

# REPORT ON BOILERS.

No. 54400

Received at London Office

18 APR 1934

14 MAY 1934

of writing Report

19

When handed in at Local Office

16.4.1934

Port of

Glasgow

in Survey held at

Glasgow

Date, First Survey

15.1.34

Last Survey

12.4.1934

1934

Book.

on the

new steel S/S

(Number of Visits 25)

Tons { Gross Net

er

Built at

Burntisland

By whom built

Burntisland SBCo

Yard No. 180

When built 1934

es made at

Glasgow

By whom made

David Rowan & Co Ltd

Engine No. 940

When made 1934

rs made at

Glasgow

By whom made

David Rowan & Co Ltd

Boiler No. 940

When made 1934

nal Horse Power

112

Owners

Port belonging to

## LTTUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

L. D. Whites Ld

(Letter for Record (S))

Heating Surface of Boilers

1953 sq ft

Is forced draught fitted

no

Coal or Oil fired

coal

nd Description of Boilers

one single ended

Working Pressure 200

ed by hydraulic pressure to

350

Date of test

14-3-34

No. of Certificate

19348

Can each boiler be worked separately

-

of Firegrate in each Boiler

57 3/4 sq ft

No. and Description of safety valves to each boiler

Two direct spring

of each set of valves per boiler

per Rule 11.350"

as fitted 11.880"

Pressure to which they are adjusted

200 lb

Are they fitted with easing gear

Yes

se of donkey boilers, state whether steam from main boilers can enter the donkey boiler

Yes

est distance between boilers or uptakes and bunkers or woodwork

27"

Is oil fuel carried in the double bottom under boilers

No

est distance between shell of boiler and <sup>FLOOR</sup> tank top plating

15 1/2"

Is the bottom of the boiler insulated

Yes

st internal dia. of boilers

14'-9"

Length

10'-6"

Shell plates: Material

steel

Tensile strength 29-33 tons

ness

1 9/32"

Are the shell plates welded or flanged

no

Description of riveting: circ. seams

end DR

seams

DRBS TR

Diameter of rivet holes in

circ. seams F 1 1/4" B 1 3/8"

Pitch of rivets

F 3.204 B 3.68"

centage of strength of circ. end seams

plate FG1 862.6

Percentage of strength of circ. intermediate seam

plate rivets

centage of strength of longitudinal joint

plate 85.2

Working pressure of shell by Rules

201

ness of butt straps

outer 31/32"

No. and Description of Furnaces in each Boiler

Three Deighton

ial

steel

Tensile strength 26-30 tons

Smallest outside diameter 3'-7 3/16"

h of plain part

top bottom

Thickness of plates

crowns 1 9/32"

Description of longitudinal joint

welded

sions of stiffening rings on furnace or c.c. bottom

Working pressure of furnace by Rules 200

lates in steam space: Material

steel

Tensile strength 26-30 tons

Thickness 1 1/4"

Pitch of stays 19 1/4" x 19"

are stays secured

DN

Working pressure by Rules

200

plates: Material

front steel

Tensile strength

26-30 tons

Thickness

29/32"

pitch of stay tubes in nests

10 7/32"

Pitch across wide water spaces

14 1/4"

Working pressure

front 202

rs to combustion chamber tops: Material

steel

Tensile strength 28-32 tons

Depth and thickness of girder

tre 2 @ 8 3/8" x 7/8"

Length as per Rule

2'-7 1/32"

Distance apart

9 1/2"

No. and pitch of stays

h 3 @ 7 1/2"

Working pressure by Rules 201

Combustion chamber plates: Material steel

e strength 26-30 tons

Thickness: Sides

23/32"

Back

1 1/8"

Top

23/32"

Bottom

23/32"

of stays to ditto: Sides

10 1/8" x 8 3/4"

Back

9 1/4" x 8 1/4"

Top

9 1/2" x 7 1/2"

Are stays fitted with nuts or riveted over

nuts

ng pressure by Rules

203

Front plate at bottom: Material steel

Tensile strength 26-30 tons

ess

29/32"

