

REPORT ON WATER TUBE BOILERS.

No. 8037

Received at London Office

Date of writing Report 28 June 1941 When handed in at Local Office 8 May 1941 Port of Philadelphia
 No. in Survey held at Lehste Pa Date, First Survey 13 Dec 1940 Last Survey 19 March 1941
 Reg. Bk. on the M/S. ATLANTIC SUN. (Number of Visits 8) Tons { Gross 11315 Net 6891
 Master Lehste Pa Built at Lehste Pa By whom built Sim S B O D D Co When built 1941
 Engines made at Lehste Pa By whom made " " " When made "
 Boilers made at Baxter NJ By whom made Foster Wheeler Corporation When made "
 Registered Horse Power 730 Owners Sim Oil Co Port belonging to Philadelphia

WATER TUBE BOILERS Exhaust Gas Heated MAIN, AUXILIARY, OR DONKEY. — Manufacturers of Steel Bethlehem Steel Co
 Letter for Record S.W.T. Date of Approval of plan 8 August 1940 Number and Description or Type 490 lb
 of Boilers 1 WT. (Waste Heat) Foster Wheeler Working Pressure 245 lb Tested by Hydraulic Pressure to 368 lb Date of Test 21.12.40
 No. of Certificate 730 Can each boiler be worked separately ✓ Total Heating Surface of Boilers 3150 sq. ft.
 Is forced draught fitted ✓ Area of fire grate (coal) in each Boiler ✓ Total grate area of boilers in vessel including
 Main and Auxiliary ✓ No. and type of burners (oil) in each boiler 2 Spring loaded No and description of safety valves on
 each boiler 2 Spring loaded Area of each valve 1.770" Pressure to which they are adjusted 245 lb
 Are they fitted with easing gear ✓ 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 15'-1" Height of Boiler 8'-6" x 11'-3"
 Steam Drums:—Number in each boiler One Inside diameter 36" Material of plates Steel Thickness 3/4"
 Range of Tensile Strength 65000 lbs minimum Are drum shell plates welded or flanged Union Welded Description of riveting:—
 Cir. seams Union Welded long. seams Union Welded Diameter of rivet holes in long. seams — Pitch of Rivets —
 Gap of plate or width of butt straps — Thickness of straps — Percentage strength of long. joint:—Plate — Rivet —
 Diameter of tube holes in drum 2 1/32" Pitch of tube holes 4 7/8" Percentage strength of shell in way of tubes 58.3
 Does drum have a flat side state method of staying No flat side Depth and thickness of girders at centre
 of fitted) — Distance apart — Number and pitch of stays in each — Working pressure —
 Rules — Steam Drum Heads or Ends:—Material Steel Thickness 1 9/32" 2 3/32" Radius or how stayed Elliptical
 Size of Manhole or Handhole 12" x 16" Water Drums:—Number in each boiler None Inside Diameter —
 Material of plates — Thickness — Range of tensile strength — Are drum shell plates welded
 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 — Water Drum Heads or Ends:—Material — Thickness —
 Radius or how stayed — Size of manhole or handhole — Headers or Sections:—Number 2 x 6 7/8" O.D.
 Material Steel Thickness 1/2" Tested by Hydraulic Pressure to 435 lb Material of Stays —
 Area at smallest part — Area supported by each stay — Working Pressure by Rules 4.35 Tubes:—Diameter 2"
 Thickness 1.48" Number 140 Steam Dome or Collector:—Description of Joint to Shell None
 Percentage strength of Joint — Diameter — Thickness of shell plates — Material —
 Description of longitudinal joint — Diameter of Rivet Holes — Pitch of Rivets — Working Pressure of shell
 Rules — Crown or End Plates:—Material — Thickness — How stayed —

SUPERHEATER. Type None Date of Approval of Plan — 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 —
 Diameter of Safety Valve — Pressure to which each is adjusted — Is easing gear fitted —
 Is a drain cock or valve fitted at lowest point of superheater — Number, diameter, and thickness of tubes —
Pressure Gear. Tubes — Gaskets or joints:—Manhole — Handhole — Handhole plates —

The foregoing is a correct description,
 Manufacturer.

Dates { During progress of work in shops - - } 13. 19, 21. Dec 1940. Jan 13. 1941 Is the approved plan of boiler forwarded herewith ✓
 { During erection on board vessel - - - } 23 Jan 11: 21 Feb. 19 March 1941 Total No. of visits 8

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built under special
 survey, and in accordance with the approved plan, the workmanship & materials are good.
 Boiler has been erected on board the vessel, tested out under hydraulic pressure to 368 lbs.
 and satisfactory. The safety valves have been adjusted under steam to 245 lbs. In my opinion
 boiler is entitled to receive the record of 3 WTDB. 245 lb. (1 Spc)

Survey Fee ... £ { see: other : } When applied for, 19
 Travelling Expenses (if any) £ { report for : } When received, 19
W.D. Pemberton
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute NEW YORK MAY 28 1941
 signed 1 WTDB (Exhaust Gas Heated) 245 LBS.

