

# REPORT ON BOILERS.

No. 54822  
28 AUG 1934

Date of writing Report 17-7-34 When handed in at Local Office 3. 8. 34 Port of Glasgow  
 Received at London Office  
 No. in Survey held at Amman Date, First Survey 8. 5. 34 Last Survey 10-7-1934  
 Reg. Book. 29608 on the Boiler No. 12773 S/S HAI YUAN (Number of Visits 10) Gross Tons Net  
 Master JTM Built at Newcastle By whom built Swan Hunter & Wigham Richardson When built 1934  
 Boilers made at Newcastle By whom made do. When made do.  
 Owners China Merchants Steam Nav Co. Port belonging to Newcastle

**VERTICAL DONKEY BOILER**— No. 12773 Description Cochran Manufacturers of steel Steel Co. of S. Land  
 Made at Amman By whom made Cochran & Co. Amman When made 1934 Where fixed Stokehold Working pressure 100  
 tested by hydraulic pressure to 200 Date of test 10-7-34 No. of Certificate 19415 Fire grate area 41 1/2 Description of safety valves direct spring loaded  
 No. of safety valves 2 Area of each 7.07 sq" Pressure to which they are adjusted 100 lb If fitted with easing gear Yes If steam from main boilers can enter the donkey boiler No  
 Diameter of donkey boiler 8'-6" Length 17'-0" Material of shell plates S Thickness 19/32" - 23/32"  
 Range of tensile strength 28-32 Description of riveting long. seams J.R.L. Diameter of rivet holes 31/32" Whether punched or drilled drilled  
 Pitch of rivets 3.034, 3.062" Lap of plating 4 3/4" Per centage of strength of joint Rivets 66.7 Plates 68.1 Working pressure of shell by rules 107  
 Thickness of shell crown plates 1 1/8" - 1 1/32" Radius of do. 4'-3" No. of stays to do. none Diameter of stays do. Diameter of furnace—Top Turnip Bottom do. Length of furnace do. Thickness of furnace side plates 2 1/2" Description of joint seamless Working pressure of furnace by rules 122  
 Thickness of Ogee ring 1 1/8" Working pressure of Ogee ring by rules 131.8 Thickness of furnace crown plates 2 1/2" Radius of do. 3'-9" Stayed by turnip Diameter of uptake 28 1/2" x 18" Thickness of uptake plates 9/16" Thickness of tube plates front 15/16" back 29/32" Mean pitch of stay tubes in nest 12 3/8" Pitch in outer vertical rows 8 1/2"  
 Diameter of tube holes FRONT stay 2 1/16" BACK stay 2 1/2" Working pressure of tube plates by rules F102.2, B106.3 Tubes: Material Iron  
 External diameter plain 2 1/2" Thickness stay 1 1/32" plain 11 W.C. No. of threads per inch 9 Pitch of tubes 4 1/4" x 3 9/16"  
 Working pressure by rules 125 Manhole compensation: Size of opening in shell plate 16" x 12" Section of compensating ring 28" dia x 7/8" No. of rivets and diameter of rivet holes 36 - 3 1/32" Outer row pitch at ends 3.9"

The foregoing is a correct description,  
 FOR COCHRAN  
 T. Forster Manufacturer.

Dates of Survey while building: During progress of work in shops - 1934 May: 8. 24. 29 June: 5. 8. 10. 21. 28 July: 9. 10 Drawing No. E 31562  
 During erection on board vessel - - -  
 Total No. of visits 10 Is the approved plan of boiler forwarded herewith Yes

**GENERAL REMARKS** (State quality of workmanship, opinions as to class, &c.) This boiler has been built under special survey in accordance with the approved plan and the Society's Rules and requirements the materials and workmanship are good.

Fitted on board & tested under steam  
S. J. Hodder

The boiler is to the order of Swan Hunter & Wigham Richardson, Yard No. 1456.

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

MONTHLY ACCOUNT

Committee's Minute GLASGOW 7 - AUG 1934  
 Assigned TRANSMIT TO LONDON

Jas. Cairns © 2020  
 Engineer Surveyor to Lloyd's Register of Shipping.  
 See Note.  
 F.B. 91707  
 Lloyd's Register Foundation  
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