

REPORT ON BOILERS.

Date of writing Report 19 When handed in at Local Office 22-3 1943 Port of Glasgow
 No. in Survey held at Annan Date, First Survey 7. 1. 43 Last Survey 16-3- 1943
 Reg. Book. "EMPIRE CHEER" (Number of Visits 8) Tons {Gross 7297
 on the "EMPIRE CHEER" Net. 4936
 Built at Sunderland By whom built Wm Doxford & Sons Ltd Yard No. 702 When built 1943
 Boilers made at Annan By whom made Cochran & Co Annan Ltd Boiler No. 15648 When made 1943
 Owners Ministry of War Transport Port belonging to Sunderland

VERTICAL DONKEY BOILER— No. one Description Composite Manufacturers of steel Bohills Ltd
 Made at Annan By whom made Cochran & Co Annan Ltd When made 1943 Where fixed Upper boiler Working pressure 120
 tested by hydraulic pressure to 230 Date of test 16-3-43 No. of Certificate 21343 Fire grate area 13.21 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 no
 Diameter of donkey boiler 8'-0" Length 19'-9" Material of shell plates S Thickness 13" 21"
 Range of tensile strength 28-32 tons Description of riveting long. seams DR. Lap Diameter of rivet holes 1 1/32" Whether punched or drilled drilled
 Pitch of rivets 3.15" 3.13" 3.1" Lap of plating 5" Per centage of strength of joint 66.2 53.9 Working pressure of shell by rules 127
 Thickness of shell crown plates 19" 1 1/32" Radius of do. 4'-0" No. of stays to do. 11 Diameter of stays 1 1/2" Diameter of furnace—Top 7'-0" Bottom 7'-0" Length of furnace 19'-9" 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 5" Radius of do. 3'-6" Stayed by hemisphere Diameter of uptake 20" x 23 1/2" Thickness of uptake plates 5"
 Thickness of tube plates front 1 1/2" back 1 1/4" Mean pitch of stay tubes in nest 8'-7.2" 8'-36" 9'-47" Pitch in outer vertical rows 5 1/4" 6'-37"
 Diameter of tube holes FRONT stay 2 3/16" 1 1/16" plain 2 1/16" 1 1/16" BACK stay 2" 1 1/2" plain 2" 1 1/2" Working pressure of tube plates by rules 8196 161 Tubes: Material S
 External diameter stay 2" 1 1/2" plain 2" 1 1/2" Thickness stay 11/32" plain 10/32" No. of threads per inch 9 Pitch of tubes 2 5/8" x 2 1/16" 3'-18" 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,
E. A. Rex Manufacturer

Dates of Survey while building { During progress of work in shops - - } 1943 Jan 7, 21, 28 Feb 4, 11, 25 Mar 4, 16 Drawing No. 26845
 { During erection on board vessel - - }
 Total No. of visits 8 Is the approved plan of boiler forwarded herewith No
Retained for duplicate cases

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)
The workmanship and materials 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 538 sq'. Exhaust gas nest. 515 sq'. Total 1053 sq'.

This boiler has been securely fixed on board the vessel & safety valves adjusted to working pressure as above.
For recommendation please see Machinery Rpt.

W. H. Hasen

Survey Fee ... £ 5 : 14 : } When applied for Mon 4/19
 Travelling Expenses (if any) £ : : } When received 19

Sh. Davis © 2020
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 23 MAR 1943
 Assigned TRANSMIT TO LONDON

Lloyd's Register Foundation
 See minute on Sl. No. Rpt.

The Surveyors are requested not to write on or below the space for Committee's Minute(s).

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