

No. Rpt. 24531

No. 6303

## REPORT ON BOILERS.

Received at London Office FRI 10 JUN 1910

Rpt. 5a.

Date of writing Report

19

When handed in at Local Office

10 June 1910

Port of

Middlesbrough

Date, First Survey

19 May

Last Survey

10 July 1910

(Number of Visits)

S.S. No 259

Tons

Net

No. in

Survey held at

Stockton-on-Tees

Reg. Book.

on the

S/S "Oakmore"

Master

Built at

Sunderland

By whom built

Sunderland S. B. &amp; Co. Ltd

When built

1910

Engines made at

S. Land.

By whom made

H. E. M. Eng. Co. Ltd

when made

1910

Boilers made at

Stockton

By whom made

H. E. M. Eng. Co. Ltd (No 4166)

when made

1910

Registered Horse Power

Owners

Port belonging to

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel

J. Spencer &amp; Son

Letter for record

(5)

Total Heating Surface of Boilers

450

Is forced draft fitted

No. and Description of

Boilers

One single ended

Working Pressure

100

Tested by hydraulic pressure to

200

Date of test

4.6.10

No. of Certificate

4438

Can each boiler be worked separately

✓

Area of fire grate in each boiler

21 sq

No. and Description of

safety valves to each boiler

2 Spring.

Area of each valve

4.9 sq

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

Inside

dia. of boilers

8'-0"

Length

8'-0"

Material of shell plates

steel

Thickness

33/64

Range of tensile strength

28-32

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

S. lap

long. seams

3 Riv. lap

Diameter of rivet holes in long. seams

15/16

Pitch of rivets

4 1/2"

Lap of plates

6 1/2"

Per centages of strength of longitudinal joint

rivets 81.7

Working pressure of shell by

plate 77.3

rules

103

Size of manhole in shell

16" x 12"

Size of compensating ring

3 in. dia.

No. and Description of Furnaces in each

boiler

2 plain

Material

steel

Outside diameter

30"

Length of plain part

top 62 1/2

Thickness of plates

crown 15/32

bottom 5/16

Description of longitudinal joint

welded

No. of strengthening rings

none

Working pressure of furnace by the rules

114

Combustion chamber

plates: Material

steel

Thickness: Sides

15/32

Back

15/32

Top

15/32

Bottom

3/16

Pitch of stays to ditto: Sides

8 1/2"

Back

Top

8"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

101

Material of stays

steel

Diameter at

smallest part

1 1/8"

Area supported by each stay

65.6

Working pressure by rules

121

End plates in steam space: Material

steel

Thickness

21/32

Pitch of stays

14 x 13 1/2"

How are stays secured

nuts &amp; washers

Working pressure by rules

100

Material of stays

steel

Diameter at smallest part

1.79

Area supported by each stay

213.75

Working pressure by rules

122

Material of Front plates at bottom

steel

Thickness

21/32

Material of

Lower back plate

steel

Thickness

21/32

Greatest pitch of stays

12" x 8"

Working pressure of plate by rules

143

Diameter of tubes

3 1/4"

Pitch of tubes

4 1/4" x 4 1/4"

Material of tube plates

steel

Thickness: Front

21/32

Back

3/16

Mean pitch of stays

9 1/2"

Pitch across wide

water spaces

12 1/2"

Working pressures by rules

105 lbs

Girders to Chamber tops: Material

steel

Depth and thickness of

girder at centre

5" x 1 1/4"

Length as per rule

20"

Distance apart

8"

Number and pitch of Stays in each

one

Working pressure by rules

111

Superheater or Steam chest: ~~has been 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

FOR THE FOREGOING IS A CORRECT DESCRIPTION,  
RILEY BROS. (BOILERMAKERS) LIMITED.

Manufacturer.

Dates

During progress of

1910 May 19, 20, 21, 26 June 1, 4

Is the approved plan of boiler forwarded herewith

yes

while

work in shops - -

July 7

Total No. of visits

8

building

During erection on

board vessel - -

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

This boiler has been built under

special survey in accordance with the approved plan, the Secretary's letter E-21.4.10

and in general conformity with the Rules. The materials and workmanship are

sound and good, and on completion the boiler was tested by hydraulic pressure with

satisfactory results. Examined under steam &amp; safety valves adjusted &amp; found satisfactory

Survey Fee

£ 2-2-0

When applied for

19

Travelling Expenses (if any) £

When received

19

W. Morrison

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

Committee's Minute

WED. 3 AUG 1910

Assigned

see minute on Sld. Rpt.

24531

Lloyd's Register  
Foundation

WS10-0205