

# REPORT ON BOILERS.

No. 92664

Received at London Office

25 JUN 1935

Report 22<sup>nd</sup> June, 1935 When handed in at Local Office 22<sup>nd</sup> June 1935 Port of **NEWCASTLE-ON-TYNE**

Survey held at **Newcastle-on-Tyne** Date, First Survey **29 April** Last Survey **17.6.1935**

the **T.S.S. "MAIMOA"** (Number of Visits         ) Tons { Gross **8011** Net **5000**

Built at **Newcastle-on-Tyne** by whom built **Palmer's Co. Ltd.** Yard No.          When built **1920.9.**

at **Newcastle-on-Tyne** By whom made **Palmer's Co. Ltd.** Engine No.          When made **1920.**

at **Newcastle-on-Tyne** By whom made **Palmer's Co. Ltd.** Boiler No.          When made **1920.**

Power **1039.** Owners **Shaw, Savill & Albion Co. Ltd.** Port belonging to **Southampton**

## TUBULAR BOILERS—MAIN, ~~AUXILIARY, OR DONKEY.~~

~~of Steel~~ **Fitting of Superheaters to the Main Boilers.** (Letter for Record         )

~~ing Surface of Boilers~~ Is forced draught fitted          Coal or Oil fired         

~~scription of Boilers~~ Working Pressure         

~~draulic pressure to~~ Date of test          No. of Certificate          Can each boiler be worked separately         

~~egrate in each Boiler~~ No. and Description of safety valves to each boiler         

~~h set of valves per boiler~~ { per Rule          as fitted          Pressure to which they are adjusted          Are they fitted with easing gear         

~~onkey boilers, state whether steam from main boilers can enter the donkey boiler~~         

~~istance between boilers or uptakes and bunkers or woodwork~~ Is oil fuel carried in the double bottom under boilers         

~~istance between shell of boiler and tank top plating~~ Is the bottom of the boiler insulated         

~~ernal dia. of boilers~~ Length          Shell plates: Material          Tensile strength         

Are the shell plates welded or flanged          Description of riveting: circ. seams { end          inter.         

Diameter of rivet holes in { circ. seams          long. seams          Pitch of rivets {         

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

of strength of longitudinal joint { plate          rivets          combined          Working pressure of shell by Rules         

f butt straps { outer          inner          No. and Description of Furnaces in each Boiler         

Tensile strength          Smallest outside diameter         

lain part { top          bottom          Thickness of plates { crown          bottom          Description of longitudinal joint         

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

in steam space: Material          Tensile strength          Thickness          Pitch of stays         

ays secured          Working pressure by Rules         

st: Material { front          back          Tensile strength {          Thickness {         

of stay tubes in nests          Pitch across wide water spaces          Working pressure { front          back         

combustion chamber tops: Material          Tensile strength          Depth and thickness of girder         

Length as per Rule          Distance apart          No. and pitch of stays         

Working pressure by Rules          Combustion chamber plates: Material         

Length          Thickness: Sides          Back          Top          Bottom         

ays to ditto: Sides          Back          Top          Are stays fitted with nuts or riveted over         

ressure by Rules          Front plate at bottom: Material          Tensile strength         

Lower back plate: Material          Tensile strength          Thickness         

ays at wide water space          Are stays fitted with nuts or riveted over         

ressure          Main stays: Material          Tensile strength         

t body of stay,          No. of threads per inch          Area supported by each stay         

ressure by Rules          Screw stays: Material          Tensile strength         

t turned off part,          No. of threads per inch          Area supported by each stay         

W54-046

© 2019

Lloyd's Register Foundation

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 \_\_\_\_\_ External diameter { Plain Stay } Thickness { \_\_\_\_\_ No. of threads per inch \_\_\_\_\_ }  
 Pitch of tubes \_\_\_\_\_ Working pressure by Rules \_\_\_\_\_ Manhole compensation: Size \_\_\_\_\_  
 shell plate \_\_\_\_\_ Section of compensating ring \_\_\_\_\_ No. of rivets and diameter of rivet holes \_\_\_\_\_  
 Outer row rivet pitch at ends \_\_\_\_\_ 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. of stays \_\_\_\_\_  
 How connected to shell \_\_\_\_\_ Inner radius of crown \_\_\_\_\_ Working pressure by Rules \_\_\_\_\_  
 Size of doubling plate under dome \_\_\_\_\_ Diameter of rivet holes \_\_\_\_\_  
 of rivets in outer row in dome connection to shell \_\_\_\_\_

Type of Superheater *The R. E. Marine Locomotive Type* manufacturers of *Jalbot Stead, Braden, Prodingham Steel Co.*  
 Number of elements *432* Material of tubes *40 Steel* Internal diameter and thickness of tubes *14 2/3" x 3/8"*  
 Material of headers *Forged Steel* Tensile strength *26,730 tons/sq. in.* Thickness *1 1/2"* Can the superheater be worked separately *no*  
 Is a safety valve fitted to every part of the superheater which can be shut off from the boiler *yes*  
 Area of each safety valve *3.1416 sq. in.* Are the safety valves fitted with easing gear *yes* Working pressure \_\_\_\_\_  
 Rules *220 lbs./sq. in.* Pressure to which the safety valves are adjusted *225 lbs./sq. in.* Hydraulic \_\_\_\_\_  
 tubes *1500 lbs./sq. in.* Castings *660 lbs./sq. in.* and after assembly in place *450 lbs./sq. in.* Are drain cocks to free the superheater from water where necessary *yes.*

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with \_\_\_\_\_  
 The foregoing is a correct description \_\_\_\_\_

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

Is this Boiler a duplicate of a previous case \_\_\_\_\_ If so, state Vessel's name and Report No. \_\_\_\_\_

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *Superheaters have now been fitted to all main boilers; the materials and workmanship are good; hydraulic tests satisfactory. See also Report on Form Rpt. 9 herewith.*

Survey Fee ... .. £ *30 : 0 : 0* When applied for, *24 JUN 1935* 19 \_\_\_\_\_  
 Travelling Expenses (if any) £ : : When received, *3-7* 19 *35* *7/17*  
*H. B. Forster.*  
 Engineer Surveyor to Lloyd's Register

Committee's Minute *TUE. 9 JUL 1935*

Assigned *See other rpt No. 92664*

