

REPORT ON WATER TUBE BOILERS.

No. 10699.

24 NOV 1947

Date of writing Report 20.11.1947. When handed in at Local Office 21.11.1947. Port of Falmouth

Received at London Office

No. in Survey held at Falmouth Date, First Survey 6-10-47 Last Survey 24-10-1947
 Reg. Bk. 34985 on the S.S. 'TRIGONOSEMUS' EX 'TUOLUMNE MEADOWS' (Number of Visits 8) Gross 10640 Tons
 Net 6303 Tons
 Built at Portland, Oregon U.S.A. By whom built Kaiser Co. Inc. When built 1944-5 mths
 Engines made at Schenectady By whom made General Electric Co. When made 1944
 Boilers made at _____ By whom made Combustion Engineering Co. Inc. When made 1944
 Nominal Horse Power _____ Owners Anglo-Saxon Petroleum Co. Port belonging to London

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel Bethlehem S.P. Worth Co.

Date of Approval of plan _____ Number and Description or Type of Boilers Two Babcock Type H.T. Boilers Working Pressure 150 lbs/sq Tested by Hydraulic Pressure to 150 lbs/sq Date of Test 5-5-44
 No. of Certificate _____ Can each boiler be worked separately Yes Total Heating Surface of Boilers 9868 sq ft + 1486 sq ft = 11354 sq ft
 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 Hex-Press. No. and description of safety valves on each boiler Duplex enclosed direct spring at 2 1/2 dia. 1.H.H. Area of each set of valves per boiler per rule as fitted 9.817 sq in Pressure to which they are adjusted 500 lbs/sq Are they fitted with easing gear Yes 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 3'-0" to steel bulkheads Height of boiler 21 feet
 Width and Length 11'-10" x 14'-5 1/2" Steam Drums:—Number in each boiler ONE Inside diameter 41 1/2" x 42"
 Thickness of plates 3/4" x 1 1/2" Range of Tensile Strength To American Bureau Requirements Are drum shell plates welded or flanged Welded If fusion welded, state name of welding firm Worth Steel Co. C. Bethlehem Steel Co. S. Have all the requirements of the rules for Class I vessels been complied with 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 7"
 Percentage strength of shell in way of tubes _____ Steam Drum Heads or Ends:—Range of tensile strength To American Bureau Requirements
 Thickness of plates 1 1/4" Radius or how stayed semi-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 _____
 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 33 Material Steel Thickness 3/4" Tested by Hydraulic Pressure to 150 lbs/sq
 Tubes:—Diameter 1 1/2", 2", 4" Thickness 13 SWG, 10 SWG, 5 SWG Number 1148, 56, 54 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 of 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 TWO Inside Diameter 7 1/2" x 7 1/2" square
 Thickness 3/4" Material Steel Range of tensile strength To American Bureau 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:—Cir. 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 3/16" Percentage strength of drum shell in way of tubes _____
 Drum Heads or Ends:—Thickness ✓ Range of tensile strength ✓
 Radius or how stayed ✓ Size of manhole or handhole 4 1/4" x 3 3/8" Number, diameter, and thickness of tubes 142 @ 1 1/4" OD x 11 SWG
 Tested by Hydraulic Pressure to 150 lbs/sq Date of Test 4-5-44 Is a safety valve fitted to each section of the superheater which can be shut off from the boiler Yes
 No. and description of Safety Valves One enclosed direct spring Area of each set of valves 1.767 sq in Pressure to which they are adjusted 464 lbs/sq Is easing gear fitted Yes
 Spare Gear. Has the spare gear required by the rules been supplied Yes

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 No
 Total No. of visits _____

Is this boiler a duplicate of a previous case ✓ If so, state vessel's name and report No. _____

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) The boilers are in good condition & are eligible in my opinion to be classed with record of B.S. 1047. Fitted for oil fuel, F.P. above 150°F.

Survey Fee ... £ : : } When applied for, 19
 Travelling Expenses (if any) £ : : } When received, 19

Committee's Minute Assigned

28 NOV 1947

Geo. Stevenson Engineer Surveyor to Lloyd's Register of Shipping.



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