

## REPORT ON BOILERS.

No. 5894

Received at London Office FRI. 25 JUL 1909

MIDDLESBROUGH ON-TELS.

Date of writing Report

19

When handed in at Local Office

22<sup>nd</sup> July 1909 Port of

(Number of Visits)

Last Survey

W.D. 21 19

No. in Survey held at

Stockton

Date, First Survey

Reg. Book.

on the

S.S. "Brington Court"

Gross 4461

Net 2782

Master

Built at

Newcastle

By whom built

Northumberland HP Co Ltd

When built 1909

Engines made at

Stockton

By whom made

Messrs Blair &amp; Co Ltd

when made 1909

Boilers made at

Stockton

By whom made

Messrs Blair &amp; Co Ltd

when made 1909

Registered Horse Power

✓

Owners

Messrs Haldin &amp; Co

Port belonging to London

MULTITUBULAR BOILERS

MAIN AUXILIARY OR DONKEY

Manufacturers of Steel

J. Spencer &amp; Sons

(Letter for record

(S)

Total Heating Surface of Boilers

1222 sq ft

Is forced draft fitted

no

No. and Description of

Boilers One single ended

Working Pressure 180

Tested by hydraulic pressure to 360

Date of test 30.6.09

No. of Certificate 4289

Can each boiler be worked separately

yes

Area of fire grate in each boiler

39 sq ft

No. and Description of

safety valves to each boiler

2 direct spring

Area of each valve

4.91

Pressure to which they are adjusted 185 lbs

Are they fitted with easing gear

yes

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 8 ft

dia.

dia. of boilers 12'-1"

Length 10'-6"

Material of shell plates

steel

Thickness

1"

Range of tensile strength 28-32

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

2 Riv Lap long. seams

2B-3 Riv

Diameter of rivet holes in long. seams

1 1/2"

Pitch of rivets 7 1/2"

width of butt straps

16 1/2" x 1 1/2"

Per centages of strength of longitudinal joint

5-Rivets per pitch

rivets 90.0

plate 85.6

Working pressure of shell by

rules 183 lbs

Size of manhole in shell

16" x 12"

Size of compensating ring

7 1/2" x 1"

No. and Description of Furnaces in each

boiler 2 (horizontal)

Material steel

Outside diameter

42 1/2"

Length of plain part

top 33"

bottom 24"

Thickness of plates

crown 33"

bottom 24"

Description of longitudinal joint

Welded

No. of strengthening rings

✓

Working pressure of furnace by the rules

185 lbs

Combustion chamber

plates: Material steel

Thickness: Sides 1 1/2"

Back 1 1/2"

Top 1 1/2"

Bottom 2 1/2"

Pitch of stays to ditto: Sides 10 1/2" x 8 1/2"

Back 9 1/2" x 8 1/2"

Top 9 x 9 1/2"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

183 lbs

Material of stays

steel

Diameter at

smallest part 1.59

Area supported by each stay

88.88

Working pressure by rules

200

End plates in steam space: Material steel

Thickness 1 1/2"

Pitch of stays

18 x 15 1/2"

How are stays secured

nuts &amp; washers

Working pressure by rules

190

Material of stays

steel

Diameter at smallest part 2.54

Area supported by each stay

297

Working pressure by rules

180

Material of Front plates at bottom

steel

Thickness 1 1/2"

Material of

Lower back plate

steel

Thickness 1 1/2"

Greatest pitch of stays

16 1/2" x 9 1/2"

Working pressure of plate by rules

185

Diameter of tubes

3 1/2"

Pitch of tubes

4 3/8" x 4 3/4"

Material of tube plates

steel

Thickness: Front 1 1/2"

Back 1 1/2"

Mean pitch of stays

9 3/4"

Pitch across wide

water spaces 14 1/2"

Working pressures by rules

181 lbs

Girders to Chamber tops: Material steel

Depth and thickness of

girder at centre

7 1/2" x 1 1/2"

Length as per rule

29 1/4"

Distance apart

9"

Number and pitch of Stays in each

20 9 3/4"

Working pressure by rules

191

Superheater or Steam chest: has been connected to boiler

no

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

holes

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

If stiffened with rings

Distance between rings

Working pressure by rules

End plates: Thickness

How stayed

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

The foregoing is a correct description,

For BLAIR &amp; Co., LIMITED

Manufacturer.

Included in report attached

Is the approved plan of boiler forwarded to the

yes.

Dates of Survey while building

During progress of work in shops - -

During erection on board vessel - - -

to

to

Total No. of visits

## GENERAL REMARKS

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

This boiler has been built under special survey in accordance with the approved plan, the Secretary's letter, and in general conformity with the Rules. The materials and workmanship are sound and good and on completion the boiler was tested by hydraulic pressure with satisfactory results.

Survey Fee

...

£

Included in Report attached

When applied for, 19

Travelling Expenses (if any) £

in Report attached

When received, 19

Engine Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute

FRI. 27 AUG 1909

Assigned