

REPORT ON WATER TUBE BOILERS.

No. 8081

Date of writing Report 28 June 1941 When handed in at Local Office 5 July 1941 Received at London Office 20 SEP 1941
 No. in Survey held at Barbington, Ohio & Lecheste, Pa Port of Cleveland, Ohio & Philadelphia, Pa
 Reg. Bk. S/S. STANVAC. MELBOURNE Date, First Survey 17 Jan 1941 Last Survey 4 June 1941
 on the S/S. STANVAC. MELBOURNE (Number of Visits 10) Tons { Gross 10013 Net 6397
 Built at Lecheste, Pa By whom built Sum PB & DD Co When built 1941
 Engines made at Exington, Pa By whom made Westinghouse E & M Co When made "
 Boilers made at Barbington, O By whom made Babcock & Wilcox Co No 1492 When made "
 Nominal Horse Power 1006 Owners " Port belonging to "

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel Bethlehem Steel CoDate of Approval of plan October 1940 Number and Description or Type 2 Water tube, single drum typeof Boilers 2 Working Pressure 475 lb Tested by Hydraulic Pressure to 713 lb Date of Test Jan 1941No. of Certificate 731 Can each boiler be worked separately Yes Total Heating Surface of Boilers 9008Is forced draught fitted Yes Area of fire grate (coal) in each Boiler 3. B & WNo. and type of burners (oil) in each boiler 2. 2 1/2" high lift No. and description of safety valves on each boiler 2. 2 1/2" high lift Pressure to which they are adjusted 475 lbAre they fitted with easing gear Yes In case of donkey boilers state whether steam from main boilers can enter the donkey boiler YesSmallest distance between boilers or uptakes and bunkers or woodwork 35" Height of boiler 20' 11" Width and Length 9' 13" 10' 11"Steam Drums:—Number in each boiler 1 Inside diameter 42 1/16" Thickness of plates Steel 3/4"Range of Tensile Strength 70000 to 82000 lb Are drum shell plates welded or flanged Fusion Welded Description of riveting:—Cir. seams Fusion Welded long. seams Fusion Welded 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 90% Rivet "Diameter of tube holes in drum 4 3/32" Pitch of tube holes 4" Percentage strength of shell in way of tubes 42.41Working pressure by rules 483 lb Steam Drum Heads or Ends:—Range of tensile strength 70000 to 82000 lb Thickness of plates 17/32"Radius or how stayed 33 3/8" Size of manhole or handhole 12" x 16" Working pressure by rules " Water Drums:—Numberin each boiler " Inside Diameter " Thickness of plates " Range of tensile strength " Are drum shell plateswelded or flanged " Description of riveting:—Cir. seams " long. seam " Diameter of rivet holes inlong. 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 ofTensile strength " Thickness of plates " Radius or how stayed "Size of manhole or handhole " Working pressure by rules " Headers or Sections:—Number 13Material Steel Thickness 19/32" Tested by Hydraulic Pressure to 713 lb Tubes:—Diameter 1 1/4" & 2"Thickness .095 & .134 Number 1064 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 ofbutt 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 "Thickness " Radius or how stayed " Working pressure by rules "SUPERHEATER. Drums or Headers:—Number in each boiler B & W type Inside Diameter "Thickness " Material " Range of tensile strength " Are drum shell plates weldedor flanged " Description of riveting:—Cir. seams " long. seams " Diameter of rivet holes inlong. 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 " Drum Heads or Ends:—Thickness " Range of tensile strength " Radius or how stayed " Size of manhole or handhole "Working pressure by rules " Number, diameter, and thickness of tubes (192) 1 1/4" - 120" Tested by Hydraulic Pressure to 713 lbDate of Test Jan & Feb 1941 Is a safety valve fitted to each section of the superheater which can be shut off from the boiler YesNo. and description of Safety Valves 1 - 1 1/2" Area of each set of valves 1.767 sqPressure to which they are adjusted 475 lb Is easing gear fitted YesSpare 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 - - Jan 17-20-22-30 Feb 5-11 1941 Is the approved plan of boiler forwarded herewith Yes
 while building { During erection on board vessel - - March 10 May 9 June 4 1941 Total No. of visits 10

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

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been satisfactorily installed on board the vessel, tested to 713 lb with satisfactory results. The safety valves have been adjusted under steam to 475 lb. In my opinion the installation is eligible to receive the record of 2 WTB 475 lb.

Survey Fee Credit to Cleveland 233.00 When applied for 12 July 1941
 Travelling Expenses (if any) Phila 117.00 When received 19
Cleveland 14.00
Phila Exp. 5.00
 Committee's Minute 50 (Installation - Sum PB & Co.)
 Assigned 2 WTB - 475 lb. NEW YORK AUG 13 1941 W. R. Cumham Engineer Surveyor to Lloyd's Register of Shipping.