

REPORT ON BOILERS.

No. 57699

Received at London Office

FRI 9 DEC 1909

Date of writing Report

19

When handed in at Local Office

2- DEC 1909

Port of NEWCASTLE ON TYNE.

No. in Survey held at

South Shields

Date, First Survey

27th July 1909

Last Survey

30th November 1909

Reg. Book.

44 Ship on the

Steel Screw Tug Abeille No. 10

(Number of Visits)

Gross 193

Net 25

Master

Built at

South Shields

By whom built

J. P. Remoldson & Sons

When built

1909

Engines made at

South Shields

By whom made

J. P. Remoldson & Sons

when made

1909

Boilers made at

" "

By whom made

J. T. Eltringham & Co. (No. 1629)

when made

1909

Registered Horse Power

Owners

Soc. de Remorq. Les Abeilles

Port belonging to

Havre

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

Manufacturers of Steel

J. Spencer & Son

(Letter for record

S)

Total Heating Surface of Boilers

1794 $\frac{1}{2}$

Is forced draft fitted

no

No. and Description of

Boilers one multitubular (single ended)

Working Pressure

180 lbs

Tested by hydraulic pressure to

360 lbs

Date of test

22/9/09

No. of Certificate

7898

Can each boiler be worked separately

✓

Area of fire grate in each boiler

57.6 $\frac{1}{2}$

No. and Description of

safety valves to each boiler

2 direct spring

Area of each valve

5.94 $\frac{1}{2}$

Pressure to which they are adjusted

185 lbs

Are they fitted with easing gear

yes

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

✓

Smallest distance between boilers or uptakes and bunkers or woodwork

2'-0"

Mean dia. of boilers

13'-10 $\frac{1}{2}$ "

Length

10'-6"

Material of shell plates

steel

Thickness

1 $\frac{3}{16}$ "

Range of tensile strength

28 $\frac{3}{4}$ -32

Are the shell plates welded or flanged

flanged

Descrip. of riveting: cir. seams

double

long. seams

double rivet butt

Diameter of rivet holes in long. seams

1 $\frac{1}{4}$ "

Pitch of rivets

7 $\frac{3}{8}$ "

Lap of plates or width of butt straps

17 $\frac{1}{2}$ "

Per centages of strength of longitudinal joint

rivets 83

plate 83

Working pressure of shell by

rules

190 lbs

Size of manhole in shell

12" x 16"

Size of compensating ring

7 $\frac{1}{2}$ " x 1 $\frac{1}{16}$ "

No. and Description of Furnaces in each

boiler 3 Brighton's

Material

steel

Outside diameter

42 $\frac{3}{4}$ "

Length of plain part

top 6'-6"

bottom 6'-6"

Thickness of plates

crown 7 $\frac{3}{32}$ "bottom 1 $\frac{1}{32}$ "

Description of longitudinal joint

welded

No. of strengthening rings

✓

Working pressure of furnace by the rules

191 lbs

plates: Material

steel

Thickness: Sides

2 $\frac{3}{32}$ "

Back

2 $\frac{3}{32}$ "

Top

2 $\frac{3}{32}$ "

Bottom

2 $\frac{3}{32}$ "

Pitch of stays to ditto: Sides

9 $\frac{1}{2}$ "Top 10 $\frac{1}{8}$ " x 9 $\frac{1}{2}$ "

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

185 lbs

Material of stays

steel

Diameter at

smallest part

1 $\frac{1}{32}$ "

Area supported by each stay

96.16 $\frac{1}{2}$

Working pressure by rules

185 lbs

Material of plates in steam space: Material

steel

Thickness

1 $\frac{1}{8}$ "

Pitch of stays

8 $\frac{1}{4}$ " x 1 $\frac{1}{4}$ "

How are stays secured

nuts

Working pressure by rules

187 lbs

Material of stays

steel

Diameter at smallest part

2 $\frac{1}{32}$ "

Area supported by each stay

319.5 $\frac{1}{2}$

Working pressure by rules

198 lbs

Material of Front plates at bottom

steel

Thickness

1

Material of

Lower back plate

steel

Thickness

1 $\frac{5}{16}$ "

Greatest pitch of stays

14 $\frac{1}{2}$ " x 8 $\frac{1}{2}$ "

Working pressure of plate by rules

215 lbs

Diameter of tubes

3 $\frac{1}{2}$ "

Pitch of tubes

4 $\frac{3}{4}$ "

Material of tube plates

steel

Thickness: Front

1"

Back

7 $\frac{1}{8}$ "

Mean pitch of stays

11 $\frac{1}{8}$ "

Pitch across wide

water spaces

14 $\frac{1}{2}$ "

Working pressures by rules

192 lbs

Girders to Chamber tops: Material

steel

Depth and thickness of

girder at centre

6" x 1 $\frac{1}{2}$ "

Length as per rule

31"

Distance apart

9 $\frac{1}{2}$ "

Number and pitch of Stays in each

two

10 $\frac{1}{8}$ "

Working pressure by rules

180 lbs

Superheater or Steam chest: how connected to boiler

✓

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,

J. T. Eltringham

Manufacturer.

Dates of Survey

During progress of work in shops - - -

1909
Jul. 27. Aug. 6. 19. 25. 31. Sep. 6. 14. 22

while building

During erection on board vessel - - -

See Machinery report

Is the approved plan of boiler forwarded herewith

yes

Total No. of visits

8+

GENERAL REMARKS

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

This boiler has been constructed under special survey the materials used are good, and the workmanship satisfactory.

Survey Fee

... .. £

When applied for,

19

Travelling Expenses (if any) £

When received,

19

FRI. 3 DEC 1909

Committee's Minute

Assigned

See Minute on Ave. Rpt 57699

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



Lloyd's Register Foundation

007403-007411-0065