

# REPORT ON BOILERS

No. 9881.

TUE. 16 MAY. 1916

Date of writing Report

191

When handed in at Local Office 13.5.16

Port of

Received at London Office

No. in Survey held at

Stockton-on-Tees

Date, First Survey

Nov. 12<sup>th</sup>

Last Survey

May 8 1916

Reg. Book.

on the Steel S.S. "Carmarthen"

Master G. Roberts - 14-16

Built at

W. Hartlepool

By whom built

W. Gray & Co. Lim.

Engines made at

W. Hartlepool

By whom made

Central Marine Engine Works

When made

1916

Boilers made at

Stockton

By whom made

Thos. Riley Bros. Ltd (No. 4894)

When made

1916

Registered Horse Power

404

Owners James & David Jenkins (Jenkins Bros., Mgrs)

Port belonging to

Cardiff

## MULTITUBULAR BOILERS

MAIN, AUXILIARY OR DONKEY.

Manufacturers of Steel

John Spencer & Son

(Letter for record (S))

Total Heating Surface of Boilers

1091 sq ft

Is forced draft fitted

Boilers

One single ended

Working Pressure

100

Tested by hydraulic pressure to

200

No. and Description of

No. of Certificate

5642

Can each boiler be worked separately

Yes

Area of fire grate in each boiler

35 sq ft

Date of test

8.5.16

safety valves to each boiler

two (2)

Springs

Area of each valve

8.29 sq in

Pressure to which they are adjusted

103 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

14"

Inside

Mean dia. of boilers

11'-0"

Length

10'-0"

Material of shell plates

steel

Thickness

19/32"

Range of tensile strength

28-32

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

2 R. lap

long. seams

2 B-2 Riv

Diameter of rivet holes in long. seams

15/16"

Pitch of rivets

5 1/2"

width of butt straps

9" x 9/16"

Per centages of strength of longitudinal joint

3 Rivets per pitch

rivets

25

plate

82.9

Working pressure of shell by

rules

103

Size of manhole in shell

19" x 15"

Size of compensating ring

7 x 1 1/2"

boiler

2 plain

Material

steel

Outside diameter

40"

Length of plain part

75 3/4"

Thickness of plates

19/32"

Material of Furnaces in each

top

75 3/4"

bottom

19/32"

Description of longitudinal joint

Weld

No. of strengthening rings

none

Working pressure of furnace by the rules

116

Combustion chamber

plates: Material

steel

Thickness: Sides

3/8"

Back

5/8"

Top

3/8"

Bottom

13/16"

Pitch of stays to ditto: Sides

10" x 9"

Back

9" x 10"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

121

Material of stays

steel

Diameter at

smallest part

1.19

Area supported by each stay

95

Pitch of stays

18" x 15"

How are stays secured

nuts & washers

Working pressure by rules

120

Material of stays

steel

Diameter at

smallest part

2.87

Area supported by each stay

295

Working pressure by rules

101

Material of Front plates at bottom

steel

Lower back plate

steel

Thickness

13/16"

Greatest pitch of stays

14" x 10"

Working pressure of plate by rules

154

Diameter of tubes

3 1/2"

Pitch of tubes

4 1/2" x 4 1/2"

Material of tube plates

steel

Thickness: Front

13/16"

Back

5/8"

Mean pitch of stays

10 1/2"

Pitch across wide

water spaces

14"

Working pressures by rules

120

Girders to Chamber tops: Material

steel

Depth and thickness of

girder at centre

7" x 1 1/4"

Length as per rule

28"

Distance apart

10"

Number and pitch of Stays in each

209"

Working pressure by rules

122

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 NO. 1201. ATTACHED

FOR The foregoing is a correct description, RILEY BROS. (BOILERMAKERS) LIMITED.

Manufacturer.

Dates of Survey

During progress of work in shops - -

1915. 11.12. Dec. 2.21.31. 1916 Mar 22. Apr 5. 11.20.27.

Is the approved plan of boiler forwarded herewith

yes

while building

During erection on board vessel - -

May 1.8.

Total No. of visits

11.

## GENERAL REMARKS

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

Special Survey: is of good material and workmanship and on completion was tested by hydraulic pressure with satisfactory results. And has now been fitted on board the above-named vessel.

Survey Fee

...

£ 3.13-0

When applied for

Monthly 191.

Travelling Expenses (if any) £

✓

When received,

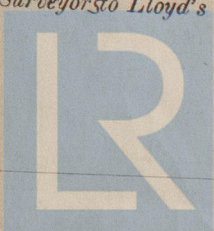
191.

Committee's Minute

FRI. 1-DEC. 1916

Assigned

Wm Morrison  
Engineer Surveyor to Lloyd's Register of Shipping.



Lloyd's Register Foundation