

REPORT ON WATER TUBE BOILERS.

No. 10761

3 - MAR 1948

Received at London Office

Date of writing Report 20.2.1948 When handed in at Local Office 22.2.1948 Port of Falmouth
 No. in Survey held at Falmouth Date, First Survey 7-1-48 Last Survey 5-2-1948
 Reg. Book 24169 on the S.S. 'FORT STEVENS' (Number of Visits 5)
 Built at Mobile, Ala. By whom built Alabama D.D. & S.B. Co. Yard No. _____ When built 1944
 Engines made at Lynn, Mass. By whom made General Electric Co. Engine No. _____ When made 1944
 Boilers made at _____ By whom made Combustion Engineering Co. Inc. Boiler No. S. 7619 When made 1944
 Nominal Horse Power _____ Owners British Tanker Co. Ltd Port belonging to London

WATER TUBE BOILERS - MAIN, AUXILIARY, OR DONKEY. - Manufacturers of Steel Bethlehem Steel, Worth Steel Co.

Date of Approval of plan American Bureau No. and Description or Type of Boilers 2 Babcock type W.T. Boilers Working Pressure 500 lbs/p Tested by Hydraulic Pressure to 750 lbs/p Date of Test 22-9-44
 No. of Certificate 1 Can each boiler be worked separately Yes Total Heating Surface of Boilers 11354 sq ft (including Superheater)
 Is forced draught fitted Yes Area of Fire Grate (coal) in each Boiler _____
 No. and type of burners (oil) in each boiler 4 - Todd's Hot Press No. and description of safety valves on each boiler 2 - separate direct spring 5 1/2" each 1 1/2" dia. Area of each set of valves per boiler 7.000 sq in Pressure to which they are adjusted 600 lbs/p Are they fitted with easing gear Yes In case of donkey boilers state whether steam from main boilers can enter the donkey boiler Yes Smallest distance between boilers or uptakes and bunkers 5'-0" Height of boiler 21'-0"
 Width and length 11'-10" x 14'-5 1/2" 16-D Steam Drums: - Number in each boiler ONE Inside diameter 41 1/2" x 42"
 Thickness of plates 3/4" & 1 1/2" Range of tensile strength To A.B. requirements Are drum shell plates welded or flanged Welded If fusion welded, state name of welding firm Bethlehem & Worth Steel Co. Have all the requirements of the Rules for Class I vessels been complied with Yes Description of riveting: - Circ. seams Yes long. seams Yes
 Diameter of rivet holes in long. seams _____ Pitch of rivets _____ Thickness of straps _____ Percentage strength of long. joint: - Plate _____ Rivet _____ Diameter of tube holes in drum 4.015" Pitch of tube holes 4"
 Percentage strength of shell in way of tubes _____ Steam Drum Heads or Ends: - Range of tensile strength To A.B. requirements
 Thickness of plates 1 1/2" Radius or how stayed Ellipsoidal Size of manhole or handhole 16" x 12" Water Drums: - Number in each boiler _____ Inside diameter _____ Thickness of plates _____ Range of tensile strength _____ Are drum shell plates welded or flanged _____ If fusion welded, state name of welding firm _____ Have all the requirements of the Rules for Class I vessels been complied with _____ Description of riveting: - Circ. seams _____ long. seams _____
 Diameter of rivet holes in long. seams _____ Pitch of rivets _____ 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: - Range of tensile strength _____
 Thickness of plates _____ Radius or how stayed _____ Size of manhole or handhole _____
 Headers or Sections: - Number 28 Main headers 28 Material Steel Thickness 3/4" Tested by hydraulic pressure to 450 lbs/p
 Tubes: - Diameter 1 1/2", 2" & 4" Thickness 13 B.W.G., 10 B.W.G., 5 W.G. Number 1148, 56, 882 Steam Dome or Collector: - Description of joint to shell _____ Inside diameter _____ Thickness of shell plates _____ Range of tensile strength _____
 Description of longitudinal joint _____ If fusion welded, state name of welding firm _____ Have all the requirements for the Rules for Class I vessels been complied with _____ Diameter of rivet holes _____
 Pitch of rivets _____ Thickness of straps _____ Percentage strength of long. joint: - plate _____ rivet _____
 Crown or End Plates: - Range of tensile strength _____ Thickness _____ Radius or how stayed _____
 SUPERHEATER, Drums or Headers: - Number in each boiler 2 Inside diameter 1/4" square
 Thickness 3/4" Material Steel Range of tensile strength To A.B. requirements Are drum shell plates welded or flanged _____ If fusion welded, state name of welding firm _____ Have all the requirements of the Rules for Class I vessels been complied with _____ Description of riveting: - Circ. seams _____ long. seams _____
 Diameter of rivet holes in long. seams _____ Pitch of rivets _____ Thickness of straps _____ Percentage strength of long. joint: - Plate _____ Rivet _____ Diameter of tube holes in drum Header 1 1/2" Pitch of tube holes approx 2 3/8" Percentage strength of drum shell in way of tubes _____
 Radius or how stayed _____ Size of manhole or handhole 4 1/2" x 5 3/8" Number, diameter, and thickness of tubes 148 @ 1 1/2" O.D. x 11 B.W.G.
 Tested by hydraulic pressure to 450 lbs/p Date of test 22-9-44 Is a safety valve fitted to each section of the superheater which can be shut off from the boiler shut off No. and description of safety valves One 1 1/2" dia single high lift Area of each set of valves 1.2270' 1.7670' Pressure to which they are adjusted 464 lbs/p Is easing gear fitted Yes

Spare Gear. Has the spare gear required by the Rules been supplied _____
 The foregoing is a correct description, _____
 Manufacturer. _____

Dates of Survey: During progress of work in shops - - - - -
 while building: During erection on board vessel - - - - -
 Is the approved plan of boiler forwarded herewith _____
 Total No. of visits _____

Is this boiler a duplicate of a previous case Yes If so, state vessel's name and report No. T.2 Tankers

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c. These boilers & superheaters have been built under the supervision of the American Bureau of Shipping. The scantlings have been verified as far as possible. The boilers are in good condition & are eligible in my opinion to be classed with record of A.S. 2-48 Fitted for oil fuel, F.P. above 150°F.

Survey Fee £ _____ When applied for _____ 19
 Travelling Expenses (if any) £ _____ When received _____ 19

Date WED 7 APR 1948
 Committee's Minute See Rpt. 9
 Engineer Surveyor to Lloyd's Register of Shipping. Geo. Stevenson

