

REPORT ON BOILERS.

No. 17043

Received at London Office

5 AUG 1930

18 MAR 1931

Date of writing Report 31. 7. 30 When handed in at Local Office 31. 7. 30 Port of GrimsburyNo. in
Reg. Book

Survey held at

Newark on Trent

Date, First Survey

29. 4. 30

Last Survey

31. 7. 30

on the

S/S "Macduff"

(Number of Visits

4

Gross

4561

Tons

Net

2626

Built at

Glasgow

By whom built

Barclay Curle & Co. Ltd.

Yard No.

644

When built

1931

Engines made at

Greenock

By whom made

J. G. Kennedy & Co. Ltd.

Engine No.

65/L

When made

1931

Boilers made at

Newark-on-Trent

By whom made

Abbott & Co. (Newark) Ltd.

Boiler No.

9343

When made

1930

Owners

Burns Philp & Co. Ltd.

Port belonging to

Sydney

VERTICAL DONKEY BOILER.

Made at

Lincoln

By whom made

Abbott & Co. (Newark) Ltd.

Boiler No.

9343

When made

1930

Where fixed

Engine Room

Manufacturers of Steel

Parkgate & Co. Ltd.

Total Heating Surface of Boiler

143.9 sq. ft.

Is forced draught fitted

No

Coal

Oil fired

Exhaust gas

No. and Description of Boilers

One Clarkson Patent, Waste Heat

Working pressure

100 lb.

Tested by hydraulic pressure to

200 lb.

Date of test

31-7-30

No. of Certificate

301

Area of Firegrate in each Boiler

✓

No. and Description of safety valves to each boiler

2 Boulton & Watt Improved High Lift

Area of each set of valves per boiler

per rule

as fitted

1.465

Pressure to which they are adjusted

100 lb.

Are they fitted with easing gear

Yes

State whether steam from main boilers can enter the donkey boiler

✓

Smallest distance between boiler or uptake and bunkers

or woodwork

10 ft

Is oil fuel carried in the double bottom under boiler

No

Smallest distance between base of boiler and tank top plating

Is the base of the boiler insulated

No

Largest internal dia. of boiler

3'-6"

Height

6'-10"

Shell plates: Material

S. h. steel

Tensile strength

28/32 T

Thickness

3/8"

Are the shell plates welded or flanged

✓

Description of riveting: circ. seams

5 R. Lap

long. seams

DR. Lap

Dia. of rivet holes in

circ. seams

13/16"

Pitch of rivets

2"

Percentage of strength of circ. seams

2 3/4

plate

5-9.4

rivets

5-6.7

of Longitudinal joint

plate

7.0

rivets

8.2

combined

Working pressure of shell by rules

162 lb.

Thickness of butt straps

outer

inner

Shell Crown: Whether complete hemisphere, dished partial spherical, or flat

flat

Material

S. h. steel

Tensile strength

26/30 T.

Thickness

9/16"

Radius

2"

Working pressure by rules

108 lb.

Description of Furnace: Plain, spherical, or dished crown

plain

Material

S. h. steel

Tensile strength

26/30 T.

Thickness

9/16"

External diameter

32 1/8"

Length as per rule

3'-10"

Working pressure by rules

108 lb.

Pitch of support stays circumferentially

✓

and vertically

✓

Are stays fitted with nuts or riveted over

✓

Diameter of stays over thread

✓

Radius of spherical or dished furnace crown

✓

Working pressure by rule

✓

Thickness of Ogee Ring

✓

Diameter as per rule

✓

Working pressure by rule

✓

Combustion Chamber: Material

✓

Tensile strength

✓

Thickness of top plate

✓

Radius if dished

✓

Working pressure by rule

✓

Thickness of back plate

✓

Diameter if circular

✓

Length as per rule

✓

Pitch of stays

✓

Are stays fitted with nuts or riveted over

✓

Diameter of stays over thread

✓

Working pressure of back plate by rules

✓

Tube Plates: Material

front

back

✓

Tensile strength

✓

Thickness

✓

Mean pitch of stay tubes in nests

✓

If comprising shell, Dia. as per rule

front

back

✓

Pitch in outer vertical rows

✓

Dia. of tube holes FRONT

stay

plain

✓

BACK

stay

plain

✓

Is each alternate tube in outer vertical rows a stay tube

✓

Working pressure by rules

front

back

Girders to combustion chamber tops: Material

✓

Tensile strength

✓

Depth and thickness of girder at centre

✓

Length as per rule

✓

Distance apart

✓

No. and pitch of stays in each

✓

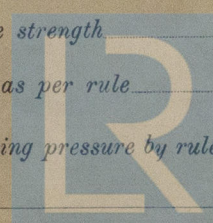
Working pressure by rule

✓

If not, state whether, and when, one will be sent?

Is a Report also sent on the Hull of the Ship?

Im 1228—Copyable Im 1228



© 2019

Lloyd's Register
Foundation

19192-0304

Crown stays: Material Tensile strength Diameter { at body of stay, or over threads

No. of threads per inch Area supported by each stay Working pressure by rules

Screw stays: Material Tensile strength Diameter { at turned off part, or over threads No. of threads per inch

Area supported by each stay Working pressure by rules Are the stays drilled at the outer ends

Tubes: Material S. A. steel External diameter { plain 2" 6 1/2" Lap Thickness 11 Blw. stay

No. of threads per inch Pitch of tubes 2 3/8 vertical 3.37 Horiz. Working pressure by rules

HAND
Manhole Compensation: Size of opening in shell plate 5" x 3 1/2" Section of compensating ring 2 1/2" No. of rivets and diameter of rivet holes 8 - 13/16 Outer row rivet pitch at ends 2 5/8" Depth of flange if manhole flanged

Uptake: External diameter 1' - 7 1/8" Thickness of uptake plate 9/16"

Cross Tubes: No. External diameters Thickness of plates

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

The foregoing is a correct description,
P.P. ABBOTT & CO. (NEWARK) LIMITED
R. Z. Abbott Manufacturer.

Annual Survey Request

DIRECTOR

Dates of Survey while building { During progress of work in shops - 1930 Apr 29 Jun 3 Jul 26 31 Is the approved plan of boiler forwarded herewith 3-12-29 (If not state date of approval.)

{ During erection on board vessel - Total No. of visits 4

Is this Boiler a duplicate of a previous case yes If so, state Vessel's name and Report No. Gms Rpt. No. 16913
21-5-30

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

This boiler has been built under special survey and is accordance with the Rules and approved plan.

The materials and workmanship are good

This Boiler is now securely fitted on board

Wm Gordon-Mitchell

Survey Fee £ 4 : 4 : 9 When applied for, 1-8-30
Travelling Expenses (if any) £ 4 : 3 : 0 When received, 1-10-30

W. H. Kinley
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **GLASGOW 17 MAR 1931**
Assigned SEE ACCOMPANYING MACHINERY REPORT - £ls. 51300.

