

REPORT ON WATER TUBE BOILERS.

No. 51824

7 OCT 1931

Received at London Office

24/4/31. When handed in at Local Office 29. 9. 1931 Port of Glasgow.

Survey held at Glasgow. Date, First Survey 24. 11. 30 Last Survey 25-9 1931.
 in the Ship Lion Steam "Corfu" Number of Visits 39 Tons Gross 14257.
 Built at Glasgow. By whom built A. Stephen Sons Ltd (534) When built 1931.
 at Glasgow. By whom made A. Stephen Sons Ltd. When made 1931.
 at Glasgow. By whom made Yarrow & Co. Ltd. When made 1931.
 Power Owners Port belonging to

TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel The English Steel Corporation Ltd.

Record (5) Date of Approval of plan 31-10-30. Number and Description of Type 4. Yarrow. Working Pressure 425 lb. Tested by Hydraulic Pressure to 688 lb. Date of Test 20-3-31.

Can each boiler be worked separately? Yes. Total Heating Surface of Boilers 25,200 sq. ft.

Area of fire grate (coal) in each Boiler 5. Total grate area of boilers in vessel including auxiliary 5. No. and type of burners (oil) in each boiler 5. No. and description of safety valves on 1-2" H.L. (Improved) Area of each valve 3.14 sq. ft. Pressure to which they are adjusted 4.75 lb.

with easing gear Yes. In case of donkey boilers state whether steam from main boilers can enter the donkey boiler. Height of Boiler 17'-7 1/2" Width and Length 23'-5"-14'-5 1/2".

Number in each boiler 1. Inside diameter 4'-2" Material of plates Steel Thickness 1 1/8".

Are drum shell plates welded or flanged No. Description of riveting:—

long. seams Solid Diameter of rivet holes in long. seams Pitch of Rivets

Thickness of straps Percentage strength of long. joint:—Plate Rivet

Pitch of tube holes 3 1/8"-3 7/8"-1 7/8" Percentage strength of shell in way of tubes 33 1/3%.

Depth and thickness of girders at centre

Distance apart Number and pitch of stays in each Working pressure

Steam Drum Heads—Material Steel Thickness 1 1/8" Radius on low stayed 4'-3" Inside Diameter 23" ✓

Water Drums—Number in each boiler 3 Inside Diameter 23" ✓

Range of tensile strength 28/32 Tons. Are drum shell plates welded

Description of riveting:—Cir. seams D.R. ✓ long. seams Diameter of Rivet Holes in

Pitch of rivets Lap of plates or width of butt straps Thickness of straps 3 7/8" 1 7/8" 3 1/8" ✓

Diameter of tube holes in drum 2"-2"-1 1/4" Pitch of tube holes 29/32

Water Drum Heads—Material Steel Thickness 29/32

Size of manhole or handhole 16" x 12" Headers or Sections:—Number

Thickness Tested by Hydraulic Pressure to Material of Stays

Area supported by each stay Working Pressure by Rules Tubes:—Diameter

Number Steam Dome or Collector:—Description of Joint to Shell

Length of Joint Diameter Thickness of shell plates Material

Diameter of Rivet Holes Pitch of Rivets Working Pressure of shell

Crown or End Plates:—Material Thickness How stayed

ATER. Type YARROW. Date of Approval of Plan 31-10-30. Tested by Hydraulic Pressure to 688 lb.

2/4/31 and 16/4/31. Is a safety valve fitted to each section of the superheater which can be shut off from the Boiler YES.

Safety Valve 2 1/2" DOUBLE H.L. (Imp) Pressure to which each is adjusted Is easing gear fitted YES.

Check or valve fitted at lowest point of superheater YES. Number, diameter, and thickness of tubes 286 - 1 1/8" - 9 L.S.G. ✓

Handhole plates

The foregoing is a correct description; Manufacturer.

27 APR 1931

Is the approved plan of boiler forwarded herewith YES.

Working progress of 1930 Nov. 24 Dec. 16. 19. 23 (1931) Jan. 15. 27 Is the approved plan of boiler forwarded herewith YES.

work in shops - - - - - July 18. 26 Mar. 2. 9. 11. 16. 20. 24. 30 Apr. 2. 9. 10.

Working erection on May 6. 12. 14. 19. 25. 26 June 1. 2. 15. 16. 25. 29 Total No. of visits 39

ward vessel - - - - - July 10. 14 Aug. 6. 11. 14. 18. 20. 31 Sep 25

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

These boilers have been built Special Survey, to approved plans in accordance with the Society's materials and workmanship are good. They are to be forwarded to the ship, at Linthouse, for fitting in their No 534. They have been placed in position, the safety valves have been adjusted & the boiler examined & found satisfactory.

When applied for, 2. 10. 1931

When received, 18. 1. 1932

GLASGOW 6 - OCT 1931

SEE ACCOMPANYING MACHINERY REPORT.

FRI. 30 OCT 1931

TUE. 16 FEB 1932

Lloyd's Register Foundation

002853-002857-0051