

REPORT ON WATER TUBE BOILERS.

No. 8037

Cargo Boilers

Date of writing Report 27 April 1941 When handed in at Local Office 5 May 1941 Port of Philadelphia Received at London Office 9 JUL 1941

No. in Survey held at Lehester Pa Date, First Survey 26 Nov 1940 Last Survey 19 March 1941

Reg. Bk. M/V ATLANTIC SUN (Number of Visits 8) Gross Tons 11315 Net Tons 6891

Master J. M. V. Built at Lehester Pa By whom built Sum SRS & DD Co When built 1941

Engines made at Lehester Pa By whom made Sum SRS & DD Co When made "

Boilers made at Carteret By whom made Foster Wheeler Corporation When made "

Registered Horse Power " Owners Sum Gil Co Port belonging to Philadelphia

WATER TUBE BOILERS ~~MAIN, AUXILIARY, OR DONKEY.~~ Manufacturers of Steel Carnegie Steel Co

(Letter for Record S. WT) Date of Approval of plan 12 March 1940 Number and Description or Type of Boilers 1 cargo boiler Sectional tank type Working Pressure 245 lb Tested by Hydraulic Pressure to 365 lb Date of Test 17.12.40

No. of Certificate 730 Can each boiler be worked separately Yes Total Heating Surface of Boilers 5260 sq ft

Is forced draught fitted Yes Area of fire grate (coal) in each Boiler Oil fired Total grate area of boilers in vessel including Main and Auxiliary 5 sq ft No. and type of burners (oil) in each boiler 5 Ford No. and description of safety valves on each boiler 2 Spring loaded Crosby high lift Area of each valve 12.56 sq in Pressure to which they are adjusted 245 lb

Are they fitted with easing gear Yes In case of donkey boilers state whether steam from main boilers can enter the donkey boiler Motor ship

Smallest distance between boilers or uptakes and bunkers or woodwork " Height of Boiler 13' 4" 10 cent Width and Length 16' 3/4" x 12' 8"

Steam Drums:—Number in each boiler 1 Inside diameter 42" Material of plates Steel Thickness 15/16"

Range of Tensile Strength 60000 lb minimum Are drum shell plates welded or flanged fusion welded Description of riveting:—fusion welded

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% allowed

Diameter of tube holes in drum 4 1/32" Pitch of tube holes 7" Percentage strength of shell in way of tubes 42.4

If Drum has a flat side state method of staying no flat side Depth and thickness of girders at centre (if fitted) " Distance apart " Number and pitch of stays in each " Working pressure by rules 250 lb

Steam Drum Heads or Ends:—Material Steel Thickness 15/16" Radius or how stayed 42"

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 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 " **Water Drum Heads or Ends:**—Material " Thickness "

Radius or how stayed " Size of manhole or handhole " **Headers or Sections:**—Number 22"

Material Steel Thickness 11/16" Tested by Hydraulic Pressure to 368 lb Material of Stays "

Area at smallest part " Area supported by each stay " Working Pressure by Rules " **Tubes:**—Diameter 2"

Thickness .134 Number 748 **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 by Rules "

Crown or End Plates:—Material " Thickness " How stayed "

UPERHEATER. Type Radiant Date of Approval of Plan 12/3/40 Tested by Hydraulic Pressure to 368 lb

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 28 - 2" .148"

Spare Gear. Tubes " Gaskets or joints:—Manhole " Handhole " Handhole plates "

The foregoing is a correct description, Manufacturer.

Dates of Survey } During progress of work in shops -- } 26. 29 Nov 1940. 10 & 17 Jan 1941 Is the approved plan of boiler forwarded herewith No

while building } During erection on board vessel -- } 23 Jan. 11. 18 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 way and in accordance with the approved plans, the workmanship & materials are good. The boiler has been satisfactorily installed on board the vessel, and tested to 368 lbs hydraulic pressure. Safety valves have been adjusted under steam to 245 lb. In my opinion the vessel is entitled to receive the record of 3 WTDB (1 SPT) 245 lbs.

Cleveland \$ 125.00 Exp 22.75
 Survey Fee .200.00 £ 36.00 : } When applied for, 15th May 1941 (Foster Wheeler)
 125.00 £ 5.00 : } When received, 19 (Sum SRS Co)
 Fost Wheeler 450 63.75

Sum SRS for installation 75 \$ Exp 5.00

NEW YORK MAY 28 1941

Engineer Surveyor to Lloyd's Register of Shipping.

Assigned 1 WTDB (1 SPT) 245 LBS.

