

REPORT ON BOILERS.

No. 52 107.

Received at London Office

Date of writing Report

19

When handed in at Local Office

16 AUG 1943

19

Port of HULL.

No. in Survey held at

HULL.

Reg. Book.

Date, First Survey

29. 12. 42.

Last Survey

28. 4. 43.

19 43.

on the H.M. Trawler

POLLOCK.

(Number of Visits

14.

Gross

391

Tons

Net

128

Built at SELBY.

By whom built

Cochrane & Son Ltd

Yard No. 1266

When built

1943

Engines made at

HULL

By whom made

Carr & Smith Ltd

Engine No. 722

When made

1

Boilers made at

HULL.

By whom made

Carr & Smith Ltd

Boiler No. 722

When made

1

Nominal Horse Power

125

Owners

Admiralty

Port belonging to

✓

MULTITUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY

Manufacturers of Steel

Appley Frodinham Steel Co. Ltd and Colville.

(Letter for Record

S.

Total Heating Surface of Boilers

1873. sq. ft.

Is forced draught fitted

Yes.

Coal or Oil fired

Coal

No. and Description of Boilers

One S.B.

Working Pressure

210 lb./sq. in.

Tested by hydraulic pressure to

365 lb./sq. in.

Date of test

7-4-43.

No. of Certificate

4186.

Can each boiler be worked separately

—

Area of Firegrate in each Boiler

50 sq. ft.

No. and Description of safety valves to each boiler

2. Spring loaded

Area of each set of valves per boiler

per Rule

12-57.

as fitted

14-12.

Pressure to which they are adjusted

210 lb./sq. in.

Are they fitted with easing gear

Yes.

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

—

Smallest distance between boilers or uptakes and bunkers or woodwork

9".

Is oil fuel carried in the double bottom under boilers

No.

Smallest distance between shell of boiler and tank top plating

—

Is the bottom of the boiler insulated

No

Largest internal dia. of boilers

14'-3 1/2"

Length

10'-6"

Shell plates: Material

Steel

Tensile strength

31-35 tons/in.²

Thickness

1 1/4".

Are the shell plates welded or flanged

No.

Description of riveting: circ. seams

end

D.R. Lap.

Long. seams

T.R., D.B.S.

Diameter of rivet holes in

circ. seams

1 5/16"

long. seams

1 1/32"

Pitch of rivets

3 3/4"

9 1/8"

Percentage of strength of circ. end seams

plate

64-9%.

rivets

42-8%.

Percentage of strength of circ. intermediate seam

plate

85-1%.

rivets

85-8%.

Thickness of butt straps

outer 1 3/32"

inner 1 3/32"

No. and Description of Furnaces in each Boiler

3 cf. Deighton Section.

Material

Steel

Tensile strength

26-30 tons/in.²

Smallest outside diameter

3'-6 3/4"

Length of plain part

top

bottom

Thickness of plates

crown

3 5/8"

bottom

Description of longitudinal joint

Weld

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

None

End plates in steam space: Material

Steel

Tensile strength

26-30 tons/in.²

Thickness

1 3/32"

Pitch of stays

17" x 17 1/2"

How are stays secured

Nuts & Washers inside and out.

Tube plates: Material

front

Steel

back

Steel

Tensile strength

26-30 tons/in.²26-30 tons/in.²

Thickness

1 5/16"

7/8"

Mean pitch of stay tubes in nests

9 1/4" x 9"

Pitch across wide water spaces

14" x 9"

Girders to combustion chamber tops: Material

Steel

Tensile strength

29-33 tons/in.²

Depth and thickness of girder

at centre

9" x 7/8" Double

Length as per Rule

2'-10 3/32"

Distance apart

8"

No. and pitch of stays

in each

3 @ 8 1/4"

Combustion chamber plates: Material

Steel

Tensile strength

26-30 tons/in.²

Thickness: Sides

2 3/32"

Back

2 3/32"

Top

2 1/32"

Bottom

2 5/32"

Pitch of stays to ditto: Sides

8 1/2" x 9 3/4"

Back

9 1/4" x 9"

Top

8 1/4" x 8"

Are stays fitted with nuts or riveted over

Nuts.

