

# REPORT ON WATER TUBE BOILERS.

No. 19617.

Received at London Office

Date of writing Report 1<sup>st</sup> Jan. 1949 When handed in at Local Office 1<sup>st</sup> Jan. 1949 Port of Southampton  
 No. in Survey held at Portsmouth Date, First Survey 7<sup>th</sup> July Last Survey 27<sup>th</sup> Sept. 1948  
 Reg. Bk. 79663 on the S.S. WAVE KING (Number of Visits 6) Gross 8159 Tons  
 Net 4545  
 Built at Glasgow By whom built Harland & Wolff Ltd. When built 1944  
 Engines made at Newcastle-on-Tyne By whom made B. A. Parsons & Co. Ltd. When made 1944  
 Boilers made at Ramfou By whom made Babcock & Wilcox Ltd. When made 1944  
 Nominal Horse Power 1210 Owners The Admiralty Port belonging to London

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

Date of Approval of plan E. 19.11.48 Number and Description or Type of Boilers Two - Babcock & Wilcox Working Pressure 460 lbs/sq. in. Tested by Hydraulic Pressure to 500 lbs/sq. in. Date of Test 18.9.48  
 No. of Certificate — Can each boiler be worked separately Yes Total Heating Surface of Boilers (2) 10400 sq. ft.  
 Is forced draught fitted Yes Area of fire grate (coal) in each Boiler — plus 25ft = 1650 Total 12050 sq. ft.  
 No. and type of burners (oil) in each boiler 4 - Babcock & Wilcox No. and description of safety valves on each boiler Two - 2 1/2" Improved high lift Area of each set of valve 9.82 sq. in. Pressure to which they are adjusted 460 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 No  
 Smallest distance between boilers or uptakes and bunkers or woodwork — Height of boiler 13'-1 1/8" Width and Length 4'-4" & 13'-3 1/2"  
 Steam Drums:—Number in each boiler One Inside diameter 3'-6" Thickness of plates 1 1/16"  
 Range of Tensile Strength — Are drum shell plates welded or flanged Welded Description of riveting:—  
 Cir. seams — long. seams — Diameter of rivet holes in long. seams — Pitch of rivets —  
 Lap of plate or width of butt straps — Thickness of straps — Percentage strength of long. joint:—Plate — Rivet —  
 Diameter of tube holes in drum 4" Pitch of tube holes 7 1/4" Percentage strength of shell in way of tubes —  
 Working pressure by rules — Steam Drum Heads or Ends:—Range of tensile strength — Thickness of plates 1 5/16"  
 Radius or how stayed 6" & 2" 36 sph. rad. Size of manhole or handhole 16" x 12" Working pressure by rules — Water Drums:—Number in each boiler — Inside Diameter — Thickness of plates — Range of tensile strength — Are drum shell plates welded or flanged — Description of riveting:—Cir. seams — long. seams — Diameter of rivet holes in long. seams — Pitch of rivets — Lap of plates or width of butt straps — 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 — Working pressure by rules — Water Drum Heads or Ends:—Range of Tensile strength — Thickness of plates — Radius or how stayed —  
 Size of manhole or handhole — Working pressure by rules — Headers or Sections:—Number 38  
 Material Steel Thickness 3/4" Tested by Hydraulic Pressure to — Tubes:—Diameter 4", 2" & 1 1/4" O.D.  
 Thickness 4, 7 & 11 LSG Number 38, 183 & 1327 Steam Dome or Collector:—Description of Joint to Shell —  
 Inside diameter — Thickness of shell plates — Range of tensile strength —  
 Description of longitudinal joint — Diameter of rivet holes — Pitch of rivets — Lap of plate or width of butt straps — Thickness of straps — Percentage strength of long. joint:—Plate — Rivet —  
 Working Pressure of shell by rules — Crown or End Plates:—Range of tensile strength — Working pressure by rules —  
 Thickness — Radius or how stayed —  
 SUPERHEATER, Drums or Headers:—Number in each boiler One TWO Inside Diameter 9 1/2"  
 Thickness 1 1/4" Material steel Range of tensile strength — Are drum shell plates welded or flanged weldless Description of riveting:—Cir. seams — long. seams — Diameter of rivet holes in long. seams — Pitch of rivets — Lap of plates or width of butt straps — Thickness of straps —  
 Percentage strength of long. joint:—Plate — Rivet — Diameter of tube holes in drum 1 1/2" Pitch of tube holes 2 1/8"  
 Percentage strength of drum shell in way of tubes — Working pressure by rules — Drum Heads or Ends:—Flat  
 Thickness 1 1/4" Range of tensile strength — Radius or how stayed — Size of manhole or handhole 3 5/8" x 3 5/8"  
 Working pressure by rules — Number, diameter, and thickness of tubes 90 - 1 1/2" O.D. x 9 W.G. 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 —  
 No. and description of Safety Valves One 2 1/2" high lift Area of each set of valves 4.91 sq. in.  
 Pressure to which they are adjusted 450 lbs/sq. in. 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 Seven During progress of work in shops — Is the approved plan of boiler forwarded herewith Yes  
 while building — During erection on board vessel — 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.) These Boilers were built and installed under British Inspection Survey. They have now been examined throughout and found to be in good order. Please see Report of herein.

Survey Fee ... £ : : } When applied for, 10  
 Travelling Expenses (if any) £ : : } When received, 10

Committee's Minute  
 Assigned

FRI. 11 FEB 1949  
See minute on file

J. B. Rogers  
 Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register Foundation