

Rpt. 5a.

## REPORT ON BOILERS.

No. 66950

Received at London Office

DEC 19 1914

Port of NEWCASTLE-ON-TYNE.

Date of writing Report

191

When handed in at Local Office

191

No. in Survey held at  
Reg. Book.

S. Shields

Date, First Survey

19th May 1914

Last Survey

25th Nov.

1914

(Number of Visits)

Gross

4199

Tons

Net

2679

Master

Built at S. Shields

By whom built

J. Readhead &amp; Sons

When built 1914

Engines made at

S. Shields

By whom made

J. Readhead &amp; Sons

When made 1914

Boilers made at

do

By whom made

do

When made 1914

Registered Horse Power

Owners

Edward Hain &amp; Sons

Port belonging to St. Geo.

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

John Spence &amp; Sons

(Letter for record

R

Total Heating Surface of Boilers

1249 sq

Is forced draft fitted

no

No. and Description of

Boilers

One, single-ended

Working Pressure

90 lbs

Tested by hydraulic pressure to 140 lbs

Date of test 22-10-14

No. of Certificate

8714

Can each boiler be worked separately

yes

Area of fire grate in each boiler

33 sq

No. and Description of

safety valves to each boiler

2 - Spring

Area of each valve

7.07 sq

Pressure to which they are adjusted

90 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

on deck

Inside

Mean dia. of boilers

10'-9"

Length

11'-0"

Material of shell plates

Steel

Thickness

2 1/32"

Range of tensile strength

28-32

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

S. Lap

long. seams

S. Lap

Diameter of rivet holes in long. seams

1 1/4"

Pitch of rivets

4 3/8"

Lap of plates or width of butt straps

5 1/2"

Per centages of strength of longitudinal joint

rivets 72-8

Working pressure of shell by

rules

96 lbs

Size of manhole in shell

16" x 12"

Size of compensating ring

8" x 2 1/32"

No. and Description of Furnaces in each

boiler

2 - plain

Material

Steel

Outside diameter

38"

Length of plain part

top 87"

Thickness of plates

crown 1 1/32"

bottom 2 1/32"

Description of longitudinal joint

S. Lap

No. of strengthening rings

yes

Working pressure of furnace by the rules

91 lbs

Combustion chamber

plates: Material

Steel

Thickness: Sides

5 7/8"

Back

5 7/8"

Top

5 7/8"

Bottom

2 1/32"

Pitch of stays to ditto: Sides

10 1/2" x 10"

Back

12" x 12"

Top 12" x 10" If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

93 lbs

Material of stays

Iron

Diameter at

smallest part 1.99"

Area supported by each stay

144 sq

Working pressure by rules

103 lbs

End plates in steam space: Material

Steel

Thickness

7/8"

Pitch of stays 18" x 20"

How are stays secured

on bolts

Working pressure by rules

107 lbs

Material of stays

Steel

Diameter at smallest part

4-11"

Area supported by each stay

360 sq

Working pressure by rules

118 lbs

Material of Front plates at bottom

Steel

Thickness

23/32"

Material of

Lower back plate

Steel

Thickness

23/32"

Greatest pitch of stays

12"

Working pressure of plate by rules

123 lbs

Diameter of tubes

3 1/4"

Pitch of tubes

4 3/8" x 4 3/8"

Material of tube plates

Steel

Thickness: Front

23/32"

Back

23/32"

Mean pitch of stays

13 1/8"

Pitch across wide

water spaces

13 1/2"

Working pressures by rules

107 lbs

Girders to Chamber tops: Material

Steel

Depth and thickness of

girder at centre

6" x 1 1/2"

Length as per rule

26"

Distance apart

12"

Number and pitch of Stays in each

2 - 10"

Working pressure by rules 115 lbs 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

The foregoing is a correct description,

John Readhead Manufacturer.

Dates

During progress of

of Survey

work in shops - -

while

During erection on

building

board vessel - - -

See Machinery Report

Is the approved plan of boiler forwarded herewith

yes

Total No. of visits

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

This donkey boiler has been constructed under special survey &amp; the materials &amp; workmanship are found to be good

Survey Fee

Travelling Expenses (if any)

£ Machinery Report

When applied for,

191

When received,

191

R. E. A. &amp; Thomas Field

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

Committee's Minute

TUE. DEC. 22. 1914

Assigned



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