

REPORT ON BOILERS.

No. 18946.

Received at London Office

22 AUG 1928

Date of writing Report

29.6.28

1928

When handed in at Local Office

14/8/28

1928

Port of

Greenock

No. in Reg. Book.

Greenock

Date, First Survey

12th March 1928

Last Survey

13/8/28

1928.

on the

S/S "Simington Court"

(Number of Visits)

Gross

Net

Master

Built at

Newcastle

By whom built

Greenock & Newcastle

Yard No.

1030

When built

1928

Engines made at

Greenock

By whom made

John & Kneaid 1928

Engine No.

657

When made

1928

Boilers made at

ditto

By whom made

ditto

Boiler No.

653

When made

1928

Nominal Horse Power

574

Owners

Port belonging to

MULTITUBULAR BOILERS—MAIN, [REDACTED]

Manufacturers of Steel

Calville, Scottish Steel Co.

(Letter for Record)

R

Total Heating Surface of Boilers

8604

Is forced draught fitted

yes

Coal or Oil fired

Coal

No. and Description of Boilers

3 Single ended 3 SB

Working Pressure

180

Tested by hydraulic pressure to

320

Date of test

19.4.28

No. of Certificate

1834 (Star 9)

Can each boiler be worked separately

yes

Area of Firegrate in each Boiler

63.25

No. and Description of safety valves to each boiler

Double spring

Area of each set of valves per boiler

per Rule

7.4

as fitted

18.4

Pressure to which they are adjusted

19.24

Are they fitted with easing gear

yes

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

yes

Smallest distance between boilers or uptakes and bunkers or woodwork

yes

Is oil fuel carried in the double bottom under boilers

yes

Smallest distance between shell of boiler and tank top plating

yes

Is the bottom of the boiler insulated

yes

Largest internal dia. of boilers

15.4.18

Length

12.0

Shell plates: Material

S

Tensile strength

28.32

Thickness

1.9/32

Are the shell plates welded or flanged

yes

Description of riveting: circ. seams

end

inter.

long. seams

TR 10 BS

Diameter of rivet holes in

circ. seams

1.3/8

long. seams

1.5/16

Pitch of rivets

4.039

Percentage of strength of circ. end seams

plate

65.75

rivets

44

Percentage of strength of circ. intermediate seam

plate

85.8

rivets

Percentage of strength of longitudinal joint

plate

85.8

rivets

88

combined

89.2

Working pressure of shell by Rules

181

Thickness of butt straps

outer

1.1/8

No. and Description of Furnaces in each Boiler

3 Single ended 3 cf.

Material

S

Tensile strength

26.30

Smallest outside diameter

3-11.3/16

Length of plain part

top

bottom

Thickness of plates

crown

bottom

Description of longitudinal joint

weld

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

Working pressure of furnace by Rules

183

End plates in steam space: Material

S

Tensile strength

26.30

Thickness

1.1/4

Pitch of stays

2 1/2 x 19 1/2

How are stays secured

DN.W

Working pressure by Rules

186

Tube plates: Material

front

back

Steel

Tensile strength

26.30

Thickness

1.5/16

3/4

Mean pitch of stay tubes in nests

9.375

Pitch across wide water spaces

13 1/2

Working pressure

front

back

183

Girders to combustion chamber tops: Material

S

Tensile strength

28.32

Depth and thickness of girder

at centre

10 x 3/4 (2)

Length as per Rule

3-1.5/8

Distance apart

9 1/8

No. and pitch of stays

in each

3 al. 9"

Working pressure by Rules

182

Combustion chamber plates: Material

S

Tensile strength

26.30

Thickness: Sides

21/32

Back

21/32

Top

21/32

Bottom

25/32

Pitch of stays to ditto: Sides

9 x 9

Back

9 x 9

Top

9 x 9 1/8

Are stays fitted with nuts or riveted over

nuts

Working pressure by Rules

185

Front plate at bottom: Material

S

Tensile strength

26.30

Thickness

1.5/16

Lower back plate: Material

S

Tensile strength

26.30

Thickness

25/32

Pitch of stays at wide water space

13 3/4

Are stays fitted with nuts or riveted over

nuts

Working Pressure

183

Main stays: Material

S

Tensile strength

28.32

Diameter

At body of stay,

3 1/4 x 3 1/2

No. of threads per inch

6

Area supported by each stay

419.25

Working pressure by Rules

189

Screw stays: Material

Steel

Tensile strength

21 1/2

Diameter

At turned off part,

1 1/8

No. of threads per inch

9

Area supported by each stay

81.5

Lloyd's Register

Foundation

010244-010244-0135

Working pressure by Rules 184 Are the stays drilled at the outer ends 90 Margin stays: Diameter { At turned off part. 13 1/4" 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 2 1/2" Stay 2 1/2" Thickness { 9 WG. 3/8" 5/16" No. of threads per inch 9

Pitch of tubes 33 1/4 x 33 1/4 Working pressure by Rules 184 Manhole compensation: Size of opening in shell plate 16 1/2 x 20 1/2 Section of compensating ring 3.04 x 2.71/4 x 1/9 1/2 No. of rivets and diameter of rivet holes 38 at 1.5716"

Outer row rivet pitch at ends 9 1/4" Depth of flange if manhole flanged 3" 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

Number of elements Material of tubes Manufacturers of { Tubes Steel castings 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 23 inclusive for boilers been complied with

For **JOHN G. KINCAID & COY. LIMITED**

The foregoing is a correct description,

J. G. Kincaid

Manufacturer.

DIRECTOR

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

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

These Boilers have been built under Special Survey in accordance with the approved plans & the workmanship & material are of good quality. They have been shipped to Newcastle at which port they will be fitted on board. This Rept. Accompanies that of the Machinery.

Survey Fee

Traveling Expenses (if any)

When applied for,

192

When received,

192

W. Gordon Maclellan

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

GLASGOW 21 AUG 1928

Assigned

Deferred

10. 16 OCT 1928

See Nve. Rpt. No. 83359

L

Lloyd's Register Foundation