

REPORT ON BOILERS.

No. 33871

Received at London Office FRI. JUN. 26 1914.

Date of writing Report

191

When handed in at Local Office

15/4/1914 Port of

GLASGOW

No. in Survey held at

Glasgow

Reg. Book.

Date, First Survey 14. 11. 13

Last Survey

8. 4. 1914

H.

on the

S/s. "Santa Isabel"

(Number of Visits 20)

Gross 2023

Tons } Net 1211

Master A. S. Graham

Built at

Port Glasgow

By whom built

Dunlop, Bremner & Co. (307)

When built 1914

Engines made at

Port Glasgow

By whom made

ditto

When made 1914

Boilers made at

Glasgow

By whom made

Dunsmuir, Jackson & Co. Ltd. 1323

When made 1914

Registered Horse Power

Owners

Santa Clara S.S. Co. Ltd.

Port belonging to Liverpool

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.

Manufacturers of Steel

Bolwell, James & Co. Ltd.

Letter for record

S

Total Heating Surface of Boilers

3990

Is forced draft fitted

No

No. and Description of

Boilers 2 Single Ended

Working Pressure

180

Tested by hydraulic pressure to

360

Date of test 8. 4. 14

No. of Certificate 12647

Can each boiler be worked separately

Area of fire grate in each boiler

No. and Description of

Safety valves to each boiler

Area of each valve

Pressure to which they are adjusted

Are they fitted with easing gear

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

Smallest distance between boilers or uptakes and bunkers or woodwork

Mean dia. of boilers 14. 7. 11/64 Length 10'-6"

Material of shell plates

S

Thickness

11/64

Range of tensile strength 28/32

Are the shell plates welded or flanged

Descrip. of riveting: cir. seams

DR

long. seams

TRIDBS

Diameter of rivet holes in long. seams 11/4"

Pitch of rivets 8 3/4"

Pitch of plates or width of butt straps

1'-6 3/4"

Per centages of strength of longitudinal joint

rivets

88. 7. 9

Working pressure of shell by

Rules 181

Size of manhole in shell

16 x 12

Size of compensating ring

80 x 10

No. and Description of Furnaces in each

Boiler 3 Corrugated

Material

S

Outside diameter

3'-10"

Length of plain part

top

bottom

Thickness of plates

crown

35/64

Description of longitudinal joint

weld

No. of strengthening rings

Working pressure of furnace by the rules

195

Combustion chamber

Plates: Material

S

Thickness: Sides

11/16"

Back

11/16"

Top

11/16"

Bottom

7/8"

Pitch of stays to ditto: Sides

10 x 9

Back

9 3/4 x 9 1/8

Pitch 10 x 9

If stays are fitted with nuts or riveted heads

Nuts

Working pressure by rules

182

Material of stays

S

Diameter at

smallest part

6. 33

Smallest part

Area supported by each stay

90

Working pressure by rules

195

End plates in steam space: Material

S

Thickness

13/16"

Pitch of stays

18 1/4 x 19 1/2"

How are stays secured

DN

Working pressure by rules

181

Material of stays

S

Diameter at

smallest part

6. 33

Area supported by each stay

355

Working pressure by rules

186

Material of Front plates at bottom

S

Thickness

1"

Material of

lower back plate

S

Thickness

7/8"

Pitch of tubes

4 1/4 x 4 1/8"

Material of tube plates

S

Thickness: Front

1"

Back

27/32"

Mean pitch of stays

12 1/2"

Pitch across wide

ter spaces

14"

Working pressures by rules

184

Girders to Chamber tops: Material

Iron

Depth and thickness of

der at centre

8 x 1 (2)

Length as per rule

2. 7 1/32

Distance apart

9"

Number and pitch of Stays in each

2 at 10"

Working pressure by rules

184

Superheater or Steam chest: how connected to boiler

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

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

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

The foregoing is a correct description,

DUNSMUIR & JACKSON, Limited.

Manufacturer.

During progress of

work in shops - - - 1913 Nov. 14. 20. 26 Dec. 2. 8. 17. 24. 26. 29.

During erection on

board vessel - - - 1914 Jan. 17. 19. 28. 30. Feb. 12. 25. Mar. 5. 17. 31. 4. 8.

Is the approved plan of boiler forwarded to Director

Yes

Total No. of visits

20.

GENERAL REMARKS

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

These Boilers have been

built under Special Survey in accordance with the approved plan & the workmanship & material are of good quality. These Boilers are being supplied to Port Glasgow & will be fitted on board.

Survey Fee

When applied for, 191

Travelling Expenses (if any) £

When received, 191

Committee's Minute

Signed

W. Gordon Muir

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



Lloyd's Register Foundation

W775-0020