

## REPORT ON BOILERS.

No. 68006

Received at London Office

27 JAN 1944

21 DEC 1944

Date of writing Report

19

When handed in at Local Office

24. 1. 44

Port of

GLASGOW.

No. in Survey held at

ANNAN

Date, First Survey

27th Aug. 1943

Last Survey

21st January 19 44

g. Book.

on the

S/S EMPIRE DYNASTY

(Number of Visits

Ten

Gross

Tons

Net

Built at

Sunderland

By whom built

J.L. THOMPSON & Co. Ltd.  
Galedon Shipbuilding Co. Ltd.

Yard No.

631,  
407

When built

1944-11.

Boilers made at

ANNAN

By whom made

Cochran &amp; Co. (Annan) Ltd

Boiler No.

15733

When made

1944

Port belonging to

VERTICAL DONKEY BOILER—

No. One

Description

Cochran

Manufacturers of steel

Colvilles Ltd.

Made at

Annan

By whom made

Cochran &amp; Co. (Annan) Ltd.

When made

1944

Where fixed

Oil

Working pressure 105 lbs.

Tested by hydraulic pressure to

208

Date of test

21.1.44

No. of Certificate

2163

Fire grate area

Fired

Description of safety valves

ordinary

No. of safety valves

2

Area of each

4.9 sq

Pressure to which they are adjusted

105 lbs.

If fitted with easing gear

yes

If steam from main boilers can

No

Diameter of donkey boiler

6'6"

Length

16'3"

Material of shell plates

S

Thickness

15/32"

19/32"

Range of tensile strength

28-32

Description of riveting long. seams

D.R. Lap

Diameter of rivet holes

27/32"

Whether punched or

drilled

Pitch of rivets

2.66"

Lap of plating

4"

Per centage of strength of joint

Tensile strength

109.9

Thickness of shell crown plates

3/32"

Radius of do.

3'3"

No. of stays to do.

-

Diameter of stays

-

Diameter of

-

-

Furnace—Top

-

Bottom

5'6"

Length of furnace

-

Thickness of furnace side plates

1/8"

Description of joint

seamless

Working

pressure of furnace by rules

125

Thickness of Ogee ring

7/8"

Working pressure of Ogee ring by rules

109

Thickness of furnace

-

Thickness of tube plates

9/16"

Radius of do.

2'9"

Stayed by

hemisphere

Diameter of uptake

15" x 23"

Thickness of uptake

Thickness of tube plates

9/16"

Mean pitch of stay tubes in nest

11.54"

Pitch in outer vertical rows

8"

Diameter of tube holes

FRONT

stay

211/16"

BACK

stay

211/16"

Working pressure of tube plates by rules

F106, B107

Internal diameter

stay

211/16"

Thickness

stay

11/32"

No. of threads per inch

9

Pitch of tubes

4" x 39/16"

Working pressure by rules

175

Manhole compensation; Size of opening in shell plate

Manhole compensation; Size of opening in shell plate

21" x 17"

Section of compensating

7 1/2" x 1"

No. of rivets and diameter of rivet holes

40 @ 27/32"

Outer row pitch at ends

4 1/2"

The foregoing is a correct description,

FOR COCHRAN &amp; CO. ANNAN, LTD.

Manufacturer

During progress of work in shops—

1943:— Aug. 27, Sep. 24, 30, Oct. 21, Nov. 4, 18, Dec. Drawing No. 28542 A,

During erection on board vessel—

9, 31. 1944: Jan. 14, 21.

Total No. of visits

Ten.

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 workmanship and materials are good.

The boiler has been constructed under special survey, to the order of Messrs. Richardson

Westgarth &amp; Co., Ltd. for their Contract No. 2744

The Boiler will be sent to Hartlepool to be fitted on board.

This Vertical Cochran Donkey Boiler has been efficiently fitted on Board the S/S Empire Dynasty and is situated on Port side in main Engine Room. The SV's were adjusted under steam on 5<sup>th</sup> Oct 1944 to 105 lbs/p.s.i. The Ring Thicknesses are Forw Valve 9/16", aft Valve 1/2". The Boiler was satisfactorily tested under steam.

A. Watt

Newcastle on Tyne

26/11/44

Survey Fee ... £ 4 : 4 : +

When applied for

Non a/c.

19.

Travelling Expenses (if any) £ : : }

When received

19.

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

GLASGOW

25 JAN 1945

JAN 1945

Assigned

Deferred - // See FE machy rph.

011628-011635-0272