

## REPORT ON BOILERS.

No. 31592.

Received at London Office

WED. JUN. 26. 1912

Date of writing Report

191

When handed in at Local Office

22.6.

1912 Port of

Glasgow

Safety

No. in Survey held at

Glasgow

Date, First Survey

5.10.11

Last Survey

29.1.

1912

Reg. Book.

on the Boilers 2-B 170 T.S.S. "Itatinga".

(Number of Visits 13.)

Tons

Gross 2114

Net 1181.

Master R. E. McNeill.

Built at Troon

By whom built

Ailsa St. L. (2-31) When built 1912

Engines made at Troon

By whom made

Ailsa St. L.

When made 1912

Boilers made at Glasgow

By whom made

David Rowan &amp; Co.

When made 1912

Registered Horse Power 304

Owners

Companhia Nacional de Navegacao Costeira Port belonging to Rio de Janeiro

## MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.

Manufacturers of Steel

Wm. Beardmore &amp; Co. Ltd.

(Letter for record (5) ✓)

Total Heating Surface of Boilers

5118

Is forced draft fitted

no

No. and Description of

Boilers Two Single Ended

Working Pressure

180

Tested by hydraulic pressure to 360 lbs

Date of test 29/1/12

No. of Certificate 11393

Can each boiler be worked separately

yes

Area of fire grate in each boiler

67.5

No. and Description of

safety valves to each boiler 2 spring loaded

Area of each valve

7.06

Pressure to which they are adjusted

185 lbs.

Are they fitted with easing gear

yes

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

no

Smallest distance between boilers or uptakes and bunkers or woodwork

2-3

Mean dia. of boilers

15-9

Length

11-6

Material of shell plates

slut

Thickness

1 1/4

Range of tensile strength

28-45

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

D. R. L.

long. seams

D. B. S.

Diameter of rivet holes in long. seams

1 5/8

Pitch of rivets

9

Lap of plates or width of butt straps

19 1/2

Per centages of strength of longitudinal joint

rivets

89.6

Working pressure of shell by

plate

85.41

No. and Description of Furnaces in each

boiler 3 Morrison

Material

slut

Outside diameter

4-2 5/8

Length of plain part

top

Thickness of plates

crown

37 1/4

bottom

64

Description of longitudinal joint

mild

No. of strengthening rings

Working pressure of furnace by the rules

180

Combustion chamber

plates: Material

slut

Thickness: Sides

11/16

Back

21/32

Top

11/16

Bottom

Pitch of stays to ditto: Sides

9x10

Back

7 3/4

Pitch of stays

9x10

Top 9x10

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

181

Material of stays

slut

Diameter at

smallest part

2.07

Area supported by each stay

90

Working pressure by rules

207

End plates in steam space: Material

slut

Thickness

1 5/16

Pitch of stays

20 5/8

How are stays secured

D. nuts

Working pressure by rules

183

Material of stays

slut

Diameter at smallest part

7.06

Area supported by each stay

400

Working pressure by rules

180

Material of Front plates at bottom

slut

Thickness

7/8

Material of

lower back plate

slut

Thickness

13/16

Greatest pitch of stays

13 13/16

Working pressure of plate by rules

182

Diameter of tubes

3 1/4

Pitch of tubes

4 3/8

Material of tube plates

slut

Thickness: Front

1 1/32

Back

25/32

Mean pitch of stays

10 5/16

Pitch across wide

water spaces

14 1/4

Working pressures by rules

180

Girders to Chamber tops: Material

slut

Depth and thickness of

rider at centre

10 1/4 x 7/8 x 2

Length as per rule

37 9/16

Distance apart

10

Number and pitch of Stays in each

3

at 9"

Working pressure by rules

180

Superheater or Steam chest: how connected to boiler

none

Can the superheater be shut off and the boiler worked

separately

Diameter

Length

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet

holes

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

If stiffened with rings

Distance between rings

Working pressure by rules

End plates: Thickness

How stayed

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

Survey request form

No. 842 attached

The foregoing is a correct description,

for David Rowan &amp; Co. Manufacturer.

Dates of Survey

During progress of work in shops - - 1911. Oct. 5. 9. 18. 20. Nov. 15. 20. 22. 27.

Is the approved plan of boiler forwarded herewith

Yams as B. 169.

while building

During erection on board vessel - - 1912. Jan. 7. 17. 29.

Total No. of visits

13.

## GENERAL REMARKS

(State quality of workmanship, opinions as to class, &amp;c.)

This boiler has been

constructed under Special Survey &amp; is of good materials &amp; workmanship. It is to be fitted on board at Troon.

These boilers have been satisfactorily fitted on board the above vessel

Including Am. Bbl.

Survey Fee £ 13. 6

When applied for, 22.1. 1912.

Travelling Expenses (if any) £

When received, 1.3. 1912.

H. B. Foster

Glasgow

14.6.12

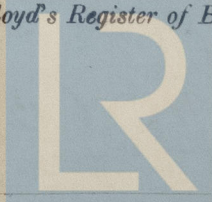
H. B. Foster-Smith

Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute

GLASGOW 25 JUN. 1912

Assigned See accompanying machinery report.



Lloyd's Register Foundation

008515-008523-0127