

REPORT ON BOILERS.

No. 78934

Received at London Office 16/5/16

Date of writing Report

191

When handed in at Local Office

16/5/

191

Port of London

No. in Survey held at

Ferrol

Date, First Survey 16th Feb 1915Last Survey 2nd May 1916

1916

Reg. Book.

(Number of Visits 12)

Gross

Tons

Net

on the *Twin S.S. "San Carlos"*Master *M. M. Munoz*Built at *Cadiz*

By whom built

S. E. de C. N. CADIZ

When built

Engines made at

Ferrol

By whom made

Sociedad Espanola de Const. Naval

When made

1916

Boilers made at

Do

By whom made

Do

When made

1916

Registered Horse Power

Owners

la Transatlantica

Port belonging to

Barcelona

MULTITUBULAR BOILERS

AUXILIARY

~~Donkey~~

Manufacturers of Steel

John Spence & Co.

(Letter for record

S)

Total Heating Surface of Boilers

693 sq ft

Is forced draft fitted

No

No. and Description of

Boilers

One single ended

Working Pressure

180 lbs

Tested by hydraulic pressure to

360 lbs

Date of test

24.4.16

No. of Certificate

1148

Can each boiler be worked separately

Yes

Area of fire grate in each boiler

24 sq ft

No. and Description of

safety valves to each boiler

Two spring loaded

Area of each valve

4.9 sq in

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

11.5" 19" Port

Mean dia. of boilers

9' 10.5"

Length

7' 6"

Material of shell plates

Steel

Thickness

2 3/32"

Range of tensile strength

493-53

Are the shell plates welded or flanged

No

Descrip. of riveting: cir. seams

I. R. Lap

long. seams

I. R. D. Butt

Diameter of rivet holes in long. seams

1 5/16"

Pitch of rivets

6 1/16"

Gap of plates or width of butt straps

1 1/2"

Per centages of strength of longitudinal joint

90.8

Working pressure of shell by

rules

195 lbs

Size of manhole in shell

16" X 12"

Size of compensating ring

9" X 2 1/32"

No. and Description of Furnaces in each

boiler

2 Fox

Material

Steel

Outside diameter

34 3/4"

Length of plain part

top 7' 6"

Thickness of plates

*crown 7/16"**bottom 7/16"*

Description of longitudinal joint

Weld

No. of strengthening rings

Working pressure of furnace by the rules

181 lbs

Combustion chamber

plates: Material

Steel

Thickness: Sides

2 1/32"

Back

1/16"

Top

2 1/32"

Bottom

3/4"

Pitch of stays to ditto: Sides

9"

Back

9 1/2" X 9"

Top

4" X 8 1/2"

If stays are fitted with nuts or riveted heads

Nuts

Working pressure by rules

196 lbs

Material of stays

Steel

Area at

smallest part

2.03 sq in

Area supported by each stay

85.5 sq in

Working pressure by rules

214 lbs

End plates in steam space: Material

Steel

Thickness

1/16"

Pitch of stays

16 1/2"

How are stays secured

I. Nuts

Working pressure by rules

186 lbs

Material of stays

Steel

Area at smallest part

6.1 sq in

Area supported by each stay

272 sq in

Working pressure by rules

232 lbs

Material of Front plates at bottom

Steel

Thickness

1/16"

Material of

*Lower back plate**Steel*

Thickness

1/16"

Greatest pitch of stays

14" X 9"

Working pressure of plate by rules

281 lbs

Diameter of tubes

3"

Pitch of tubes

4 1/4" X 4 1/8"

Material of tube plates

Steel

Thickness: Front

1/16"

Back

3/4"

Mean pitch of stays

10.5"

Pitch across wide

water spaces

14"

Working pressures by rules

206 lbs

Girders to Chamber tops: Material

Steel

Depth and thickness of

*girder at centre**7 1/2" X 5 1/8"*

Length as per rule

22.5

Distance apart

8 1/2"

Number and pitch of Stays in each

One

Working pressure by rules

232 lbs

Steam dome: description of joint to shell

Yes

% of strength of joint

Yes

Diameter

Yes

Thickness of shell plates

Yes

Material

Yes

Description of longitudinal joint

Yes

Diam. of rivet holes

Yes

Pitch of rivets

Yes

Working pressure of shell by rules

Yes

Crown plates

Yes

Thickness

Yes

How stayed

*Yes**Yes**Yes*

SUPERHEATER.

Type

Date of Approval of Plan

Tested by Hydraulic Pressure to

Date of Test

Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Diameter of Safety Valve

Pressure to which each is adjusted

Is Easing Gear fitted

The foregoing is a correct description,

(Signed) *H. J. Spiers*

Manufacturer.

Dates of Survey
 During progress of work in shops - 1915 Feb. 16, 17, June 22, 23, Oct 4, 5, 6.
 while building - 1916 Apr. 24, 25, 29, May 1, 2.

Is the approved plan of boiler forwarded herewith With *St. Santa Label*

Total No. of visits

12

GENERAL REMARKS

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

This boiler has been constructed under special Survey and in accordance with the approved plan. The material & workmanship are good

For recommendation see RPT 4a

Survey Fee

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£

5

:

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When applied for,

20/5/

191

Travelling Expenses (if any) £

When received,

191

Committee's Minute

FRI. 28 SEP. 1917

Assigned

(Signed) *E. M. Salmon*

Engineer Surveyor to Lloyd's Register of Shipping.

Ramon
Foundation

002784-002789-0042