

Rpt. 5c.

REPORT ON WATER TUBE BOILERS.

No.

Received at London Office

18 FEB 1925

Date of writing Report 11th Feb 1925 When handed in at Local Office 14th Feb 1925 Port of GLASGOW.

No. in Reg. Bk. Survey held at Glasgow Date, First Survey 4th Dec 1924 Last Survey 6th Feb 1925
 on the Yarrow W.T. Boiler N° 1507. Number of Visits 67
 Master Built at By whom built When built
 Engines made at By whom made When made
 Boilers made at Glasgow By whom made Messrs. Yarrow & Co Ltd. (N° 1507) When made 1925.
 Registered Horse Power Owners Port belonging to

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY. Manufacturers of Steel The Steel Coy of Scotland
 (Letter for Record S) Date of Approval of plan 14th November, 1924. Number and Description or Type of Boilers 1—Water Tube: Yarrow Type Working Pressure 180 lb./sq. in. Tested by Hydraulic Pressure to 320 lb./sq. in. Date of Test 4-2-25
 No. of Certificate 16723 Can each boiler be worked separately Total Heating Surface of Boilers 2100 sq. ft.
 Is forced draught fitted Yes Area of fire grate (coal) in each Boiler 61.25 sq. ft. Total grate area of boilers in vessel including Main and Auxiliary No. and type of burners (oil) in each boiler 3: Yarrow Type No. and description of safety valves on each boiler 2—Suction spring: Lochburn High Lift Area of each valve 3.98 ins. 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 Height of Boiler 12' 8" Width and Length 13' x 12' 4"
Steam Drums:—Number in each boiler one Inside diameter 3' 7" Material of plates steel Thickness 1 1/2" + 1/2"
 Range of Tensile Strength 26-30 tons Are drum shell plates welded or flanged no Description of riveting: Cir. seams D.R. Lap long. seams D.R.D.B.S. Diameter of rivet holes in long. seams 13/16" Pitch of Rivets 3 3/8"
 Lap of plates or width of butt straps 8 1/2" + 1 1/2" Thickness of straps 7/16" Percentage strength of long. joint:—Plate 75.8 Rivet 97.8
 Diameter of tube holes in drum 1 1/2" + 1 1/4" Pitch of tube holes 2' 1/8" + 1' 8 7/8" Percentage strength of shell in way of tubes 84.0
 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 230 lb./sq. in. **Steam Drum Heads or Ends:**—Material steel Thickness 7/8" Radius or how stayed 3 ft. radius.
 Size of Manhole or Handhole 16" x 12" **Water Drums:**—Number in each boiler two Inside Diameter 12' 11"
 Material of plates steel Thickness 1 1/8" + 5/8" Range of tensile strength 26-30 tons Are drum shell plates welded or flanged no Description of riveting:—Cir. seams S.R. Lap long. seams S.R.D.B.S. Diameter of Rivet Holes in long. seams 15/16" Pitch of rivets 2 19/32" Lap of plates or width of butt straps 6 1/8" + 5 1/2" Thickness of straps 17/32"
 Percentage strength of long. joint:—Plate 66.2 Rivet 67.3 Diameter of tube holes in drum 1.53 + 1.251 Pitch of tube holes 2' 1/8" + 1' 8 7/8"
 Percentage strength of drum shell in way of tubes 67.5 **Water Drum Heads or Ends:**—Material steel Thickness 3/4"
 Radius or how stayed 1' 9 1/2" rad. Size of manhole or handhole 16" x 12" **Headers or Sections:**—Number none
 Material Thickness Tested by Hydraulic Pressure to Material of Stays
 Area at smallest part Area supported by each stay Working Pressure by Rules **Tubes:**—Diameter 1 1/2" + 1 1/4" ext.
 Thickness 10 + 11 L.S.G. Number 960 + 128 **Steam Dome or Collector:**—Description of Joint to Shell none
 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
UPERHEATER. Type none Date of Approval of Plan Tested by Hydraulic Pressure to
 Date of Test Is a safety valve fitted to each section of the superheater which can be shut off from the Boiler
 Diameter of Safety Valve Pressure to which each is adjusted Is easing gear fitted
 Is a drain cock or valve fitted at lowest point of superheater diameter, and thickness of tubes
 Spare Gear. Tubes 13 @ 1 1/2" x 6 @ 1 1/2" Gaskets or joints: none Handhole plates



The foregoing is a correct description,

Manufacturer.

Dates of Survey During progress of 1924 Dec 4-11-18 1925 Jan 9 Is the approved plan of boiler forwarded herewith Already sent.
 while building During erection on 20 Feb 26 Total No. of visits 67
 board vessel

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This Boiler has been built under Special Survey in accordance with the Rules & the approved plan: the material & workmanship are good. The Boiler is being shipped to Manila to be fitted on a Ferry Boat.

Survey Fee ... £ 14 : - : When applied for, 17/2/1925
 Travelling Expenses (if any) £ - : - : When received, 20/2/1925

J. D. Boyle
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 17 FEB 1925

FRI. 6 NOV 1925

Assigned TRANSMIT TO LONDON

W103-0183

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