

## REPORT ON BOILERS.

No. 59005

WES. 30 AUG 1910

Received at London Office

29 AUG 1910

Date of writing Report

19

When handed in at Local Office

19

Port of NEWCASTLE ON TYNE.

No. in Survey held at

Date, First Survey 3<sup>rd</sup> June 1910 Last Survey

19

Reg. Book.

(Number of Visits)

Gross

Tons

Net

on the

Smith &amp; Sons

Master

Built at

Middlesbrough

By whom built

Kew Smith Dock Co Ltd

When built

1910

Engines made at

North Shields

By whom made

Shields Engineering Co Ltd

when made

1910

Boilers made at

North Shields

By whom made

J. T. Eltringham &amp; Co Ltd

when made

1910

Registered Horse Power

Owners

Port belonging to

## MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.

Manufacturers of Steel

J. &amp; S. Spencer &amp; Sons

Letter for record

5

Total Heating Surface of Boilers

1131.5

Is forced draft fitted

no

No. and Description of

Boilers

One single ended

Working Pressure

130 lbs

Tested by hydraulic pressure to

260 lbs

Date of test

16/7/10

No. of Certificate

8004

Can each boiler be worked separately

yes

Area of fire grate in each boiler

35.5

No. and Description of

Safety valves to each boiler

2 spring Patent

Area of each valve

14.91

Pressure to which they are adjusted

135 lbs

Are they fitted with easing gear

yes

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

yes

Smallest distance between boilers or uptakes and bunkers or woodwork

24"

Mean dia. of boilers

12'-0"

Length

10'-0"

Material of shell plates

steel

Thickness

25/32"

Range of tensile strength

29-33 tons

Are the shell plates welded or flanged

flanged

Descrip. of riveting: cir. seams

double

long. seams double rivet diameter of rivet holes in long. seams

1"

Pitch of rivets

5 1/2"

Top of plates or width of butt straps

10"

Per centages of strength of longitudinal joint

81.7

Working pressure of shell by

81.8

Rules

135 lbs

Size of manhole in shell

16" x 12"

Size of compensating ring

7 1/4" x 25/32"

No. and Description of Furnaces in each

Boiler

2 flue

Material

steel

Outside diameter

42 1/2"

Length of plain part

top 7 1/4"

bottom

64"

Thickness of plates

crown 5/8"

bottom 5/8"

Description of longitudinal joint

welded

No. of strengthening rings

yes

Working pressure of furnace by the rules

136 lbs

Combustion chamber

Plates: Material

steel

Thickness: Sides

19/32"

Back

19/32"

Top

Bottom

Pitch of stays to ditto: Sides

9 1/4"

Back

9 1/2"

Top 10 7/8"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

134 lbs

Material of stays

steel

Diameter at

smallest part

1 1/2"

Area supported by each stay

90.0

Working pressure by rules

148 lbs

Material of plates in steam space: Material

steel

Thickness

7/8"

Pitch of stays

16 1/2" x 16"

How are stays secured

nuts &amp; washers

Working pressure by rules

137 lbs

Material of stays

steel

Diameter at smallest part

2 1/4"

Area supported by each stay

264.0

Working pressure by rules

132 lbs

Material of Front plates at bottom

steel

Thickness

7/8"

Lower back plate

steel

Thickness

13/16"

Greatest pitch of stays

14 1/2" x 9 1/2"

Working pressure of plate by rules

151 lbs

Diameter of tubes

3 1/2"

Pitch of tubes

4 3/4"

Material of tube plates

steel

Thickness: Front

7/8"

Back

2 3/32"

Mean pitch of stays

11 1/8"

Pitch across wide

water spaces

14 1/2"

Working pressures by rules

130 lbs

Girders to Chamber tops: Material

steel

Depth and thickness of

stays

Two 10"

Order at centre

6 1/4" x 1 1/2"

Length as per rule

28 3/4"

Distance apart

9"

Number and pitch of Stays in each

Two 10"

Working pressure by rules

133 lbs

Superheater or Steam chest

none

how connected to boiler

yes

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

End plates: Thickness

How stayed

Are they fitted with easing gear

Working pressure of end plates

Area of safety valves to superheater

The foregoing is a correct description,

J. T. Eltringham &amp; Co Manufacturer.

Is the approved plan of boiler forwarded herewith

yes

Please return for dealing with duplicate

Total No. of visits

7

1910

Jan. 3. 5. 21. 25. Jul 8. 14. 16.

During progress of work in shops - -

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,

the materials used are good, and the workmanship is

satisfactory.

Survey Fee ... .. £

When applied for, 19.

Travelling Expenses (if any) £

When received, 19.

Committee's Minute

Assigned

FRI. 14 OCT 1910

W494-0056

Lloyd's Register Foundation