

REPORT ON BOILERS.

No. 51738

Received at London Office 23 SEP 1931

Date of writing Report

10

When handed in at Local Office

14. 8. 1931

Port of

Glasgow

of opening

No. in Survey held at
Reg. Book.

Glasgow

Date, First Survey

9. 6. 31

Last Survey

19. 31

10021 on the

SSEELK HOUND

(Number of Visits

17

Tons

Gross 729

Net 301

Master

Built at

Bristol

By whom built

L. Hill & Sons Ltd

Yard No.

When built

1929-10

d diameter

Engines made at

Nürnberg, Augsburg

By whom made

Maschfkt Augsburg

Engine No.

When made

Boilers made at

Glasgow

By whom made

Warrick Rowan & Co Ltd

Boiler No.

386

When made

1931

Nominal Horse Power

226 106

Owners

Grangemouth Dockyard Co Ltd

Port belonging to

London

MAIN.

MULTITUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

Bovilles Ltd

(Letter for Record (5))

ssure as per

Total Heating Surface of Boilers

2040 sq ft

Is forced draught fitted

no

Coal or Oil fired

oil

st pressure

No. and Description of Boilers

one single ended

Working Pressure

180

valves fitted

Tested by hydraulic pressure to

320

Date of test

11.8.31

No. of Certificate

1904

Can each boiler be worked separately

✓

Area of Firegrate in each Boiler

590 sq ft

No. and Description of safety valves to each boiler

Area of each set of valves per boiler

per Rule

Pressure to which they are adjusted

Are they fitted with easing gear

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

anufacturers

Smallest distance between boilers or uptakes and bunkers or woodwork

Is oil fuel carried in the double bottom under boilers

Smallest distance between shell of boiler and tank top plating

Is the bottom of the boiler insulated

Largest internal dia. of boilers

15'-0"

Length

10'-6"

Shell plates: Material

steel

Tensile strength

29-33 tons

Thickness

1 3/16"

Are the shell plates welded or flanged

no

Description of riveting: circ. seams

end JTB lap

long. seams

JTB S. T. R

Diameter of rivet holes in

circ. seams

F 1 3/16" B 1 1/4"

Pitch of rivets

F 3.162" B 3.388"

Percentage of strength of circ. end seams

plate

F 62.4 B 63.1

rivets

F 46.8 B 48.4

Percentage of strength of circ. intermediate seam

plate

✓

Percentage of strength of longitudinal joint

plate

85.7

rivets

87.6

combined

88.9

Working pressure of shell by Rules

180

Thickness of butt straps

outer

2 3/32"

inner

1 1/32"

No. and Description of Furnaces in each Boiler

Three Deighton 3 ft

Material

steel

Tensile strength

26-30 tons

Smallest outside diameter

46 5/32"

Length of plain part

top

✓

Thickness of plates

crown

3 1/2"

Description of longitudinal joint

welded

Dimensions of stiffening rings on furnace or c.c. bottom

Working pressure of furnace by Rules

181

End plates in steam space: Material

steel

Tensile strength

26-30 tons

Thickness

1 3/16"

Pitch of stays

17 1/2" x 2 1/2"

How are stays secured

JTB

Working pressure by Rules

181

Tube plates: Material

front

steel

back

"

Tensile strength

26-30 tons

Thickness

2 1/32"

3/4"

Mean pitch of stay tubes in nests

10"

Pitch across wide water spaces

14"

Working pressure

front

181

back

201

Girders to combustion chamber tops: Material

steel

Tensile strength

28-32 tons

Depth and thickness of girder

at centre

2 @ 7 3/8" x 7 1/8"

Length as per Rule

32' 6"

Distance apart

8 5/8"

No. and pitch of stays

in each

2 @ 10 3/8"

Working pressure by Rules

180

Combustion chamber plates: Material

steel

Tensile strength

26-30 tons

Thickness: Sides

4 1/2"

Back

2 1/2"

