

REPORT ON BOILERS.

No. 51824

7 OCT 1931

Received at London Office

Survey Report

19

When handed in at Local Office 29.9.31

Port of

Glasgow

Survey held at

Glasgow

Date, First Survey

1-10-30

Last Survey

25th Sept. 1931

on the

Steel Twin Screw Steamer "Corfu"

(Number of Visits 144)

Gross 14251 Tons
Net 7440.

Built at

Glasgow

By whom built

A. Stephen & Sons Ltd

Yard No. 534

When built 1931.

Made at

Glasgow

By whom made

A. Stephen & Sons Ltd

Engine No. 534

When made 1931.

Made at

do.

By whom made

do.

Boiler No. 534

When made 1931.

Horse Power

2997.

Owners

P. & O. Steam Navigation Co.

Port belonging to

London.

TUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

Steel Company of Scotland

(Letter for Record S)

Working Surface of Boilers

5616 ft

Is forced draught fitted

Yes.

Coal or Oil fired

Oil.

Description of Boilers

2 Single Ended Return Lube.

Working Pressure

230 lbs.

hydraulic pressure to

395 lbs.

Date of test

20.2.31.

No. of Certificate

18924.

Can each boiler be worked separately

Yes.

Regulate in each Boiler

61.2 ft

No. and Description of safety valves to each boiler

2 Improved Lift Lift.

Each set of valves per boiler

per Rule 8.5 ft

as fitted 9.8 ft

Pressure to which they are adjusted

230 lbs.

Are they fitted with easing gear

Yes.

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

No.

Distance between boilers or uptakes and bunkers or woodwork

Well clear

Is oil fuel carried in the double bottom under boilers

Yes.

Distance between shell of boiler and tank top plating

2'-2"

Is the bottom of the boiler insulated

Yes.

Internal dia. of boilers

15'-3"

Length

11'-9"

Shell plates: Material

S

Tensile strength

29.33 tons

Are the shell plates welded or flanged

No.

Description of riveting: circ. seams

end D.B. overlap

inter. 11"

DB. 3R. 5 units in pitch

Diameter of rivet holes in

circ. seams 1 11/16"

long. seams 1 1/2"

Pitch of rivets

10 1/2"

of strength of circ. end seams

plate 67

rivets 42.4

Percentage of strength of circ. intermediate seam

plate 85.4

rivets 85.1

of strength of longitudinal joint

plate 85.1

combined 87.6

Working pressure of shell by Rules

232.

of butt straps

outer 1 1/2"

inner 1 3/4"

No. and Description of Furnaces in each Boiler

3 Morrison

Tensile strength

26.30 tons

Smallest outside diameter

45 31/32"

Thickenss of plates

47/64"

Description of longitudinal joint

Weld.

of stiffening rings on furnace or c.c. bottom

Yes.

Working pressure of furnace by Rules

235.

in steam space: Material

S

Tensile strength

26.30 tons

Thickness

1 3/8"

Pitch of stays

21" x 7 1/2"

Stays secured

Nuts inside + outside

Working pressure by Rules

238.

Material

front S

back S

Tensile strength

26.30 tons

Thickness

1 1/2"

29 3/32"

of stay tubes in nests

9.06"

Pitch across wide water spaces

13 1/2"

Working pressure

front 232.

back 362.

combustion chamber tops: Material

S

Tensile strength

28.32 tons

Depth and thickness of girder

Length as per Rule

2'-8 1/8"

Distance apart

8 3/4"

No. and pitch of stays

Working pressure by Rules

246.

Combustion chamber plates: Material

S

Thickness: Sides

43/64"

Back

43/64"

Top

11/16"

Bottom

24/32"

Stays to ditto: Sides

8 1/4" x 8"

Back

8 1/4" x 8"

Top

8 3/4" x 8"

Are stays fitted with nuts or riveted over

Nuts

Pressure by Rules

238

Front plate at bottom: Material

S

Tensile strength

26.30 tons

Lower back plate: Material

S

Tensile strength

26.30 tons

Thickness

29 3/32"

Stays at wide water space

13 1/2"

Are stays fitted with nuts or riveted over

Nuts

Pressure

234.

Main stays: Material

S

Tensile strength

28.32 tons

At body of stay, or over threads

3 3/8"

No. of threads per inch

6

Area supported by each stay

367.5"

Pressure by Rules

238.

Screw stays: Material

S

Tensile strength

26.30 tons

At turned off part, or over threads

15 5/8" + 1 3/4"

No. of threads per inch

9

Area supported by each stay

66"

002853-002857-0049

© 2021

Lloyd's Register Foundation

Working pressure by Rules **231** Are the stays drilled at the outer ends **No.** Margin stays: Diameter { At turned off part, or Over threads **1 1/2" x 2 1/2"**

No. of threads per inch **9** Area supported by each stay **84"** Working pressure by Rules **245**

Tubes: Material **Lap welded steel** External diameter { Plain **2 1/2"** Stay **3"** Thickness { **9/16"** **3/8"** **1/4"** No. of threads per inch **9**

Pitch of tubes **3 5/8" x 3 5/8"** Working pressure by Rules **230** Manhole compensation: Size of opening in shell plate **20 1/2" x 16 1/2"** Section of compensating ring **28" x 1 1/4"** No. of rivets and diameter of rivet holes **36 @ 1 1/2"**

Outer row rivet pitch at ends **10 1/2"** Depth of flange if manhole flanged **3 7/8"** 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,

Dates of Survey { During progress of work in shops - - while building { During erection on board vessel - -

Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.)

SEE ACCOMPANYING MACHINERY REPORT.

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.)

These Boilers have been built under special Survey and in accordance with the Rules. The materials and workmanship are good. They have been placed on board and specifically steamed in position. The safety valves have been adjusted and the boilers examined under steam and found in order.

Survey Fee ... £ Travelling Expenses (if any) ... £

When applied for, 19 When received, 19

Committee's Minute **GLASGOW 6 - OCT 1931**

Assigned **SEE ACCOMPANYING MACHINERY REPORT.**

30 OCT 1931

TUE. 16 FEB. 1932