Front plate at bottom: Material

Steel

Tensile strength

26-30 tons/in.²

Thickness

1 5/4"

Lower back plate: Material

Steel

Tensile strength

26-30 tons/in.²

Thickness

7/8"

Pitch of stays at wide water space

14" x 9"

Are stays fitted with nuts or riveted over

Nuts.

Main stays: Material

Steel

Tensile strength

26-30 tons/in.²

Diameter

At body of stay,

or

3".

No. of threads per inch

6

Screw stays: Material

Steel

Tensile strength

26-30 tons/in.²

Diameter

At turned off part,

or

1 3/4"

No. of threads per inch

9.

002897-002906-0193

Lloyd's Register
Foundation

Pollock

Are the stays drilled at the outer ends No. Margin stays: Diameter { At turned off part, or Over threads 1 1/4", 1 1/8", 2"

No. of threads per inch 9

Tubes: Material L.W. Iron. External diameter { Plain 3 1/4" Stay 3 1/4" Thickness { 8.W.G. 7/16", 3/8", 7/16" No. of threads per inch 9

Pitch of tubes 4 1/2" x 4 5/8" Manhole compensation: Size of opening in shell plate 12" (x16") Section of compensating ring 35 5/8" x 1 1/4" No. of rivets and diameter of rivet holes 122 @ 1 1/32"

Outer row rivet pitch at ends 10.45" Depth of flange if manhole flanged 3 3/8" Steam Dome: Material None.

Tensile strength 2051 Thickness of shell 1" Description of longitudinal joint { Plate Rivets 2051

Diameter of rivet holes 2051 Pitch of rivets 2051 Percentage of strength of joint { Plate Rivets 2051

Internal diameter 2051 Thickness of crown 2051 No. and diameter of stays 2051 Inner radius of crown 2051

How connected to shell 2051 Size of doubling plate under dome 2051 Diameter of rivet holes and pitch of rivets in outer row in dome connection to shell 2051

Type of Superheater NONE Manufacturers of { Tubes Steel forgings Steel castings

Number of elements 2051 Material of tubes 2051 Internal diameter and thickness of tubes 2051

Material of headers 2051 Tensile strength 2051 Thickness 2051 Can the superheater be shut off and the boiler be worked separately 2051 Is a safety valve fitted to every part of the superheater which can be shut off from the boiler 2051

Area of each safety valve 2051 Are the safety valves fitted with easing gear 2051

Pressure to which the safety valves are adjusted 2051 Hydraulic test pressure: tubes forgings and castings 2051 and after assembly in place 2051 Are drain cocks or valves fitted to free the superheater from water where necessary 2051

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with Yes. For AMOS & SMITH LTD. The foregoing is a correct description, Manufacturer. W. A. Newley

Dates { During progress of work in shops - - 1943 Dec. 29 Jan 14, Mar. 24-26 Are the approved plans of boiler and superheater forwarded herewith 13.8.41 (If not state date of approval.)

while building { During erection on board vessel - - - See machinery report Total No. of visits 17.

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

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

This Boiler has been constructed under Special Survey in accordance with the approved Admiralty plans and the Rules.

The Workmanship and Materials are good and, when subjected to a hydraulic test of 365 lb 10" it was found satisfactory in every respect.

[Boiler installed under Special Survey, tried under working conditions, safety valves adjusted as required, accumulation test held, and boiler examined on completion of all tests and found satisfactory in every respect. W. S. Shields.]

Survey Fee ... £ : : When applied for, 19

Travelling Expenses (if any) £ : : When received, 19

W. A. Newley
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute 31 AUG 1943

Assigned See minute on I.C. Report.