

REPORT ON BOILERS.

No. 27910.

Received at London Office

Date of writing Report

19

When handed in at Local Office

3/4/

19

Port of

Glasgow

WED. 7 JUL 1909

No. in Survey held at

Glasgow

Date, First Survey

22nd October

Last Survey

28th June, 1909

Reg. Book.

on the

S/S "Dunedin"

(Number of Visits

56

Gross

4469

Tons

Net

Master

Built at

Glasgow

By whom built

C. Bonnell & Co. Ltd.

When built

1909

Engines made at

Glasgow

By whom made

Dunsmuir & Jackson Ltd.

when made

1909

Boilers made at

ditto

By whom made

Dunsmuir & Jackson Ltd.

when made

1909

Registered Horse Power

Owners

Henderson & McIntosh

Port belonging to

Leith

MULTITUBULAR BOILERS

~~MANUFACTURED BY~~

DONKEY.

Manufacturers of Steel

Bolville

(Letter for record

(S)

Total Heating Surface of Boilers

941

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

8.4.09

No. of Certificate

984

Can each boiler be worked separately

Yes

Area of fire grate in each boiler

324

No. and Description of

safety valves to each boiler

Double Spring

Area of each valve

7.06

Pressure to which they are adjusted

105

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

8"

Mean dia. of boilers

11'-0 11/16"

Length

9'-6"

Material of shell plates

S

Thickness

1 1/16"

Range of tensile strength

28/32

Are the shell plates welded or flanged

No

Descrip. of riveting: cir. seams

D.R.

long. seams

T.R. Lap

Diameter of rivet holes in long. seams

1 1/16"

Pitch of rivets

4 1/32

Lap of plates

4 1/4"

Per centages of strength of longitudinal joint

rivets

81.2%

Working pressure of shell by

rules

105

Size of manhole in shell

16 x 12"

Size of compensating ring

8 1/2"

No. and Description of Furnaces in each

boiler

2 plain

Material

S

Outside diameter

3-5 1/16"

Length of plain part

top 6'3"

bottom 6'7 1/8"

Thickness of plates

crown 3 1/8"

bottom 3 1/8"

Description of longitudinal joint

weld.

No. of strengthening rings

Yes

Working pressure of furnace by the rules

110

Combustion chamber

plates: Material

S

Thickness: Sides

1 1/2"

Back

1 1/2"

Top

1 1/2"

Bottom

2 3/32"

Pitch of stays to ditto: Sides

4 3/4 x 9 1/4"

Back

4 3/8 x 8 7/8"

Top

4 3/4 x 8"

If stays are fitted with nuts or riveted heads

Yes

Working pressure by rules

107

Material of stays

S

Diameter at

smallest part

1 1/2 x 3 1/2"

Area supported by each stay

64"

Working pressure by rules

123

End plates in steam space: Material

S

Thickness

3 1/4"

Pitch of stays

15 1/2 x 15"

How are stays secured

D.R.

Working pressure by rules

108

Material of stays

S

Diameter at

smallest part

3 4/7"

Area supported by each stay

233"

Working pressure by rules

131

Material of Front plates at bottom

S

Thickness

1 1/16"

Material of

Lower back plate

S

Thickness

1 1/16"

Greatest pitch of stays

16"

Working pressure of plate by rules

117

Diameter of tubes

3"

Pitch of tubes

4 1/2 x 4 1/4"

Material of tube plates

S

Thickness: Front

2 1/32"

Back

2 1/8"

Mean pitch of stays

1 1/4"

Pitch across wide

water spaces

14"

Working pressures by rules

120

Girders to Chamber tops: Material

Iron

Depth and thickness of

girder at centre

6 x 3 1/4 (2)

Length as per rule

2.3"

Distance apart

8'

Number and pitch of Stays in each

2 at 7 3/4"

Working pressure by rules

116

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

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 DUNSMUIR & JACKSON, Limited

James Fletcher

Manufacturer.

Dates

During progress of

of Survey

work in shops - -

while

During erection on

building

board vessel - -

See accompanying report

Is the approved plan of boiler forwarded herewith

No and with

Glasgow Report No. 27778

Total No. of visits

56.

GENERAL REMARKS

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

This Boiler has been built

under Special Survey in accordance with the approved plan & the workmanship & material are of good quality

Survey Fee

£

When applied for

19

Travelling Expenses (if any) £

When received

19

Wm Gordon Muir

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

Committee's Minute

GLASGOW

6 JUL. 1909

Assigned

See minute on

accompanying report

(No. 27910)

Lloyd's Register
Foundation

W311-0045