Top

1 1/2"

Bottom

1 1/2"

Pitch of stays to ditto: Sides

10 3/8" x 8 5/8"

Back

9 1/4" x 8 3/4"

Top

10 3/8" x 8 5/8"

Are stays fitted with nuts or riveted over

nuts

Working pressure by Rules

185

Front plate at bottom: Material

steel

Tensile strength

26-30 tons

Thickness

2 1/32"

Lower back plate: Material

steel

Tensile strength

26-30 tons

Thickness

3/4"

Pitch of stays at wide water space

13 1/4"

Are stays fitted with nuts or riveted over

nuts

Working Pressure

180

Main stays: Material

steel

Tensile strength

28-32 tons

Diameter

At body of stay

2 3/4"

Over threads

No. of threads per inch

6

Area supported by each stay

356 sq in

Working pressure by Rules

184

Screw stays: Material

steel

Tensile strength

26-30 tons

Diameter

At turned off part

1 5/8" & 1 3/4"

Over threads

No. of threads per inch

9

Area supported by each stay

80.9 sq in & 90.7 sq in

hipping.

W1000-0022

86512

Working pressure by Rules **184 & 203** Are the stays drilled at the outer ends **no** Margin stays: Diameter { At turned off part, or Over threads **1 3/4"**

No. of threads per inch **9** Area supported by each stay **98.4 sq"** Working pressure by Rules **184**

Tubes: Material **Iron** External diameter { Plain **3 1/4"** Stay **3 1/4"** Thickness { **9/16"** **5/16"** **3/8"** No. of threads per inch **9**

Pitch of tubes **4 1/2" x 4 7/16"** Working pressure by Rules **180** Manhole compensation: Size of opening in shell plate **15 1/2" x 19 1/2"** Section of compensating ring **9 1/2" x 13 1/16"** No. of rivets and diameter of rivet holes **34 @ 1 1/4"**

Outer row rivet pitch at ends **8 3/4"** Depth of flange if manhole flanged **3"** Steam Dome: Material **none**

Tensile strength Thickness of shell Description of longitudinal joint

Diameter of rivet holes Pitch of rivets Percentage of strength of joint { Plate Rivets

Internal diameter Working pressure by Rules Thickness of crown No. and diameter of stays

Inner radius of crown Working pressure by Rules

How connected to shell Size of doubling plate under dome Diameter of rivet holes and pitch of rivets in outer row in dome connection to shell

Type of Superheater **none** Manufacturers of { Tubes Steel castings

Number of elements Material of tubes Internal diameter and thickness of tubes

Material of headers Tensile strength Thickness Can the superheater be shut off and the boiler be worked separately

Is a safety valve fitted to every part of the superheater which can be shut off from the boiler

Area of each safety valve Are the safety valves fitted with easing gear Working pressure as per Rules

Pressure to which the safety valves are adjusted Hydraulic test pressure: tubes castings and after assembly in place Are drain cocks or valves fitted to free the superheater from water where necessary

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with

The foregoing is a correct description,
For David Rowan & Co. Ltd. Manufacturer.
Arch. N. Grierson

Dates of Survey { During progress of work in shops - - 1931 June: 9, 10, 11, 16, 17, 24, 29, 30 Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval) **yes**

while building { During erection on board vessel - - July: 1, 2, 3, 14 Aug: 3, 5, 6, 10, 11 Total No. of visits **17**

Is this Boiler a duplicate of a previous case **no** If so, state Vessel's name and Report No.

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

The materials and workmanship are good.

The boiler has been constructed under Special Survey in accordance with the Rules.

The boiler will be fitted in the vessel at Grangemouth.

14/8/31

Survey Fee £ **13 : 12 :** When applied for, **22 SEP 1931**

Travelling Expenses (if any) £ **nil** When received, **25.9.31**

S. C. Davis
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **GLASGOW 22 SEP 1931**

Assigned **Deferred**

See Gls. Rpt. 524968

