

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 No 1507. Number of Visits 67 Tons Gross Net.

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. (No 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-Sweet 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 3/8" + 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 plate 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 1/2"

Material of plates steel Thickness 1 7/8" + 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 9 @ 1 1/2" Gaskets or joints: none Handhole plates The foregoing is a correct description, Manufacturer.



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

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, 3/3/1925 } J. D. Boyle Engineer Surveyor to Lloyd's Register of Shipping. COMMITTEE'S MINUTE GLASGOW 17 FEB 1925 FRI. 6 NOV 1925 TRANSMIT TO LONDON W103-0183