

REPORT ON BOILERS.

No. 80563

Received at London Office

SAT. APR 24 1920

(Boiler No. 2016)

Date of writing Report

10

When handed in at Local Office

21 APR 1920

Port of Liverpool

Date, First Survey

19th Decr/18

Last Survey 24th Mar 1919

No. in Survey held at

Birkenhead

Reg. Book.

on the s/s "Co. 72"

(Number of Visits 21)

Gross Tons

Not

Master

Built at Ellesmere Port

By whom built Manchester Dry Docks Co. Ltd.

When built 1920

Engines made at

By whom made

When made

Boilers made at Birkenhead

By whom made Cammell, Laird & Co. Ltd.

When made 1920

Registered Horse Power

Owners

Port belonging to

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.

Manufacturers of Steel H. Bealmore & Co. Ltd. J. Halmsey & Sons

(Letter for record S)

Total Heating Surface of Boilers

952 sq. ft.

Is forced draft fitted

No

No. and Description of

Boilers One - Cylindrical Multitubular

Working Pressure 130 lbs

Tested by hydraulic pressure to 260 lbs

Date of test 21/3/19

No. of Certificate 2061

Can each boiler be worked separately

Area of fire grate in each boiler

35 sq. ft.

No. and Description of

safety valves to each boiler

2 - Spring loaded

Area of each valve

Pressure to which they are adjusted

Are they fitted with easing gear

No

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

Inside

Mean dia. of boilers

10'6"

Length 10'0"

Material of shell plates

Steel

Thickness 23/32

Range of tensile strength 28/32 tons

Are the shell plates welded or flanged

No

Descrip. of riveting: cir. seams

DR - Lap

long. seams DR - double butt strap

Diameter of rivet holes in long. seams

5/16

Pitch of rivets 4'8"

Lap of plates on width of butt straps

9/16

Per centages of strength of longitudinal joint

87.7

Working pressure of shell by

plate 80.78

rules 134 lbs

Size of manhole in shell

16" x 12"

Size of compensating ring

No. 1

No. and Description of Furnaces in each

boiler 2 - Plain

Material Steel

Outside diameter

3'3 1/2"

Length of plain part

top 7'5"

Thickness of plates

bottom 3'5"

Description of longitudinal joint

Weld

No. of strengthening rings

None

Working pressure of furnace by the rules

130 lbs

plates: Material Steel

Thickness: Sides

1'3/8"

Back 1'3/8"

Top 1'3/8"

Bottom 2'3/8"

Pitch of stays to ditto: Sides

8'2" x 7'2"

Back 8'2" x 7'2"

Top 8'2" x 7'2" stays are fitted with nuts or riveted heads

Nuts

Working pressure by rules 137 lbs

Material of stays

Steel

Area at

smallest part 1'9"

Area supported by each stay 62.68 sq. in.

Working pressure by rules

152 lbs

End plates in steam space: Material Steel

Thickness

2'3/8"

Pitch of stays 16" x 14 1/2"

How are stays secured

Nuts

Working pressure by rules

142 lbs

Material of stays

Steel

Area at smallest part 3'26 sq. in.

Area supported by each stay

236 sq. in.

Working pressure by rules

144 lbs

Material of Front plates at bottom

Steel

Thickness

2'3/8"

Lower back plate

Steel

Thickness

2'3/8"

Greatest pitch of stays 14'2" x 7'2"

Working pressure of plate by rules

181 lbs

Diameter of tubes

3'2"

Pitch of tubes 4'2" x 4'8"

Material of tube plates

Steel

Thickness: Front

2'3/8"

Back 1'4"

Mean pitch of stays

10'5"

Pitch across wide

water spaces

14"

Working pressures by rules

130 lbs

Girders to Chamber tops: Material

Steel

Depth and thickness of

girder at centre

2 - 6" x 23/32"

Length as per rule

2'4 1/2"

Distance apart

7'2"

Number and pitch of Stays in each

2 - 8'2"

Working pressure by rules

137 lbs

Steam dome: description of joint to shell

Weld

% of strength of joint

100

Diameter

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet holes

10'6"

Pitch of rivets

Working pressure of shell by rules

142 lbs

Crown plates

Thickness

How stayed

Weld

SUPERHEATER.

Type

Date of Approval of Plan

Tested by Hydraulic Pressure to

Date of Test

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

Diameter of Safety Valve

Pressure to which each is adjusted

Is Easing Gear fitted

The foregoing is a correct description,

J. G. Baird

Manufacturer.

Dates of Survey while building

During progress of work in shops - - -
During erection on board vessel - - -

1919 1920

Dec 19, Jan 6, 10, 14, 15, 20, 24, 27, 31, Feb 4, 13, 26, Mar 6, 7, 10, 11, 13, 17, 20, 21, 24

Is the approved plan of boiler forwarded herewith

Total No. of visits 21

GENERAL REMARKS

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

This boiler has been constructed under Special Survey in accordance with the approved plan and the Secretary's letter (E) of 28th October 1918. The materials and workmanship are of good quality. When tested by water pressure to 260 lbs per sq. in., the boiler was found tight and satisfactory in every respect. This boiler has been forwarded to Ellesmere Port to be fitted on board.

Survey Fee ... £ 2 : 5 : -
Travelling Expenses (if any) £ : : -

When applied for, 10/6/20
When received, 10/6/20

21 APR 1920

25 APR 1920

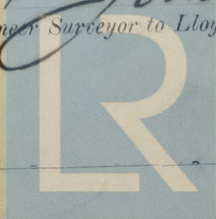
H. G. Oxford

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

Transmit to London.



Lloyd's Register Foundation