired Exhaust Gases

No. and Description of Boilers See Spencer-Bremlow back sheet Working Pressure 115 lbs per sq in

Tested by hydraulic pressure to 223 Date of test Feb 2nd No. of Certificate 1282 Can each boiler be worked separately Yes

Area of Firegrate in each Boiler 8.6 sq ft No. and Description of safety valves to each boiler 2 Spring loaded (Birkers)

Area of each set of valves per boiler 8.6 sq ft Pressure to which they are adjusted 115 lbs Are they fitted with easing gear Yes

In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler No

Smallest distance between boilers or uptakes and bunkers or woodwork Yes Is oil fuel carried in the double bottom under boilers Yes

Smallest distance between shell of boiler and tank top plating Yes Is the bottom of the boiler insulated Yes

Largest internal dia. of boilers 5 ft Length 12 ft Shell plates: Material Steel Tensile strength 28

Thickness 7/16 Are the shell plates welded or flanged No Description of riveting: circ. seams Single butts

long. seams B.R. Diameter of rivet holes in { circ. seams 13/16 Pitch of rivets { 2 in

Percentage of strength of circ. end seams { plate 57.3% rivets 48.6% Percentage of strength of circ. intermediate seam { plate 57.3% rivets 48.6%

Percentage of strength of longitudinal joint { plate 73.2% rivets 122% Working pressure of shell by Rules 235

Thickness of butt straps { outer 7/16 inner 7/16 No. and Description of Furnaces in each Boiler \_\_\_\_\_

Material \_\_\_\_\_ Tensile strength \_\_\_\_\_ Smallest outside diameter \_\_\_\_\_

Length of plain part { top \_\_\_\_\_ bottom \_\_\_\_\_ Thickness of plates { crown \_\_\_\_\_ bottom \_\_\_\_\_ Description of longitudinal joint \_\_\_\_\_

Dimensions of stiffening rings on furnace or c.c. bottom \_\_\_\_\_ Working pressure of furnace by Rules \_\_\_\_\_

End plates in steam space: Material Steel Tensile strength 27 Thickness 11/16 Pitch of stays \_\_\_\_\_

How are stays secured \_\_\_\_\_ Working pressure by Rules \_\_\_\_\_

Tube plates: Material { front Steel back Steel Tensile strength { 27.1 Thickness { 11/16 11/16

Mean pitch of stay tubes in nests 13 in Pitch across wide water spaces \_\_\_\_\_ Working pressure { front 115 back 115

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 Rules \_\_\_\_\_ Combustion chamber plates: Material \_\_\_\_\_

Tensile strength \_\_\_\_\_ Thickness: Sides \_\_\_\_\_ Back \_\_\_\_\_ Top \_\_\_\_\_ Bottom \_\_\_\_\_

Pitch of stays to ditto: Sides \_\_\_\_\_ Back \_\_\_\_\_ Top \_\_\_\_\_ Are stays fitted with nuts or riveted over \_\_\_\_\_

Working pressure by Rules \_\_\_\_\_ Front plate at bottom: Material \_\_\_\_\_ Tensile strength \_\_\_\_\_

Thickness \_\_\_\_\_ Lower back plate: Material \_\_\_\_\_ Tensile strength \_\_\_\_\_ Thickness \_\_\_\_\_

Pitch of stays at wide water space \_\_\_\_\_ Are stays fitted with nuts or riveted over \_\_\_\_\_

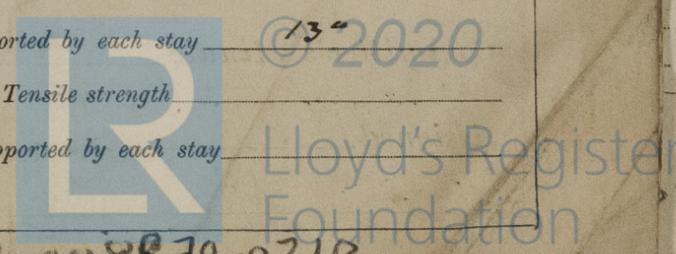
Working Pressure \_\_\_\_\_ Main stays: Material Steel Tensile strength 26-30

