

REPORT ON WATER TUBE BOILERS.

No. 6825

Small Compressed Air Tank Received at London Office

AUG 14 1939

Date of writing Report July 22nd 1939 When handed in at Local Office July 26th 1939 Port of Baltimore Md. USA

No. in Survey held at Sparrows Point, Md. Date, First Survey Jan 26th Last Survey May 9th 1939

Reg. Bk. 39138 on the "MOBILUBE" Steel Single Screw Tanker Steamship (4332) (Number of Visits 3) Gross 10222 Tons Net 6181

Master T.O. JOHANSEN Built at Sparrows Pt. Md. By whom built Bethlehem Steel Co When built 1939

Engines made at Exington, Pa. By whom made Westinghouse Manufacturing Co When made 1938-9

Boilers made at Canter, N.Y. By whom made Foster-Wheeler Corp. When made 1938-9

Registered Horse Power 706.79 Owners Jacory Vacuum Oil Co Port belonging to New York N.Y.

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

(Letter for Record ONE - 30" W/L Dia Corp' Air Tank) Date of Approval of plan January 18th 1939 Number and Description or Type of Boilers ONE - 30" W/L Dia Corp' Air Tank Working Pressure 100 lbs Tested by Hydraulic Pressure to 200 lbs Date of Test March 20th 1939

No. of Certificate THE TANK can be worked separately Yes Total Heating Surface of Boilers 30 cubic feet

Is forced draught fitted Area of fire grate (coal) in each Boiler ONE - 1" Spring Loaded Total grate area of boilers in vessel including Main and Auxiliary ONE - 1" Spring Loaded No. and type of burners (oil) in each boiler ONE - 1" Spring Loaded No and description of safety valves on each boiler ONE - 1" Spring Loaded Area of each valve approx 7.85 sq in Pressure to which they are adjusted 100 lbs

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

Smallest distance between boilers or uptakes and bunkers or woodwork 17 inches Height of Boiler ONE Width and Length ONE

Drums:—Number in each boiler ONE Inside diameter 30 inches Material of plates A.S. Steel Thickness 5/16 inch

Range of Tensile Strength 54,300 lbs per sq inch Are drum shell plates welded or flanged Welded Description of riveting:—Fusion Welded

Cir. seams Fusion Welded long. seams Fusion Welded Diameter of rivet holes in long. seams 3/16 Pitch of Rivets 1 1/2

Lap of plate or width of butt straps 3/16 Thickness of straps 3/16 Percentage strength of long. joint:—Plate 90% Rivet as allowed

Diameter of tube holes in drum 3/16 Pitch of tube holes 1 1/2 Percentage strength of shell in way of tubes 90%

If Drum has a flat side state method of staying Stays Depth and thickness of girders at centre (if fitted) 30" Radius Distance apart 30" Number and pitch of stays in each 30" Radius Working pressure by rules 30" Radius

Size of Manhole or Handhole 4 3/8" x 3 1/4" Water Drums:—Number in each boiler ONE Inside Diameter 30"

Material of plates A.S. Steel Thickness 5/16 inch Range of tensile strength 54,300 lbs per sq inch Are drum shell plates welded or flanged Welded

Description of riveting:—Cir. seams Fusion Welded long. seams Fusion Welded Diameter of Rivet Holes in long. seams 3/16 Pitch of rivets 1 1/2 Lap of plates or width of butt straps 3/16 Thickness of straps 3/16

Percentage strength of long. joint:—Plate 90% Rivet as allowed Diameter of tube holes in drum 3/16 Pitch of tube holes 1 1/2

Percentage strength of drum shell in way of tubes 90% Water Drum Heads or Ends:—Material A.S. Steel Thickness 5/16 inch

Radius or how stayed 30" Radius Size of manhole or handhole 4 3/8" x 3 1/4" Headers or Sections:—Number ONE

Material A.S. Steel Thickness 5/16 inch Tested by Hydraulic Pressure to 200 lbs Material of Stays A.S. Steel

Area at smallest part 30" Area supported by each stay 30" Working Pressure by Rules 30" Tubes:—Diameter 30"

Thickness 5/16 inch Number ONE Steam Dome or Collector:—Description of Joint to Shell Welded

Percentage strength of Joint 90% Diameter 30" Thickness of shell plates 5/16 inch Material A.S. Steel

Description of longitudinal joint Welded Diameter of Rivet Holes 3/16 Pitch of Rivets 1 1/2 Working Pressure of shell by Rules 30"

Crown or End Plates:—Material A.S. Steel Thickness 5/16 inch How stayed Stays

SUPERHEATER. Type ONE Date of Approval of Plan January 18th 1939 Tested by Hydraulic Pressure to 200 lbs

Date of Test March 20th 1939 Is a safety valve fitted to each section of the superheater which can be shut off from the Boiler Yes

Diameter of Safety Valve 1 1/2 Pressure to which each is adjusted 100 lbs Is easing gear fitted Yes

Is a drain cock or valve fitted at lowest point of superheater Yes Number, diameter, and thickness of tubes ONE

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

The foregoing is a correct description,

J. A. ...
Bethlehem Steel Company
Shipbuilding Division, Sparrows Point, Md.

Manufacturer.

Dates of Survey } During progress of work in shops -- Jan 26th 1939 February 28th 1939. Is the approved plan of boiler forwarded herewith Yes
while } During erection on board vessel --- May 9th 1939 Total No. of visits Three

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This Small Air Tank for Compressed Air System has been constructed under Special Survey & in accordance with the approved plan. The workmanship & material are good. Report of welding test & stress invoice attached herewith. The tank subjected to an impact test using 2 1/2 lb hammer & test tank pressed hydraulically to 150 lbs to verify welding - then pressure raised to 200 lbs for a sustained duration & all joints & connections examined & found satisfactory. The tank subsequently installed aboard vessel & is now in use under operation.

Survey Fee ... £ 40⁰⁰ When applied for, July 26th 1939
Travelling Expenses (if any) £ 5⁰⁰ When received, 19.9.39

A. J. ...
Engineer Surveyor to Lloyd's Register of Shipping.

NEW YORK AUG 2 - 1939

Committee's Minute See First Entry Report.
Assigned See First Entry Report.



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