

REPORT ON BOILERS.

No. 74.285

Received at London Office JUL 21 AUG 1923

of writing Report

10

When handed in at Local Office

10

Port of

Newcastle-on-Tyne

Survey held at

Newcastle-on-Tyne

Date, First Survey

20th July 1920

Last Survey

17th April 1921

Book.

on the Main Boiler 993. (SS FLORENCE COOKE).

Number of Visits

8

Gross

Net

ter

Built at

South Shields

By whom built

Hepples (1919) Ltd.

When built

1923.

ines made at

North Shields

By whom made

The Shields Eng & Dry Dock Co Ltd.

When made

1923.

ers made at

Hebburn

By whom made

Palmer & S. Ltd. 993

When made

1921-4.

stered Horse Power

62.

Owners

Cook & Explosives Ltd.

Port belonging to

Sunderland.

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

Manufacturers of Steel

J. Spencer & Sons Ltd.

ter for record

8'

Total Heating Surface of Boilers

1120 sq. ft.

Is forced draft fitted

No.

No. and Description of

ers

one S.E. Cyl. multitubular

Working Pressure

130 lbs

Tested by hydraulic pressure to

260 lbs

Date of test

13-4-21.

of Certificate

9553.

Can each boiler be worked separately

✓

Area of fire grate in each boiler

35 sq. ft.

No. and Description of

ty valves to each boiler

25 Spring loaded

Area of each valve

5.93 sq. in.

Pressure to which they are adjusted

135 lbs

they fitted with easing-gear

Yes

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

✓

allest distance between boilers or uptakes and bunkers or woodwork

6"

Internal Dia.

12'-0"

Length

10'-0"

erial of shell plates

Steel

Thickness

3/16"

Range of tensile strength

28/32

Are the shell plates welded or flanged

No.

rip. of riveting: cir. seams

DR Lap.

long. seams

I.R.E.B. type

Diameter of rivet holes in long. seams

1"

Pitch of rivets

5 1/4"

width of butt straps

15 1/2"

Per centages of strength of longitudinal joint

82.5%

Working pressure of shell by

plate

80.95%

Size of manhole in shell

16" x 12"

Size of compensating ring

7" x 13/16"

No. and Description of Furnaces in each

er

two plain

Material

Steel

Outside diameter

3'-7 3/8"

Length of plain part

5'-10"

ription of longitudinal joint

Weld

No. of strengthening rings

none

Working pressure of furnace by the rules

167 lbs

es: Material

Steel

Thickness: Sides

19/32"

Back

9/16"

Top

19/32"

Bottom

13/16"

Pitch of stays to ditto: Sides

9 1/2 x 8 1/2"

9 1/2 x 8 1/2"

If stays are fitted with nuts or riveted heads

Nuts.

Working pressure by rules

135 lbs

Material of stays

Steel

best part

1.45"

Area supported by each stay

81 sq. in.

Working pressure by rules

143 lbs

End plates in steam space: Material

Steel

h of stays

16 1/2 x 16 1/2"

How are stays secured

Draw.

Working pressure by rules

133 lbs

Material of stays

Steel

Area at smallest part

4.11 sq. in.

supported by each stay

272 sq. in.

Working pressure by rules

156 lbs

Material of Front plates at bottom

Steel

Thickness

27/32"

Material of

er back plate

Steel

Thickness

25/32"

Greatest pitch of stays

13" x 9"

Working pressure of plate by rules

130 lbs

Diameter of tubes

3 1/2"

h of tubes

4 7/8 x 4 1/4"

Material of tube plates

Steel

Thickness: Front

27/32"

Back

3/4"

Mean pitch of stays

14 5/8 x 9 1/2"

er spaces

14"

Working pressures by rules

130 lbs

Girders to Chamber tops: Material

Steel

Depth and thickness of

2 of 8 1/2" pitch

er at centre

8 1/2 x 1 3/8"

Length as per rule

30-5"

Distance apart

9 1/2"

Number and pitch of Stays in each

2 of 8 1/2" pitch

king pressure by rules

165 lbs

Steam dome: description of joint to shell

none

% of strength of joint

meter

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet holes

h of rivets

Working pressure of shell by rules

Crown plates

Thickness

How stayed

ERHEATER. Type

None.

Date of Approval of Plan

Tested by Hydraulic Pressure to

of Test

Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

eter of Safety Valve

Pressure to which each is adjusted

Is Easing Gear fitted

The foregoing is a correct description,

Manufacturer.

ates

During progress of

work in shops - -

urvey

During erection on

board vessel - -

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.)

The Boilers built under Special Survey. The material and workmanship found good and efficient. This boiler has been efficiently installed & fastened on the S.S. Florence Cooke. The boiler was tested under 200 lbs. hydraulic pressure (as mounting) at the maker's works and found sound and satisfactory.

Survey Fee

£ 7 : 10

When applied for

16th April 1921.

Travelling Expenses (if any)

£

When received

26th May 1921.

Committee's Minute

FRI. 24 AUG 1923

igned

Sgd. L. G. Shallcross.

Engineer Surveyor to Lloyd's Register of Shipping.

L. Rickett.

Lloyd's Register Foundation

002630-002638-0225

002630-002638-0228