

## REPORT ON WATER TUBE BOILERS.

No. 5829.

Received at London Office

Date of writing Report 31st Aug. 1948 When handed in at Local Office 31st Aug. 1948 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 Shpyd. 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 ---  
 as fitted 25.13 sq. ins. Pressure to which they  
 are adjusted 250 lbs./sq.in. Are they fitted with easing gear Yes In case of donkey boilers state whether steam from main boilers can enter  
 the 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 3/4" 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. in sides) Size of manhole or handhole 16" x 12" Mud  
 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% 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"  
 leaders or sections:—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"  
 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  
 form --- 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 ---  
 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 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:—(in sides) Thickness --- Range of tensile strength ---  
 radius or how stayed --- Size of manhole or handhole 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  
 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.

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

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

signed

FRI. 29 OCT 1948

Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register Foundation

003450-003457-0231