

Rpt. 5a.

REPORT ON BOILERS.

No. 113157

27 SEP 1939

Received at London Office

Date of writing Report

10

When handed in at Local Office

21 SEP 1939

Port of

LIVERPOOL

No. in Reg. Book

Survey held at

Date, First Survey

May 26th/39

Last Survey

Sept 13th 1939

(Number of Visits

9

Gross Tons

180

Net

Master

Built at

Northwich

By whom built

W.J. Yarwood & Son

Yard No. 625

When built

1939

Engines made at

Northwich

By whom made

W.T. Yarwood & Sons

Engine No. 158

When made

1939

Boilers made at

Birkenhead

By whom made

Cammell Laird & Co. Ltd.

Boiler No. 2210

When made

1939

Nominal Horse Power

Owners

Port belonging to

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

Manufacturers of Steel

Calville's Ltd.

(Letter for Record

(5)

Total Heating Surface of Boilers

1445 sq. ft.

Is forced draught fitted

Coal or Oil fired

No. and Description of Boilers

1. S.B.

Working Pressure

200 lbs

Tested by hydraulic pressure to

350 lbs

Date of test

13-9-39

No. of Certificate

2513

Can each boiler be worked separately

Area of Firegrate in each Boiler

53 1/2 sq. ft.

No. and Description of safety valves to each boiler

DOUBLE-1 3/4" dia IMP. HIGH LIFT.

Area of each set of valves per boiler

per Rule 4.20"

as fitted 4.810"

Pressure to which they are adjusted

Are they fitted with easing gear

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

Is oil fuel carried in the double bottom under boilers

Smallest distance between shell of boiler and tank top plating

Is the bottom of the boiler insulated

Largest internal dia. of boilers

13'0"

Length

10'6"

Shell plates: Material

Steel

Tensile strength

29/33 Tons

Thickness

1 5/32"

Are the shell plates welded or flanged

NO.

Description of riveting: circ. seams

end

D.R.

long. seams

T.R.-D.B.S.

Diameter of rivet holes in

circ. seams

1 3/16"

Pitch of rivets

3.01"

8 3/8"

Percentage of strength of circ. end seams

plate 60.6

rivets 50.0

Percentage of strength of circ. intermediate seam

plate

85.8

Percentage of strength of longitudinal joint

plate 85.8

rivets 85.2

combined 88.6

Working pressure of shell by Rules

201 lbs

Thickness of butt straps

outer 7/8"

inner 1"

No. and Description of Furnaces in each Boiler

3. Beighton Section

Material

Steel

Tensile strength

26-30 Tons

Smallest outside diameter

3' 2 1/4"

Length of plain part

top

bottom

Thickness of plates

9/16"

Description of longitudinal joint

WELD.

Dimensions of stiffening rings on furnace or c.c. bottom

Working pressure of furnace by Rules

213 lbs

End plates in steam space: Material

STEEL

Tensile strength

26-30 TONS

Thickness

1 3/32"

Pitch of stays

18 1/2" x 17"

How are stays secured

D.N. + W.

Working pressure by Rules

15/16" 204 lbs

Tube plates: Material

front STEEL

back

Tensile strength

26-30 TONS

Thickness

7/8"

Mean pitch of stay tubes in nests

11.6"

Pitch across wide water spaces

14 1/4"

Working pressure

front 213 lbs

back 206 lbs

Girders to combustion chamber tops: Material

STEEL

Tensile strength

28-32 TONS

Depth and thickness of girder

at centre

9 1/4" x 1 1/2"

Length as per Rule

2' - 5 24/32"

Distance apart

10 1/2" max.

No. and pitch of stays

in each

3 @ 7"

Working pressure by Rules

216 lbs

Combustion chamber plates: Material

STEEL

Tensile strength

26-30 TONS

Thickness: Sides

11/16"

Back

21/32"

Top

11/16"

Bottom

13/16"

Pitch of stays to ditto: Sides

9 1/8" x 7/14"

Back

8 3/4" x 8"

Top

10 1/2" x 7"

Are stays fitted with nuts or riveted over

NUTS

Working pressure by Rules

202 lbs

Front plate at bottom: Material

STEEL

Tensile strength

26-30 TONS

Thickness

15/16"

Lower back plate: Material

STEEL

Tensile strength

26-30 TONS

Thickness

7/8"

Pitch of stays at wide water space

15"

Are stays fitted with nuts or riveted over

NUTS

Working Pressure

205 lbs

Main stays: Material

STEEL

Tensile strength

28-32 TONS

Diameter

At body of stay, or Over threads

3"

No. of threads per inch

6

Area supported by each stay

30.40"

Working pressure by Rules

214 lbs

Screw stays: Material

STEEL

Tensile strength

26-30 TONS

Diameter

At turned off part, or Over threads

1 5/8"

No. of threads per inch

9

Area supported by each stay

73.54"

