

RECEIVED
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SUNDERLAND RPT. No. 34863

REPORT ON BOILERS.

No. 72083

Received at London Office 10 SEP 1947

Date of writing Report 6.9.47 When handed in at Local Office 6.9.47 Port of GLASGOW

No. in Survey held at Annan Date, First Survey 7.2.47 Last Survey 11.8.47
 Reg. Book on the M/V. FERNLAND (Number of Visits 2) Tons } Gross 5564
 Net 5140

Yard No. 325 Built at SUNDERLAND. By whom built BARTRAM & SONS LIMITED When built 1948.

Boilers made at ANNAN By whom made COCHRAN & CO, ANNAN LIMITED. Boiler No. 17185 When made 1947

Owners FEARNLEY & EGER. Port belonging to OSLO.

VERTICAL DONKEY BOILER— No. one Description Cochran Manufacturers of steel Colvilles Ltd.,

Made at Annan By whom made Cochran & Co, Annan Ltd When made 1947 Where fixed TOP ER PLATFORM Working pressure 105 lbs/sq. in.

tested by hydraulic pressure to 208 lbs/sq. in. Date of test 21/8/47 No. of Certificate 22489 Alternate Ex. G ACT END. lbs/sq. in. Fire/grate area Description of safety valves Double spring and O.F.

No. of safety valves 2 Area of each 3.14 sq. in. Pressure to which they are adjusted 105 lbs. If fitted with easing gear Yes If steam from main boilers can enter the donkey boiler

Diameter of donkey boiler 6'0" Length 16'3" Material of shell plates S Thickness 19/32" & 7/16"

Range of tensile strength 28/32 tons Description of riveting long. seams D.R. Lap Diameter of rivet holes 25/32" Whether punched or drilled drilled Pitch of rivets 2.59" 2.6" & Lap of platin 3 7/8" Per centage of strength of joint Working pressure of shell by rules 108.2 lbs per sq. in. Thickness of shell crown plates 3/4 Radius of do. 6'0" No. of stays to do. none Diameter of stays - Diameter of furnace—Top - Bottom 5'0" Length of furnace - Thickness of furnace side plates 1/2" Description of joint seamless Working pressure of furnace by rules 137.5 lbs/sq. in. Thickness of Ogee ring 27/32" Working pressure of Ogee ring by rules 109.5 lbs/sq. in. Thickness of furnace crown plates 1/2" Radius of do. 2'6" Stayed by hemisphere Diameter of uptake 21 1/2" x 25" Thickness of uptake plates 9/16" Thickness of tube plates front 27/32" back 23/32" Mean pitch of stay tubes in nest 9.18" Pitch in outer vertical rows 6.25"

Diameter of tube holes FRONT 2.3/16" BACK 2" Working pressure of tube plates by rules F.109.9 lbs/sq. in. Tubes: Material steel

External diameter 2" Thickness 11/32" No. of threads per inch 9 Pitch of Tubes 3" x 3 1/2"

Working pressure by rules 215 lbs/sq. in. Manhole compensation; Size of opening in shell plate 21" x 16 1/2" Section of compensating ring 7 1/2" x 1" No. of rivets and diameter of rivet holes 40 @ 25/32" Outer raw pitch at ends 4.4"

For COCHRAN & CO, ANNAN LTD. The foregoing is a correct description, Manufacturer. Technical Sales Manager

Dates of Survey while building { During progress of work in shops - 1947 Feb. 14-21, 28 Mar 19. 21 Apr 3, 11, 21. May 5, 11, 22, 29 Jun 5, 19, 26, July 10
 During erection on board vessel - 21.5.47 } Drawing No. 32268

Total No. of Visits 21. Is the approved plan of boiler forwarded herewith. Yes

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

This boiler has been constructed to the order of Messrs. J.G. Kincaid & Co. Ltd., and despatched to Greenock for installation.

This boiler has been constructed under Special Survey and in accordance with the approved plan. The materials and workmanship are good.

This donkey boiler has been efficiently fitted in place on board the M/V FERNLAND, examined under steam and its safety valves adjusted to WP 105 lbs/sq. in., accumulation test carried out with satisfactory results.

Rings. P. 5/8" 3 1/2"
Sunderland 11-3-48

Survey Fee ... £ 6 : 0 : 0 } When applied for MONTHLY ACCOUNT 19

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

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

Committee's Minute GLASGOW 9 SEP 1947

Assigned Defered for comp. See F.E. McKay. rpt.

