

Newcastle-on-Tyne No. 94924
REPORT ON WATER TUBE BOILERS.

No. 58199

Rpt. 5c.

Received at London Office

24 MAR 1937

Date of writing Report 9. 3. 1937 When handed in at Local Office 22. 3. 1937 Port of Glasgow.
 No. in Survey held at Renfrew. Date, First Survey 12. 8. 36 Last Survey 8. 3. 1937
 Reg. Blk. on the Boilers Contract No. 6/1310. S.S. "MULUBINBA" Number of Visits 43
 Master Built at Leith By whom built H. Robb. No. 234. When built 1937
 Engines made at Waltham By whom made North Eastern Marine Eng. Co. Ltd. (22865) When made 1937
 Boilers made at Renfrew. By whom made Babcock & Wilcox Ltd When made 1937.
 Registered Horse Power Owners Newcastle & Hunter River Steam Ship Co. Ltd. Port belonging to Newcastle

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel Calverley Ltd

(Letter for Record) Date of Approval of plan 10. 31 Aug 1936 Number and Description or Type of Boilers 2. B+W. Type. Working Pressure 235 lb. Tested by Hydraulic Pressure to 405 lb. Date of Test 30/12/36.
 No. of Certificate 19882. Can each boiler be worked separately Total Heating Surface of Boilers 4200 sq. ft.
 Is forced draught fitted Area of fire grate (coal) in each Boiler 64 sq. ft. Total grate area of boilers in vessel including Main and Auxiliary No. and type of burners (oil) in each boiler No. and description of safety valves on each boiler 2. Imp. High Left. Area of each valve 3.14 sq. ft. Pressure to which they are adjusted
 Are they fitted with easing gear In case of donkey boilers state whether steam from main boilers can enter the donkey boiler
 Smallest distance between boilers or uptakes and bunkers or woodwork 1'-6" Height of Boiler 10'-2" approx Width and Length 14'-0" x 10'-2" approx
 Steam Drums:—Number in each boiler one Inside diameter 3'-6" Material of plates Steel Thickness 9/16" & 1 1/16"
 Range of Tensile Strength 28/32 Ton. Are drum shell plates welded or flanged under circumferential seam Description of riveting:—
 Cir. seams: D.R. long. seams DR-DBS. Diameter of rivet holes in long. seams 29/32" Pitch of Rivets 3.48"
 Lap of plates or width of butt straps 9 7/8" & 9 1/8" Thickness of straps 9/16" both Percentage strength of long. joint:—Plate 73.98 Rivet 96.99
 Diameter of tube holes in drum 4.04" Pitch of tube holes 4" x 6" Percentage strength of shell in way of tubes 40%
 If Drum has a flat side state method of staying Depth and thickness of girders at centre (if fitted)
 Distance apart Number and pitch of stays in each Working pressure by rules Steam Drum Heads or Ends:—Material Steel Thickness 7/8" plate Radius or how stayed 3'-0"
 Size of Manhole or Handhole Water Drums:—Number in each boiler See steam drum Inside Diameter
 Material of plates Thickness Range of tensile strength Are drum shell plates welded or flanged Description of riveting:—Cir. seams long. seams Diameter of Rivet Holes in long. seams Pitch of rivets Lap of plates or width of butt straps Thickness of straps Percentage strength of long. joint:—Plate Rivet Diameter of tube holes in drum Pitch of tube holes Percentage strength of drum shell in way of tubes Water Drum Heads or Ends:—Material Thickness Radius or how stayed Size of manhole or handhole Headers or Sections:—Number 14 Sections per Boiler
 Material Steel Thickness 1/32" min. Tested by Hydraulic Pressure to 405 lb. Material of Stays 1 1/2" & 4"
 Area at smallest part Area supported by each stay Working Pressure by Rules 235 lb. Tubes:—Diameter 1 1/2" & 4"
 Thickness 10 L.S.G. & 1/4" Number 376 @ 1 1/2" Steam Dome or Collector:—Description of Joint to Shell
 Percentage strength of Joint Diameter Thickness of shell plates Material
 Description of longitudinal joint Diameter of Rivet Holes Pitch of Rivets Working Pressure of shell by Rules Crown or End Plates:—Material Thickness How stayed

SUPERHEATER. Type B+W. Date of Approval of Plan 25/8/36. Tested by Hydraulic Pressure to 405 lb.
 Date of Test 16/2/37. Is a safety valve fitted to each section of the superheater which can be shut off from the Boiler yes.
 Diameter of Safety Valve 2" Single J. H. left. Pressure to which each is adjusted Is easing gear fitted
 Is a drain cock or valve fitted at lowest point of superheater Number, diameter, and thickness of tubes 104 @ 1 1/2" x 9 L.S.G.
 Spare Gear. Tubes 32 Gaskets or joints:—Manhole 6 Handhole 910 Handhole plates 15.

The foregoing is a correct description,
 Babcock & Wilcox, Ltd. Manufacturer.
 Per J.C.P.

Dates of Survey } During progress of 1936 Aug. 12. 19. 20. 21. 31 Sep. 3. 8. 29 Oct. Is the approved plan of boiler forwarded herewith yes.
 while } During erection on 6. 9. 14. 20. 21 Nov. 2. 12. 13. 23 24 25 27 30 Total No. of visits 43
 building } board vessel -- Dec. 1. 2. 8. 10. 11. 18. 21. 22. 30 (1937) Jan. 6. 15. 19
 21. 25. 26 Feb. 5. 12. 16. 23 25 Mar 4. 8.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These boilers have been built under Special Survey, to approved plans in accordance with the Society's Rules. Materials and workmanship are good. They are intended for Mr Henry Robb's Yard No. 234.

22/3/37
 Survey Fee ... £ 26/10/0: } When applied for, 19
 Travelling Expenses (if any) £ : : } When received, 19

H. Sutherland,
 Engineer Surveyor to Lloyd's Register of Shipping.
 TUE 25 MAY 1937

Committee's Minute GLASGOW 23 MAR 1937
 Assigned TRANSMIT TO LONDON

