

REPORT ON BOILERS.

No. 61988

Received at London Office

Date of writing Report

19

When handed in at Local Office

19

Port of *Newcastle on Tyne*

MON. MAR 25. 1912

No. in

Survey held at

Newcastle

Reg. Book.

Date, First Survey

10th Apr. 1911

Last Survey

9th March 1912

on the

S. S. Birma

(Number of Visits)

Gross

4896

Tons

Net

3045

Master

Built at

Wallend

By whom built

Swan Hunter & Wigham Richardson

When built

1912

Engines made at

Wallend

By whom made

Wallend Shipway & Engineering Co.

when made

1912

Boilers made at

Walker

By whom made

Swan Hunter & Wigham Richardson L^{td}

when made

1912

Registered Horse Power

Owners

Rotterdamse Lloyd

Port belonging to

Rotterdam

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.

Manufacturers of Steel

J. Spencer & Son

(Letter for record

X)

Total Heating Surface of Boilers

1006

Is forced draft fitted

no

No. and Description of

Boilers *one S. E. Cylindrical Mult.*

Working Pressure

100 lbs

Tested by hydraulic pressure to

200 lbs

Date of test

8.8.11

No. of Certificate

8174

Can each boiler be worked separately

✓

Area of fire grate in each boiler

34.5

No. and Description of

safety valves to each boiler

3" double

Area of each valve

4.06

Pressure to which they are adjusted

100 lbs

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

*on deck**Limit*

Mean dia. of boilers

10.10 5/8"

Length

9.6"

Material of shell plates

steel

Thickness

1 1/16"

Range of tensile strength

28 3/4/32

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

d.r. lap.

long. seams

t.r. lap.

Diameter of rivet holes in long. seams

1 1/2"

Pitch of rivets

3 7/8"

Lap of plates or width of butt straps

7 1/2"

Per centages of strength of longitudinal joint

rivets

80.4

Working pressure of shell by

rules

106.2 lbs

Size of manhole in shell

16" x 12"

Size of compensating ring

7 1/2" x 11 1/16"

No. and Description of Furnaces in each

boiler

2 plain

Material

steel

Outside diameter

38 7/8"

Length of plain part

top

72 1/2"

Thickness of plates

crown

9 1/16"

Description of longitudinal joint

double butt

No. of strengthening rings

✓

Working pressure of furnace by the rules

121.5 lbs

Combustion chamber

plates: Material

steel

Thickness: Sides

15/32"

Back

15/32"

Top

15/32"

Bottom

13/16"

Pitch of stays to ditto: Sides

7 1/2" x 7 1/2"

Back

7 1/2" x 7 1/2"

Top

7 1/2" x 7 1/2"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

108

Material of stays

iron

Diameter at

smallest part

1.19"

Area supported by each stay

62"

Working pressure by rules

115 lbs

End plates in steam space: Material

steel

Thickness

13/16"

Pitch of stays

15 1/4" x 17"

How are stays secured

d & w

Working pressure by rules

119.5 lbs

Material of stays

steel

Diameter at smallest part

3.26"

Area supported by each stay

259.25"

Working pressure by rules

130 lbs

Material of Front plates at bottom

steel

Thickness

13/16"

Material of

Lower back plate

steel

Pitch of tubes

4 1/2" x 4 1/4"

Material of tube plates

steel

Thickness: Front

13/16"

Back

13/32"

Mean pitch of stays

12 3/4" x 8 1/4"

Pitch across wide

water spaces

14"

Working pressures by rules

120.7 lbs

Girders to Chamber tops: Material

steel

Depth and thickness of

girder at centre

6 1/2" x 1"

Length as per rule

27 3/16"

Distance apart

7 3/8"

Number and pitch of Stays in each

2 - 7 3/8"

Working pressure by rules

111.7 lbs

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

✓

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

*✓**See**Wadding Report*

For

The foregoing is a correct description,

SWAN, HUNTER, & WIGHAM RICHARDSON, LTD.

Manufacturer.

Dates

During progress of

See Wadding Report

of Survey

work in shops - - -

while

During erection on

building

board vessel - - -

Is the approved plan of boiler forwarded herewith

Total No. of visits

GENERAL REMARKS

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

This donkey boiler has been constructed under special survey, the workmanship and materials used are both of good quality, it has been properly fitted and secured and the safety valves have been adjusted.

Survey Fee

...

£ 2.2.0

When applied for

See Wadding Report

Travelling Expenses (if any) £

When received.

19

R. W. Coomber & C. Cooper

Engineer Surveyors to Lloyd's Register of British and Foreign Shipping.

Committee's Minute

TUE. APR. 2 - 1912

Assigned

