

## REPORT ON BOILERS.

Std. No. 33638

No. 66491  
31 DEC 1942

Received at London Office

Date of writing Report 19 28-12-42 When handed in at Local Office 19 42 Port of Glasgow

No. in Survey held at Annan Date, First Survey 26.11.42 Last Survey 15-12-1942

Reg. Book. on the "HARLESDEN" (Number of Visits 3) Gross 7273 Tons Net 4984

Built at Sunderland By whom built Wm Dwyer & Sons Ltd Yard No. 699 When built 1942

Boilers made at Annan By whom made Cochran & Co Annan Ltd Boiler No. 15525 When made 1942

Owners Port belonging to

**VERTICAL DONKEY BOILER**— No. one Description *Cochran Composite* Manufacturers of steel *Cochran Ltd*

Made at Annan By whom made *Cochran & Co Annan Ltd* When made 1942 Where fixed *upper boiler* Working pressure 120

tested by hydraulic pressure to 230 Date of test 15-12-42 No. of Certificate 21276 Fire grate area — Description of safety valves *ordinary*

No. of safety valves 2 Area of each 7.06 sq 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  $\frac{21}{32}$   $\frac{13}{16}$

Range of tensile strength 28-32 *tons* Description of riveting long. seams *DR Lap* Diameter of rivet holes  $1\frac{1}{2}$  Whether punched or drilled *drilled* Pitch of rivets 3'-15" 3'-13" 3'-8" Lap of plating 5" Per centage of strength of joint Rivets 66.2 539 Working pressure of shell by rules 126.7 Thickness of shell crown plates  $\frac{19}{32}$   $\frac{13}{32}$  Radius of do. 4'-0" No. of stays to do. — Diameter of stays — Diameter of furnace—Top — Bottom 7'-0" Length of furnace — Thickness of furnace side plates  $\frac{23}{32}$  Description of joint *seamless* Working pressure of furnace by rules 144 Thickness of Ogee ring  $1\frac{1}{2}$  Working pressure of Ogee ring by rules 124 Thickness of furnace crown plates  $\frac{23}{32}$  Radius of do. 3'-6" Stayed by *hemisphere* Diameter of uptake  $21\frac{1}{2} \times 25$  Thickness of uptake plates  $\frac{9}{16}$  Thickness of tube plates front  $1\frac{1}{2}$  back  $1\frac{1}{2}$  Mean pitch of stay tubes in nest 8'-73" 8'-37" 9'-47" Pitch in outer vertical rows 5'-4" 6'-37"

Diameter of tube holes FRONT stay  $2\frac{3}{16}$   $1\frac{1}{8}$  BACK stay  $2\frac{1}{2}$   $1\frac{1}{2}$  Working pressure of tube plates by rules F127. B.206 F126. B.161 Tubes: Material *S*

External diameter stay  $2\frac{1}{2}$   $1\frac{1}{2}$  plain  $2\frac{1}{16}$   $1\frac{1}{16}$  Thickness stay  $\frac{11}{32}$  plain  $\frac{101}{56}$  No. of threads per inch 9 Pitch of tubes  $25\frac{1}{8} \times 2\frac{1}{16}$   $3\frac{1}{8} \times 3\frac{1}{3}$

Working pressure by rules 215 Manhole compensation; Size of opening in shell plate  $21 \times 17$  Section of compensating ring  $7\frac{1}{2} \times 1\frac{1}{2}$  No. of rivets and diameter of rivet holes 40 @  $1\frac{1}{2}$  Outer row pitch at ends 4'-03"

The foregoing is a correct description,

C. A. Fox.

Manufacturer

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

Drawing No. 25112A

Dates of Survey while building

During progress of work in shops — 1942 Nov 26 Dec 4. 15.

During erection on board vessel — —

Total No. of visits 3

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 on board the vessel.

Heating surface—Exhaust gas—5150 sq. Oil fired—5380 sq. Total 10530 sq.

This boiler has been securely fixed on board the vessel & safety valves adjusted to working pressure as above.

In recommendation please see Machinery Rpt.

B. J. Hasen.

Survey Fee ... £ 5 : 14 : } When applied for ... 19

Travelling Expenses (if any) £ : : } When received ... 19

S. H. Davis

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 29 DEC 1942

Assigned *Deferred for completion*

WED. 31 MAR 1943

See Std. No. 33638

Lloyd's Register Foundation

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