

REPORT ON BOILERS.

No. 76051.
TUE. OCT. 17 1922

Received at London Office

Date of writing Report

19

When handed in at Local Office

13.10.

1922 Port of

NEWCASTLE ON TYNE

No. in

Survey held at

Jarrow & Hebburn

Date, First Survey

31. August/21

Last Survey

12 October

19

22

Reg. Book.

36564 on the

S.S. British Sergeant.

(Number of Visits—)

(Palmer & Co 931)

Gross 6050.

Net 3520.

Master

Built at

Hebburn

By whom built

Palmer Shipbuilding & Iron Co Ltd

When built 1922.

Engines made at

Jarrow on Tyne

By whom made

Palmer Shipbuilding & Iron Co Ltd

When made 1922

Boilers made at

Jarrow on Tyne

By whom made

Palmer Shipbuilding & Iron Co Ltd

When made 1922

Registered Horse Power

593

Owners

British Tanker Co Ltd

Port belonging to

London

MULTITUBULAR BOILERS

— ~~MAN, ROCKET, OR~~ DONKEY. —

Manufacturers of Steel

J. Spencer & Son Ltd

(Letter for record

S)

Total Heating Surface of Boiler

1102 sq ft

Is forced draft fitted

No

No. and Description of

Boilers One, Single Ended

Working Pressure

120 lbs

Tested by hydraulic pressure to

230 lbs

Date of test

3/11/21

No. of Certificate

9624

Can each boiler be worked separately

Yes

Area of fire grate in each boiler

27 sq ft

No. and Description of

safety valves to each boiler

Two, direct spring

Area of each valve

7.06 sq in

Pressure to which they are adjusted

125 lbs per sq in

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

18 in

Man dia. of boilers

10'-6"

Length

10'-6"

Material of shell plates

Steel

Thickness

5/8"

Range of tensile strength

25/32 ton

Are the shell plates welded or flanged

No

Descrip. of riveting: cir. seams

2 R Lap

long. seams

Double straps

5 rivets

Diameter of rivet holes in long. seams

1 1/16"

Pitch of rivets

4 7/8"

Top of plates on width of butt straps

10 3/16"

Per centages of strength of longitudinal joint

rivets 93.8.

plate 55.9.

Working pressure of shell by

rules

125 lbs

Size of manhole in shell

16" x 12"

Size of compensating ring

39" x 33" x 5/8"

No. and Description of Furnaces in each

boiler

No, Brighton

Material

Steel

Description of longitudinal joint

Welded

No. of strengthening rings

Yes

Working pressure of furnace by the rules

148 lbs

Combustion chamber

plates: Material

Steel

Thickness: Sides

19/32"

Top 10" x 8 1/2"

If stays are fitted with nuts or riveted heads

Nuts on outside

Working pressure by rules

121 lbs

Material of stays

Steel

Area at

smallest part

1 1/4"

Area supported by each stay

Pitch of stays

24" x 15"

How are stays secured

Double nuts

Working pressure by rules

129

Material of stays

Steel

Area at smallest part

4.1 sq in

Area supported by each stay

360 sq in

Working pressure by rules

123

Material of front plates at bottom

Steel

Thickness

3/4"

Material of

Lower back plate

Steel

Thickness

3/4"

Greatest pitch of stays

Pitch of tubes

4 1/4" x 4 1/4"

Material of tube plates

Steel

Thickness: Front

3/4"

Back

5/8"

Mean pitch of stays

2 1/4" x 8 1/2"

Pitch across wide

water spaces

Working pressures by rules

138 lbs per sq in

Girders to Chamber tops: Material

Steel

Depth and thickness of

girder at centre

6" x 1"

Length as per rule

25 7/8"

Distance apart

8 1/2"

Number and pitch of Stays in each

Working pressure by rules

122 lbs

Steam dome: description of joint to shell

None

% of strength of joint

Yes

Diameter

Yes

Thickness of shell plates

Yes

Material

Yes

Description of longitudinal joint

Yes

Diam. of rivet holes

Yes

Pitch of rivets

Yes

Working pressure of shell by rules

Yes

Crown plates

Yes

Thickness

Yes

How stayed

Yes

SUPERHEATER. Type

None

Date of Approval of Plan

Tested by Hydraulic Pressure to

Date of Test

Yes

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

Yes

Diameter of Safety Valve

Yes

Pressure to which each is adjusted

Yes

Is Easing Gear fitted

Yes

Palmer Shipbuilding & Iron Co., Ltd.

The foregoing is a correct description,

General Manager, Engine Works

Manufacturer.

Is the approved plan of boiler forwarded herewith

Copy

Total No. of visits

See accompanying Report

Dates of Survey

During progress of

work in shops - -

while

During erection on

board vessel - -

building

Survey Fee

£

When applied for

19

Travelling Expenses (if any)

£

When received

19

Committee's Minute

Assigned

TUE. 24 OCT. 1922

Engine Surveyor to Lloyd's Register of Shipping.

Lloyd's Register

Foundation

W12-0026