

## REPORT ON BOILERS.

Sld. No. 65704

Date of writing Report

19

When handed in at Local Office

29. 6. 1942

Received at London Office

1 JUL 1942 SEP 1942

Port of

Glasgow

No. in Survey held at

Annan

Date, First Survey

1942 Feb 27

Last Survey

19-6-

1942

Reg. Book.

"HARDINGHAM."

(Number of Visits

10

Gross

7269

Tons

Net

5041

Built at

Sunderland

By whom built

Wm. D. Wigham &amp; Sons Ltd.

Yard No.

692

When built

1942

Boilers made at

Annan

By whom made

Cochran &amp; Co Annan Ltd

Boiler No.

15387

When made

1942

Owners

J. B. Harrison

Port belonging to

London

VERTICAL DONKEY BOILER—

No. one

Description

Composite

Manufacturers of steel

Cochran Ltd

Made at

Annan

By whom made

Cochran &amp; Co Annan Ltd

When made

1942

Where fixed

recm.

Working pressure

120

tested by hydraulic pressure to

230

Date of test

19-6-42

No. of Certificate

21090

Fire grate area

—

Description of safety valves

ordinary

No. of safety valves

2

Area of each

7.06

Pressure to which they are adjusted

120

If fitted with easing gear

yes

If steam from main boilers can

enter the donkey boiler

—

Diameter of donkey boiler

8'-0"

Length

17'-9"

Material of shell plates

S

Thickness

13/16"

21/32"

Range of tensile strength

28-32 tons

Description of riveting long. seams

WR lap

Diameter of rivet holes

1 1/32"

Whether punched or

drilled

drilled

Pitch of rivets

3.15" &amp; 3 7/8" &amp; 3.135"

Lap of plating

5"

Per centage of strength of joint

Rivets

16.2.53.9

Working pressure of shell by

Plates

16.8.67.3

Diameter of stays

—

Diameter of

furnace—Top

Bottom

7'-0"

Length of furnace

Thickness of furnace side plates

23/32"

Description of joint

seamless

Working

pressure of furnace by rules

144

Thickness of Ogee ring

1 1/32"

Working pressure of Ogee ring by rules

124

Thickness of furnace

crown plates

23/32"

Radius of do.

3'-6"

Stayed by

hemisphere

Diameter of uptake

20" x 23 1/2"

Thickness of uptake

plates

5/8"

Thickness of tube plates

front 1 1/4"

back 1 1/4"

Mean pitch of stay tubes in nest

8 7/32"

8.37"

Pitch in outer vertical rows

5 1/4"

6.37"

Diameter of tube holes

FRONT

stay 2 3/16"

1 1/16"

BACK

stay 2"

1 1/2"

Working pressure of tube plates by rules

F. 122. 126

B. 196 161

Tubes: Material

S

External diameter

stay 2" 1 1/2"

plain 2" 1 1/2"

Thickness

stay 1 1/2"

plain 1 1/2"

No. of threads per inch

9

Pitch of tubes

2 5/8" x 2 1/16"

3.187" x 3.13"

Working pressure by rules

215

Manhole compensation; Size of opening in shell plate

21" x 17"

Section of compensating

ring

7 1/2" x 1 1/32"

No. of rivets and diameter of rivet holes

40 @ 1 1/32"

Outer row pitch at ends

4.03"

The foregoing is a correct description,

T. R. E. x.

Manufacturer

FOR COCHRAN &amp; CO., ANNAN, LTD.

Dates

of Survey

while

building

During progress of

work in shops

During erection on

board vessel

Total No. of visits

1942 Feb 27 Mar 5. 12. Apr 9. 21. May 7. 14.

June 10. 18. 19

Drawing No.

26845

Is the approved plan of boiler forwarded herewith

No

Retained for duplicate cases

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

The materials and workmanship are good

The boiler has been constructed under special survey

It will be sent to Sunderland to be fitted in the vessel.

Heating surface—oil fired nest—538 sq. ft. Exhaust gas nest—515 sq. ft. Total—1053 sq. ft.

This boiler has been securely fixed on board the vessel.

The safety valves have been adjusted to working pressure in accordance with rule requirements

In recommendation please see Enclos. Rpt.

J. B. Harrison

Survey Fee ... £ 5 : 14 :

When applied for

Travelling Expenses (if any) £ :

When received

None

19

19

Committee's Minute

GLASGOW 30 JUN 1942

Assigned

Superior for Completion

Engineer Surveyor to Lloyd's Register of Shipping.

FRI 25 SEP 1942

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