

Rpt. 5a.

REPORT ON BOILERS.

No. 24862

Received at London Office

JUN 6 1911

Date of writing Report

10

When handed in at Local Office

26 10 11 Port of

Sunderland

No. in Survey held at
Reg. Book.

on the

S.S. Grangemoor

Date, First Survey

11 March

Last Survey

22 May 1911

Master

Griffith

Built at

Sunderland

By whom built

Messrs Blumer & Coys

When built

1911

Engines made at

Sunderland

By whom made

J. Dickinson & Sons. Ltd.

when made

1911

Boilers made at

Sunderland

By whom made

Messrs Pollock Ltd (609)

when made

1911

Registered Horse Power

Owners

W. Anciman & Co

Port belonging to

Newcastle

MULTITUBULAR BOILERS ~~MAIN AUXILIARY OR~~ DONKEY. Manufacturers of Steel

Messrs Blumer & Coys

(Letter for record)

(8)

Total Heating Surface of Boilers

668 sq

Is forced draft fitted

No

No. and Description of

Boilers

One single ended

Working Pressure

100

Tested by hydraulic pressure to

200

Date of test

24-4-11

No. of Certificate

2909

Can each boiler be worked separately

Yes

Area of fire grate in each boiler

24 sq

No. and Description of

safety valves to each boiler

Two spring loaded

Area of each valve

8.29 sq

Pressure to which they are adjusted

102 lbs.

Are they fitted with easing gear

Yes

In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler

made

Smallest distance between boilers or uptakes and bunkers or woodwork

12"

Mean dia. of boilers

9'-6"

Length

9'-6"

Material of shell plates

Steel

Thickness

5/8"

Range of tensile strength

28-32

Are the shell plates welded or flanged

No

Descrip. of riveting: cir. seams

S.R.

long. seams

T.R. lap.

Diameter of rivet holes in long. seams

3/8"

Pitch of rivets

3.14"

Lap of plates or width of butt straps

6"

Per centages of strength of longitudinal joint

rivets

41.3

Working pressure of shell by

rules

106 lbs.

Size of manhole in shell

16" x 19"

Size of compensating ring

5 3/4" x 13 1/16"

No. and Description of Furnaces in each

boiler

Two plain

Material

Steel

Outside diameter

3'-0"

Length of plain part

top

4'-2"

Thickness of plates

crown

1 1/4"

bottom

3/8"

Description of longitudinal joint

weld

No. of strengthening rings

none

Working pressure of furnace by the rules

106 lbs.

Combustion chamber

plates: Material

Steel

Thickness: Sides

1 1/8"

Back

9/16"

Top

1 1/8"

Bottom

1 1/8"

Pitch of stays to ditto: Sides

9 3/4" x 9 3/4"

Back

9 3/4" x 10"

Area

Top

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

104 lbs.

Material of stays

Steel

Diameter at

2 3/8"

smallest part

1.45 sq

Area supported by each stay

49 sq

Working pressure by rules

103 lbs.

End plates in steam space: Material

Steel

Thickness

3/8"

Pitch of stays

16" x 19"

How are stays secured

D.N. double

Working pressure by rules

100 lbs.

Material of stays

Steel

Diameter at smallest part

4-11"

Area supported by each stay

288 sq

Working pressure by rules

148 lbs.

Material of Front plates at bottom

Steel

Thickness

3/8"

Material of

Lower back plate

Steel

Thickness

3/8"

Greatest pitch of stays

12 1/2"

Working pressure of plate by rules

139 lbs.

Diameter of tubes

3 1/4"

Pitch of tubes

4 1/2" x 4 3/8"

Material of tube plates

Steel

Thickness: Front

2 3/8"

Back

5/8"

Mean pitch of stays

11 1/8"

Pitch across wide

water spaces

13 1/2"

Working pressures by rules

101.5 lbs.

Girders to Chamber tops: Material

Steel

Depth and thickness of

girder at centre

2 @ 5 1/8" x 13 1/16"

Length as per rule

25 3/8"

Distance apart

10 1/2"

Number and pitch of Stays in each

2 @ 4 1/2"

Working pressure by rules

104 lbs.

Superheater or Steam chest: how connected to boiler

none

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

Yes

The foregoing is a correct description,

MAC COLL & POLLOCK LTD.

Manufacturer.

Dates of Survey

During progress of

work in shops - -

1911 March 11, 27, Apr. 20, 24.

while building

During erection on

board vessel - -

May 1, 22

Is the approved plan of boiler forwarded herewith

Yes

Total No. of visits

6

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

This boiler has been built under special survey the materials & workmanship are of good quality & the hydraulic test proved satisfactory it has been securely fitted on board & its safety valves adjusted under steam to the above pressure.

Survey Fee

£ 2 : 2 : -

When applied for,

26 1911

Travelling Expenses (if any) £

When received,

13/6/1911

William P. Dutton

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

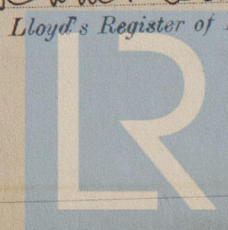
Committee's Minute

WED. 7 JUN 1911

Assigned

20 minute on

Std Rpt 24862

Lloyd's Register
Foundation