

REPORT ON BOILERS.

No. 55700

11 NOV 1908

Received at London Office

Date of writing Report

10

When handed in at Local Office

11 NOV 1908

Port of Newcastle

No. in Survey held at

Newcastle

Date, First Survey

Last Survey

5th Nov 1908

Reg. Book.

on the

Auxiliary Boiler & Engineer

(Number of Visits)

Gross 5883

Net 3797

Master

U. Lewellyn

Built at

Newcastle

By whom built

W. H. Hunter & Co. Ltd.

When built

1908

Engines made at

Newcastle

By whom made

H. & M. Eng. Co. Ltd.

When made

1908

Boilers made at

do

By whom made

do

When made

1908

Registered Horse Power

Owners

J. J. Harrison

Port belonging to

Liverpool

MULTITUBULAR BOILERS - MAIN, AUXILIARY OR DONKEY.

Manufacturers of Steel

J. J. Harrison & Co. Ltd.

Letter for record

156

Total Heating Surface of Boilers

1242 sq. ft.

Is forced draft fitted

no.

No. and Description of

Boilers

Working Pressure

190

Tested by hydraulic pressure to

380

Date of test

5/5/08

No. of Certificate

7709

Can each boiler be worked separately

yes

Area of fire grate in each boiler

50.8 sq. ft.

No. and Description of

Safety valves to each boiler

2 Spring

Area of each valve

4.9 sq. in.

Pressure to which they are adjusted

195

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

30"

Mean dia. of boilers

13' 2 1/2"

Length

9' 9 1/4"

Material of shell plates

S

Thickness

1 1/2"

Range of tensile strength

28 1/2 to 32

Are the shell plates welded or flanged

both

Description of riveting: cir. seams

d. & lap

long. seams

4. butt

Diameter of rivet holes in long. seams

1 1/2"

Pitch of rivets

8"

Width of butt straps

18 3/4"

Per centages of strength of longitudinal joint

91.2

Working pressure of shell by

plate

85.1

Size of manhole in shell

16 x 12"

Size of compensating ring

in shell

No. and Description of Furnaces in each

boiler

3 Morrison

Material

S

Outside diameter

3' 5 1/4"

Length of plain part

top

bottom

Thickness of plates

1 1/2"

bottom

Description of longitudinal joint

welded

No. of strengthening rings

Working pressure of furnace by the rules

199

Combustion chamber

Material of plates

S

Thickness: Sides

2 1/2"

Back

2 1/2"

Top

2 1/2"

Bottom

4"

Pitch of stays to ditto: Sides

10 x 8"

Top of stays

10 x 8"

If stays are fitted with nuts or riveted heads

nut.

Working pressure by rules

204

Material of stays

S

Diameter at

Smallest part

2.36

Area supported by each stay

864

Working pressure by rules

204

End plates in steam space: Material

S

Thickness

1 1/2"

Pitch of stays

21 x 19"

How are stays secured

nut.

Working pressure by rules

193

Material of stays

S

Diameter at smallest part

8.48"

Area supported by each stay

399"

Working pressure by rules

220

Material of Front plates at bottom

S

Thickness

1"

Material of

Lower back plate

S

Thickness

3 1/2"

Greatest pitch of stays

14 1/2"

Working pressure of plate by rules

199

Diameter of tubes

3 1/4"

Pitch of tubes

4 1/2 x 4 1/2"

Material of tube plates

S

Thickness: Front

1"

Back

3/4"

Mean pitch of stays

9 1/4"

Pitch across wide

Water spaces

14 1/2"

Working pressures by rules

194

Girders to Chamber tops: Material

S

Depth and thickness of

Number and pitch of Stays in each

2 @ 8 1/2"

Order at centre

8 1/2 x 12"

Length as per rule

28"

Distance apart

10"

Working pressure by rules

198

Superheater or Steam chest: how connected to boiler

Working pressure by rules

198

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

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

End plates: Thickness

How stayed

Are they fitted with easing gear

Area of safety valves to superheater

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

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