

# REPORT ON BOILERS.

No. 47865

Received at London Office

2 MAY 1928

Writing Report apl 25 1928 When handed in at Local Office 28.4.1928 Port of Glasgow

Survey held at Grangemouth Date, First Survey 16.9.27 Last Survey apl 20 1928

on the S.S. MIRANI (Number of Visits 44) Tons { Gross 739 Net 381

Built at Grangemouth By whom built Gmh Dryd Co Ltd Yard No. 415 When built 1928

made at Glasgow By whom made Mckie & Baxter Engine No. 1209 When made 1928

made at Hebburn By whom made Palmer's S & J. Co Ltd Boiler No. 1087 When made 1928

Horse Power 100 Owners Burns Philps & Co Port belonging to London

## TITUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel (Letter for Record)

Heating Surface of Boilers Is forced draught fitted Coal or Oil fired

Description of Boilers Working Pressure

by hydraulic pressure to Date of test No. of Certificate Can each boiler be worked separately

Number and Description of safety valves to each boiler 2 S.L. ✓

Pressure to which they are adjusted 200 lb Are they fitted with easing gear yes ✓

of donkey boilers, state whether steam from main boilers can enter the donkey boiler no

Least distance between boilers or uptakes and bunkers or woodwork 6 1/2" Is oil fuel carried in the double bottom under boilers no

Least distance between shell of boiler and tank top plating 15" Is the bottom of the boiler insulated yes

Internal 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 { }

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

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

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

Tensile strength Smallest outside diameter

Thickness of plates { crown bottom } Description of longitudinal joint

Working pressure of furnace by Rules

Material Tensile strength Thickness Pitch of stays

Working pressure by Rules

Material { front back } Tensile strength Thickness { }

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

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

Thickness: Sides Back Top Bottom

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

Material Tensile strength Thickness

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

Working Pressure Main stays: Material Tensile strength

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

At turned off part, or Over threads 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 \_\_\_\_\_ External diameter { Plain Stay } \_\_\_\_\_ Thickness { \_\_\_\_\_ } No. of threads per inch \_\_\_\_\_

Pitch of tubes \_\_\_\_\_ Working pressure by Rules \_\_\_\_\_ **Manhole compensation:** Size of opening \_\_\_\_\_

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. and diameter of stays \_\_\_\_\_

\_\_\_\_\_ Inner radius of crown \_\_\_\_\_ Working pressure by Rules \_\_\_\_\_

How connected to shell \_\_\_\_\_ Size of doubling plate under dome \_\_\_\_\_ Diameter of rivet holes and \_\_\_\_\_

of rivets in outer row in dome connection to shell \_\_\_\_\_

**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 \_\_\_\_\_

the boiler be worked separately \_\_\_\_\_ Is a safety valve fitted to every part of the superheater which can be shut off from the boiler \_\_\_\_\_

Area of each safety valve \_\_\_\_\_ Are the safety valves fitted with easing gear \_\_\_\_\_ Working pressure \_\_\_\_\_

Rules \_\_\_\_\_ Pressure to which the safety valves are adjusted \_\_\_\_\_ Hydraulic test pressure \_\_\_\_\_

tubes \_\_\_\_\_ castings \_\_\_\_\_ and after assembly in place \_\_\_\_\_ Are drain cocks or valves \_\_\_\_\_

to free the superheater from water where necessary \_\_\_\_\_

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

The foregoing is a correct description,

Dates of Survey { During progress of work in shops - - - } *See accompanying machinery report.* 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 *HH* \_\_\_\_\_

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

*This boiler has been fitted in the above vessel.*

*Alb  
28/4/28*

Survey Fee ... .. £ : : } When applied for, 192

Travelling Expenses (if any) £ : : } When received, 192

*H. L. Sutherland*

Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute **GLASGOW 1-MAY 1928**

Assigned *See accompanying Mach. Report.*



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