

REPORT ON BOILERS.

26886

No. 9369

JUN. 8, 1916

Date of writing Report

191

When handed in at Local Office

7.6.16

Port of

Received at London Office

Middlesbrough

No. in Survey held at

Stockton-on-Tees

Date, First Survey

Feb 23rd

Last Survey

June 2, 1916

Reg. Book.

on the Donkey Boiler for the RFA "Oldbury"

(Number of Visits)

(S.S.N. 391)

Tons

Gross 5873

Net 3553

Master

Robert

Built at

Sunderland

By whom built

Messrs Short Bros Ltd

When built

1916

Engines made at

Sunderland

By whom made

John Dickinson & Sons Ltd

When made

1916

Boilers made at

Stockton

By whom made

Messrs Riley Bros Ltd (N. 4816)

When made

1916

Registered Horse Power

Owners

Same & Macandrew Ltd

Port belonging to

London

MULTITUBULAR BOILERS — ~~MAIN, AUXILIARY OR DONKEY~~ —

Manufacturers of Steel Messrs J. Spencer & Sons

(Letter for record

(S)

Total Heating Surface of Boilers

920 sq

Is forced draft fitted

No

No. and Description of

Boilers

One single ended

Working Pressure

180

Tested by hydraulic pressure to

360

Date of test

2.6.16

No. of Certificate

5649

Can each boiler be worked separately

Yes

Area of fire grate in each boiler

31.6 sq

safety valves to each boiler

2 direct spring

Area of each valve

6.49 sq

Pressure to which they are adjusted

180 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

Many dia. of boilers

10'-0"

Length

10'-6"

Material of shell plates

steel

Thickness

13/16"

Range of tensile strength

28 1/2 - 32

Are the shell plates welded or flanged

No

Descrip. of riveting: cir. seams

2-R. lap

long. seams

2-B-3 Riv

Diameter of rivet holes in long. seams

1 1/2"

Pitch of rivets

7 1/4"

Pitch of plates or width of butt straps

13 1/2 x 3/4"

Per centages of strength of longitudinal joint

rivets 87.7

plates 86.57

Working pressure of shell by

rules

180

Size of manhole in shell

19" x 15"

Size of compensating ring

7" x 1"

No. and Description of Furnaces in each

top

77 3/4"

Thickness of plates

3/4"

boiler

2 plain

Material

steel

Outside diameter

36"

Length of plain part

bottom

108"

Working pressure of furnace by the rules

181

Description of longitudinal joint

Weld

No. of strengthening rings

none

Working pressure of furnace by the rules

181

Combustion chamber

plates: Material

steel

Thickness: Sides

2 1/32"

Top

10" x 8"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

181

Material of stays

steel

Diameter at

smallest part

2.03

Area supported by each stay

85.5

Working pressure by rules

214

End plates in steam space: Material

steel

Thickness

1"

Pitch of stays

19 1/2" x 12 1/2"

How are stays secured

nuts & washers

Working pressure by rules

181

Material of stays

steel

Diameter at smallest part

3.05"

Area supported by each stay

260

Working pressure by rules

202

Material of Front plates at bottom

steel

Thickness

1"

Material of

Lower back plate

steel

Thickness

1"

Greatest pitch of stays

14" x 9"

Working pressure of plate by rules

250

Diameter of tubes

3 1/4"

Pitch of tubes

4 3/8" x 4 1/4"

Material of tube plates

steel

Thickness: Front

1"

Back

3/4"

Mean pitch of stays

9 1/2"

Pitch across wide

water spaces

14"

Working pressures by rules

183

Girders to Chamber tops: Material

steel

Depth and thickness of

girder at centre

9" x 1 1/2"

Length as per rule

30"

Distance apart

10"

Number and pitch of Stays in each

208"

Working pressure by rules

196

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

No

SURVEY REQUEST

NO. 1238

FOR

The foregoing is a correct description,

RILEY BROS. (BOILERMAKERS) LIMITED.

Manufacturers.

Dates of Survey

During progress of

work in shops

1916 Feb. 23. 25. Apr. 20. 27. May 1. 5. 18. 24. 30. June 2.

Is the approved plan of boiler forwarded herewith

yes

During erection on

board vessel

Total No. of visits

10. 12

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

No

SURVEY REQUEST

NO. 1238

FOR

The foregoing is a correct description,

RILEY BROS. (BOILERMAKERS) LIMITED.

Manufacturers.

Dates of Survey

During progress of

work in shops

1916 Feb. 23. 25. Apr. 20. 27. May 1. 5. 18. 24. 30. June 2.

Is the approved plan of boiler forwarded herewith

yes

During erection on

board vessel

Total No. of visits

10. 12

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

No

SURVEY REQUEST

NO. 1238

FOR

The foregoing is a correct description,

RILEY BROS. (BOILERMAKERS) LIMITED.

Manufacturers.

Dates of Survey

During progress of

work in shops

1916 Feb. 23. 25. Apr. 20. 27. May 1. 5. 18. 24. 30. June 2.

Is the approved plan of boiler forwarded herewith

yes

During erection on

board vessel

Total No. of visits

10. 12

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

No

SURVEY REQUEST

NO. 1238

FOR

The foregoing is a correct description,

RILEY BROS. (BOILERMAKERS) LIMITED.

Manufacturers.

Dates of Survey

During progress of

work in shops

1916 Feb. 23. 25. Apr. 20. 27. May 1. 5. 18. 24. 30. June 2.

Is the approved plan of boiler forwarded herewith

yes

During erection on

board vessel

Total No. of visits

10. 12

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

No

SURVEY REQUEST

NO. 1238

FOR

The foregoing is a correct description,

RILEY BROS. (BOILERMAKERS) LIMITED.

Manufacturers.

Dates of Survey

During progress of

work in shops

1916 Feb. 23. 25. Apr. 20. 27. May 1. 5. 18. 24. 30. June 2.

Is the approved plan of boiler forwarded herewith

yes

During erection on

board vessel

Total No. of visits

10. 12

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

No

SURVEY REQUEST

NO. 1238

FOR

The foregoing is a correct description,

RILEY BROS. (BOILERMAKERS) LIMITED.

Manufacturers.

Dates of Survey

During progress of

work in shops

1916 Feb.