Lower back plate: Material steel

Tensile strength 26-30 tons

Thickness

51/64"

of stays at wide water space

13 1/2"

Are stays fitted with nuts or riveted over

nuts

of Shipping Pressure

205

Main stays: Material steel

Tensile strength 28-32 tons

ter { At body of stay,

3"

No. of threads per inch

6

Area supported by each stay 389 sq"

ter { Over threads,

Working pressure by Rules

202

Screw stays: Material steel

Tensile strength 26-30 tons

ter { At turned off part,

No. of threads per inch

9

Area supported by each stay 76.3 & 88 sq"

ter { Over threads,

1 7/8" & 1 3/4"

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W401 0073

Working pressure by Rules 2008205 Are the stays drilled at the outer ends no Margin stays: Diameter <sup>At turned off part,</sup> 1 7/8" or <sup>Over threads</sup> 1 7/8" ✓

No. of threads per inch 9 Area supported by each stay 93.50" Working pressure by Rules 227

Tubes: Material Iron External diameter <sup>Plain</sup> 3 1/4" ✓ <sup>Stay</sup> 3 1/4" ✓ Thickness <sup>8 W.G.</sup> 1/4" 9 1/16" 3/8" No. of threads per inch 9 ✓

Pitch of tubes 4 1/2" x 4 3/8" Working pressure by Rules 230 Manhole compensation: Size of opening 752

shell plate 15 1/2" x 19 1/2" Section of compensating ring 9 1/4" x 1 3/2" No. of rivets and diameter of rivet holes 32 @ 1 3/8" ✓

Outer row rivet pitch at ends 9 9/16" Depth of flange if manhole flanged 3" ✓ Steam Dome: Material none

Tensile strength \_\_\_\_\_ Thickness of shell \_\_\_\_\_ Description of longitudinal joint \_\_\_\_\_

Diameter of rivet holes \_\_\_\_\_ Pitch of rivets \_\_\_\_\_ Percentage of strength of joint <sup>Plate</sup> \_\_\_\_\_ <sup>Rivets</sup> \_\_\_\_\_

Internal diameter \_\_\_\_\_ Working pressure by Rules \_\_\_\_\_ Thickness of crown \_\_\_\_\_ No. and diam. \_\_\_\_\_

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 none Manufacturers of <sup>Tubes</sup> \_\_\_\_\_ <sup>Steel castings</sup> \_\_\_\_\_

Number of elements \_\_\_\_\_ Material of tubes \_\_\_\_\_ Internal diameter and thickness of tubes \_\_\_\_\_

Material of headers \_\_\_\_\_ Tensile strength \_\_\_\_\_ Thickness \_\_\_\_\_ Can the superheater be shut \_\_\_\_\_

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 22 inclusive for boilers been complied with yes

The foregoing is a correct description,  
 For David Rowan & Co. Ltd. <sup>Manuf.</sup>  
 Arch. H. Grierson

Dates of Survey <sup>During progress of</sup> \_\_\_\_\_ <sup>work in shops - -</sup> \_\_\_\_\_ Are the approved plans of boiler and superheater forwarded herewith \_\_\_\_\_  
<sup>while</sup> <sup>building</sup> <sup>During erection on</sup> <sup>board vessel - - -</sup> \_\_\_\_\_ (If not state date of approval.)  
 SEE ACCOMPANYING MACHINERY REPORT. Total No. of visits \_\_\_\_\_

Is this Boiler a duplicate of a previous case yes If so, state Vessel's name and Report No. "London Queen" G.L.R. No. 5

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)  
The materials and workmanship are good  
The boiler has been constructed under special survey and has been sent to Burnley to be fitted in the vessel.

11/14/34.

This boiler has been efficiently fitted on board the vessel, examined under steam & safety valves adjusted 200 lbs

CRK.

Survey Fee ... £ see another page When applied for, 19  
 Travelling Expenses (if any) £ \_\_\_\_\_ When received, 19

S. J. Davis.  
 Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute GLASGOW 17 APR 1934

Assigned SEE ACCOMPANYING MACHINERY REPORT.

JUN 11 1934 TUE. 31  
 See Lib 18619  
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