

## REPORT ON BOILERS.

No. 20328

Received at London Office

17 MAR 1937

Date of writing Report 18.2.37 When handed in at Local Office 12th March 1937 Port of Greenock

No. in Survey held at Greenock Date, First Survey 9th June 1936 Last Survey 10th March 1937

eg. Book. M/S "Regent Panther" (Number of Visits ☒) Tons {Gross 9556  
Net 5799

on the Greenock Built at Newcastle By whom built Swan & Hunter Ltd Yard No. 1523 When built 1937

Engines made at Greenock By whom made John & Co. Ltd Engine No. 17105 When made 1937

Boilers made at ditto By whom made ditto Boiler No. 17105 When made 1937

nominal Horse Power Owners CT Bawing & Co. Ltd Port belonging to London

MULTITUBULAR BOILERS—~~MAIN~~ AUXILIARY, ~~OR DONKEY~~.

Manufacturers of Steel Steel Co of Scotland, Bolnisi Works (Letter for Record S)

Total Heating Surface of Boilers 1210 sq ft Is forced draught fitted yes Coal or Oil fired oil

No. and Description of Boilers one Single Ended Working Pressure 180

Tested by hydraulic pressure to 320 Date of test 26.2.37 No. of Certificate 2090 Can each boiler be worked separately —

Area of Firegrate in each Boiler 0.15 No. and Description of safety valves to each boiler 2 Cockburn Improved High Lift

Area of each set of valves per boiler {per Rule 3.9 sq ft  
as fitted 4.8 sq ft Pressure to which they are adjusted 180 lb Are they fitted with easing gear yes

In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler —

Smallest distance between boilers or uptakes and bunkers 18" air Is oil fuel carried in the double bottom under boilers No

Smallest distance between shell of boiler and tank top plating 30" air Is the bottom of the boiler insulated —

Largest internal dia. of boilers 11' 2 3/4" Length 10' 6" Shell plates: Material S Tensile strength 29.33

Thickness 29/32" Are the shell plates welded or flanged — Description of riveting: circ. seams {end DR  
inter. —

Long. seams TRIDBS Diameter of rivet holes in {circ. seams 15/16"  
long. seams 29/32" Pitch of rivets {2' 6 1/4"  
6' 1/8"

Percentage of strength of circ. end seams {plate 64.2  
rivets 46.1 Percentage of strength of circ. intermediate seam {plate 85.2  
rivets 86.4

Percentage of strength of longitudinal joint {plate 85.2  
rivets 86.4 Working pressure of shell by Rules 181

Thickness of butt straps {outer 1 1/16"  
inner 1 3/16" No. and Description of Furnaces in each Boiler 2 Deightons

Material S Tensile strength 26.30 Smallest outside diameter 30 15/16"

Length of plain part {top —  
bottom — Thickness of plates {crown 1 15/32"  
bottom 1 15/32" Description of longitudinal joint weld

Dimensions of stiffening rings on furnace or c.c. bottom — Working pressure of furnace by Rules 182

End plates in steam space: Material S Tensile strength 26.30 Thickness 1 1/32" Pitch of stays 16 1/2" x 16 1/2"

How are stays secured DN Washers Working pressure by Rules 181

Tube plates: Material {front S  
back S Tensile strength {26.30 Thickness {3/4"

Lean pitch of stay tubes in nests 10.42" Pitch across wide water spaces 14" Working pressure {front 185  
back 201

Girders to combustion chamber tops: Material S Tensile strength 29.33 Depth and thickness of girder —

Centre 8 1/4" x 3 1/4" (2) Length as per Rule 2' 7 1/2" Distance apart 8" No. and pitch of stays —

In each 2 at 10" Working pressure by Rules 188 Combustion chamber plates: Material S

Tensile strength 26.30 Thickness: Sides 2 1/32" Back 2 1/32" Top 2 1/32" Bottom 2 1/32"

Pitch of stays to ditto: Sides 8" x 10" Back 9" x 9 1/4" Top 10" x 8" Are stays fitted with nuts or riveted over Nuts

Working pressure by Rules 183 Front plate at bottom: Material S Tensile strength 26.30

Thickness 1" Lower back plate: Material S Tensile strength 26.30 Thickness 2 5/32"

Pitch of stays at wide water space 13 3/4" Are stays fitted with nuts or riveted over Nuts

Working Pressure 188 Main stays: Material S Tensile strength 28.32

Diameter {At body of stay, 2 1/2"  
or —  
Over threads — No. of threads per inch 6 Area supported by each stay 242.25 sq in

Working pressure by Rules 196 Screw stays: Material S Tensile strength 26.30

Diameter {At turned off part, 1 5/8"  
or —  
Over threads — No. of threads per inch 9 Area supported by each stay 83.25 sq in



Working pressure by Rules 183 Are the stays drilled at the outer ends 910 Margin stays: Diameter { At turned off part, 3/4" or Over threads ✓  
No. of threads per inch 9 Area supported by each stay 90 125" Working pressure by Rules 181  
Tubes: Material Iron External diameter { Plain } 3" Thickness { 5/16 1/4 3/8 } No. of threads per inch 9  
Pitch of tubes 4 1/4" x 4 5/16" Working pressure by Rules 193 Manhole compensation: Size of opening in shell plate 16 x 20 Section of compensating ring 2.9 x 2.5 x 1.6" No. of rivets and diameter of rivet holes 38 at 1 1/8"  
Outer row rivet pitch at ends 4 5/8" Depth of flange if manhole flanged 3 1/2" 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 pitch 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 and 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 as per Rules \_\_\_\_\_ Pressure to which the safety valves are adjusted \_\_\_\_\_ Hydraulic test pressure: tubes \_\_\_\_\_, castings \_\_\_\_\_ and after assembly in place \_\_\_\_\_ Are drain cocks or valves fitted to free the superheater from water where necessary \_\_\_\_\_  
Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with \_\_\_\_\_

The foregoing is a correct description,  
For JOHN G. KINCAID & CO. LIMITED.  
W. G. Kincaid Director. Manufacturer.

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

Is this Boiler a duplicate of a previous case Yes If so, state Vessel's name and Report No. M/s Regent Lion" Enk Rpt 20300

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built under Special Survey in accordance with the approved plan & the workmanship & material are of good quality - This Report accords with that of the Machinery

This Donkey Boiler has been satisfactorily installed on the Port side aft of Eng. Rm. on the 2<sup>nd</sup> Deck, with access from the E.R.

The Safety Valves were adjusted under steam to 180 lbs/sq. the accumulation test was satisfactory - and Easing gear has been fitted.

A Watt  
Newcastle on Tyne  
27/5/37

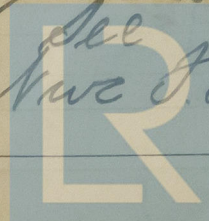
Survey Fee £100 charged on Marley Rpt. : When applied for, 19  
Travelling Expenses (if any) £ : When received, 19

W. Gordon-Maclaine  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 16 MAR 1937

Assigned SEE ACCOMPANYING MACHINERY REPORT.

TUE 1 JUN 1937



© 2020

Lloyd's Register Foundation