

REPORT ON WATER TUBE BOILERS.

No. 8037

Received at London Office 9 JUL 1941

Date of writing Report 28 June 1941 When handed in at Local Office 8 May 1941 Port of Philadelphia

No. in Survey held at 1 on the M/S. ATLANTIC SUN. Date, First Survey 13 Dec 1940 Last Survey 19 March 1941

Reg. Bk. (Number of Visits 8) Tons { Gross 11315 Net 6891

Master Built at Chester Pa By whom built Sun S B O D D Co When built 1941

Engines made at Chester Pa By whom made " " " When made " "

Boilers made at Baxter NJ By whom made Foster Wheeler Corporation When made " "

Registered Horse Power Owners Sun Oil Co Port belonging to Philadelphia

WATER TUBE BOILERS ~~MAIN, AUXILIARY, OR DONKEY.~~ Exhaust Gas Heated 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 1 WT. (Waste Heat) Foster Wheeler

Boilers 730 Working Pressure 245 lb Tested by Hydraulic Pressure to 368 lb Date of Test 18-2-41

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 Heavy Diesel Area of each valve 1.770 sq. ft. No and description of safety valves on each boiler 2 Heavy Diesel 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 Height of Boiler 15' 1" Width and Length 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 65,000 lb min 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

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 19/32" 23/32" 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 1/8" 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 13. 19 21. Dec 1940. Jan 13. 1941 Is the approved plan of boiler forwarded herewith No

Survey { work in shops - - } 23 Jan 11. 21 Feb. 19 March 1941 Total No. of visits 8

While { During erection on } board vessel - - -

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built under special supervision, 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 lb. and satisfactory. The safety valves have been adjusted under steam to 245 lb. In my opinion boiler is entitled to receive the record of 3 WTDB. 245 lb. (1 Sp)

Survey Fee ... £ { see: other : } When applied for, 19

Travelling Expenses (if any) £ { report for : } When received, 19

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Signed 1 WTDB (Exhaust Gas Heated) 245 LBS.

NEW YORK MAY 28 1941



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