

REPORT ON WATER TUBE BOILERS.

No. 5829.
BFW
Scindia Steam Navigation Co.

Received at London Office

Date of writing Report 31st Aug. 19 48 When handed in at Local Office 31st Aug. 19 48. Port of HALIFAX, N. S.
 No. in Survey held at Halifax, N. S. Date, First Survey 2nd July, Last Survey 14th July, 1948
 Reg. Bk. 2947 on the Steel Single Screw Steamer "SEA KING" (Number of Visits 5) Tons { Gross 7210
 Net 4381
 Built at Baltimore, Md. By whom built Bethlehem-Fairfield Shipyd. Inc When built 1944
 Engines made at Hamilton, Ohio, By whom made General Machinery Corpn. When made 1944
 Boilers made at Edge Moor, Del. By whom made Edge Moor Iron Works, Inc. When made 1944
 Nominal Horse Power 667 M.N. Owners Scindia Steam Navigation Co., Ltd. Port belonging to Bombay.

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel Lukens Steel Co.

Date of Approval of plan (Approved A.B.S. & U.S.M.C. Type EC2 - S- C1 vessel) (A.B.S. Number and Description or Type test 375 lbs. 1-28-44)
 U.S.C.G. Nos. Babcock-Wilcox - W.T. Cross Drum Working Pressure 250 lbs. Tested by Hydraulic Pressure to --- Date of Test ---
 No. of Certificate 9942 & 9943 Can each boiler be worked separately Yes Total Heating Surface of Boilers 10,233 sq. ft.

forced draught fitted Yes Area of fire grate (coal) in each Boiler ---
 No. and type of burners (oil) in each boiler 4 - Peabody Type No. and description of safety valves on each boiler 2 - 4" diar. (Duplex High-lift Consolidated type)

Area of each set of valves per boiler { per rule --- Pressure to which they are adjusted 250 lbs./sq. in. as fitted 25.13 sq. ins.
 Are they fitted with easing gear Yes In case of donkey boilers state whether steam from main boilers can enter donkey boiler N/A

Smallest distance between boilers or uptakes and bunkers or woodwork N/A Height of boiler O.A. 16' 5 5/8"
 Width and Length 14' 7 1/2" x 17' 10 7/8" Steam Drums:—Number in each boiler One Inside diameter 47 3/8 ins.

Thickness of plates 0.9375 Range of Tensile Strength 70,000 lbs./sq. ins. Are drum shell plates welded or flanged Welded
 If fusion welded, state name of welding firm (Boilers built by Edge Moor Iron Works) 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 4 1/32" Pitch of tube holes 7"
 Percentage strength of shell in way of tubes 42.4% Steam Drum Heads or Ends:—Range of tensile strength 65,000 lbs./sq. in.

Thickness of plates 0.9375 Radius or how stayed 3' 6" (Approx. size of manhole or handhole) 16" x 12" Mud Water Drums:—Number in each boiler One
 Inside Diameter 6" square Thickness of plates 5/8" 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 (To ABS requirements)
 Description of riveting:—Cir. seams --- long. seam ---

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 1/32" Pitch of tube holes 7"

Percentage strength of drum shell in way of tubes 42.4% Mud Water Drum Heads or Ends:—Range of Tensile strength ---
 Thickness of plates --- Radius or how stayed --- Size of manhole or handhole 5 1/2" x 4 9/16"

Number 44 Material Steel Thickness 19/32" Tested by Hydraulic Pressure to (A.B.S. test) 13/16"
 Tubes:—Diameter 4" & 2" Thickness 0.203" & 0.134" Number 44 & 602 Tube doors in headers:—5" x 4"

Steam Dome or Collector:—Description of joint to Shell (No steam dome) 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 ---

Percentage strength of long. joint:—Plate --- Rivet --- Thickness of straps --- Percentage strength of long. joint:—Plate --- Rivet ---

Range of tensile strength --- Thickness --- Radius or how stayed ---
 UPPER HEATER, Drums or Headers:—Number in each boiler Two Inside Diameter 6" square.

Thickness 5/8" Material Steel 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 (To ABS requirements)
 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 headers 2 1/32" Pitch of tube holes 3 3/4" Percentage strength of drum shell in way of tubes 45.8%
 Drum Heads or Ends:—Thickness --- Range of tensile strength ---

Radius or how stayed --- Size of manhole or handhole (in sides) 5 1/2" x 4 9/16" Number, diameter, and thickness of tubes 22 "U" tubes, 2" x 0.134"
 Tested by Hydraulic Pressure to --- (original ABS test) --- 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 1-1 1/2" High lift. Area of each set of valves 1.77 sq. ins. Pressure to which they are adjusted 230 lbs./sq. in. Is easing gear fitted Yes

Spare Gear. Has the spare gear required by the rules been supplied Main feed check valve disc remains to be supplied.
 The foregoing is a correct description,
 Manufacturer.

Is the approved plan of boiler forwarded herewith (Type EC2 - S-C1 vessel) No. ---
 Dates of Survey 2nd, 5th, 6th, 9th & 14th July, 1948, Total No. of visits 5
 During progress of work in shops ---
 During erection on board vessel ---

Is this boiler a duplicate of a previous case Yes If so, state vessel's name and report No. (American built type EC2 - S-C1 vessels)

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) The Boilers of this vessel, originally built and installed under Special Survey of the Surveyors to the American Bureau of Shipping, are in good condition and eligible in my opinion to be classed with this Society, subject to automatic feed water regulators being fitted, and spare main feed check valve lid being supplied.

Survey Fee £See Rpt. 9. When applied for, 19
 Travelling Expenses (if any) £ : : } When received, 19

Committee's Minute See minute on
 signed fe. machy rpt.
 FRI. 29 OCT 1948



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