Diameter { At body of stay, 1 3/8 in or 8 No. of threads per inch 8 Area supported by each stay \_\_\_\_\_

Working pressure by Rules 200 Screw stays: Material \_\_\_\_\_ Tensile strength \_\_\_\_\_

Diameter { At turned off part, \_\_\_\_\_ or \_\_\_\_\_ No. of threads per inch \_\_\_\_\_ Area supported by each stay \_\_\_\_\_

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Working pressure by Rules \_\_\_\_\_ Are the stays drilled at the outer ends \_\_\_\_\_ Margin stays: Diameter { At turned off part, or Over threads } \_\_\_\_\_  
 No. of threads per inch \_\_\_\_\_ Area supported by each stay \_\_\_\_\_ Working pressure by Rules \_\_\_\_\_  
 Tubes; Material steel External diameter { Plain 1 3/4" Stay 1 1/4" Thickness { 10 S.W.S. No. of threads per inch \_\_\_\_\_  
 Pitch of tubes 2 3/4" Working pressure by Rules \_\_\_\_\_ Manhole compensation: Size of opening \_\_\_\_\_  
 shell plate 16 x 12 Section of compensating ring 14" x 1/2" No. of rivets and diameter of rivet holes 48 - 13/16  
 Outer row rivet pitch at ends 3 1/4" Depth of flange if manhole flanged \_\_\_\_\_ Steam Dome: Material \_\_\_\_\_  
 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 \_\_\_\_\_  
 How connected to shell \_\_\_\_\_ Inner radius of crown 11" Working pressure by Rules \_\_\_\_\_  
 of rivets in outer row in dome connection to shell \_\_\_\_\_ Size of doubling plate under dome \_\_\_\_\_ Diameter of rivet holes and pitch \_\_\_\_\_

**Type of Superheater** \_\_\_\_\_ 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 \_\_\_\_\_  
 Area of each safety valve \_\_\_\_\_ Is a safety valve fitted to every part of the superheater which can be shut off from the boiler \_\_\_\_\_  
 Rules \_\_\_\_\_ Pressure to which the safety valves are adjusted \_\_\_\_\_ Working pressure as per \_\_\_\_\_  
 tubes \_\_\_\_\_, castings \_\_\_\_\_ and after assembly in place \_\_\_\_\_ Hydraulic test pressure \_\_\_\_\_  
 to free the superheater from water where necessary \_\_\_\_\_ Are drain cocks or valves fitted \_\_\_\_\_  
 Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with \_\_\_\_\_

The foregoing is a correct description,  
**SPENCER-BONECOURT LTD.** Manufacturer  
*A. Jackson*

Dates of Survey { During progress of work in shops - - - } 1925 JAN 16 - 20 FEB 2  
 while building { During erection on board vessel - - - } \_\_\_\_\_  
 Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.) \_\_\_\_\_  
 Total No. of visits 3

**GENERAL REMARKS** (State quality of workmanship, opinions as to class, &c.)  
*This boiler has been built under Special Survey in accordance with the Rules and the approved plan. It was tested by hydraulic pressure to 223 lbs per sq. inch, showing no signs of weakness and was found tight & sound in every respect at that pressure.  
 It is stamped: - No. 1282  
 Hydro test  
 223 lbs  
 W.P. 115 lbs  
 2-2-25 H.P.C.*

Survey Fee ... .. £ 4 : 4 : 0 | When applied for, 10 FEB 1925  
 Travelling Expenses (if any) £ 2 : 2 : 0 | When received, 17 X 2 1925  
*CCP*

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

Committee's Minute \_\_\_\_\_ TUES. 14 JUL 1925  
 Assigned \_\_\_\_\_

