

# REPORT ON WATER TUBE BOILERS.

No. 7699

Received at London Office 20 JUL 1942

Report made on 15th June, 1942 When handed in at Local Office 23rd June, 1942 Port of Baltimore, Maryland  
 Survey held at Baltimore, Maryland Date, First Survey 9th Dec. 1941 Last Survey 28th March 1942  
 on the S.S. "COLINA" (Number of Visits 12) {Gross 9925  
 Sparrows Point, Maryland U.S.A. By whom built Bethlehem Steel Co. (Yard No. 4358) When built 1942  
 Lynn, Mass. By whom made General Electric When made 1941  
 Carteret, N.J. By whom made Foster-Wheeler Corp. Nos. 458 and 457 When made 1941  
 Horse Power 1884 Owners Socony-Vacuum Oil Co. Port belonging to New York

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

Approval of plan 10th July, 1940  
 2 Foster Wheeler Water Tube Working Pressure 490 lbs. Tested by Hydraulic Pressure to Drum 980 lbs. Date of Test 29/10 & 6 & 13/12/40  
 Certificate Can each boiler be worked separately Yes Total Heating Surface of Boilers 7400 sq. ft. Date of Test 20/12/41  
 Draught fitted Yes Area of fire grate (coal) in each Boiler Oil fired  
 No. and description of safety valves on 2 spring loaded high lift  
 Area of each set of valves per boiler {per rule 11.93 sq. in. Pressure to which they as fitted 14.14 sq. in.  
 490 lbs. Are they fitted with easing gear Yes In case of donkey boilers state whether steam from main boilers can enter boiler not near Height of boiler 19'6"  
 Length 13'-0" x 18' - 0" Steam Drums:—Number in each boiler one Inside diameter 48"  
 Range of Tensile Strength 70,000 lbs. per sq. in. minimum Are drum shell plates welded Fusion Welded  
 If fusion welded, state name of welding firm - Have all the requirements of the rules vessels been complied with Yes Description of riveting:—Cir. seams Fusion Weld Long. seams Fusion Weld  
 rivet holes in long. seams - Pitch of rivets - Thickness of straps - Percentage strength of plates 90% allowed Rivet - Diameter of tube holes in drum 1-9/32" & 2-1/32" Pitch of tube holes (1-1/4" tubes) & 2-3/4" (2" tubes) & 4-1/2"  
 Strength of shell in way of tubes 48.7 & 54.8 Steam Drum Heads or Ends:—Range of tensile strength 65000 lbs. per sq. in. min.  
 b. plates 1-13/32" & 15/16" Radius or bow stayed Ellipsoidal Size of manhole or handhole 12" x 16" Water Drums:—Number one Inside Diameter 32" Thickness of plates 1-1/16" Range of tensile strength 70000 min. Are drum shell plates changed Fusion Weld If fusion welded, state name of welding firm - Have all the requirements of the rules vessels been complied with Yes Description of riveting:—Cir. seams Fusion Weld long. seam Fusion Weld  
 rivet holes in long. seams - Pitch of rivets - Thickness of straps - Diameter of tube holes in drum 1-9/16" & 2-1/32" Pitch of tube holes 2-1/2" mean & 4-1/2" mean  
 strength of long. joint:—Plate - Rivet - Diameter of tube holes in drum 1-9/16" & 2-1/32" Pitch of tube holes 2-1/2" mean & 4-1/2" mean  
 strength of drum shell in way of tubes 48.7 & 54.8 Water Drum Heads or Ends:—Range of Tensile strength 65000 lbs. per sq. in. min.  
 plates 1-1/16" & 15/16" Radius or bow stayed Ellipsoidal Size of manhole or handhole 12" x 16" Tested by Hydraulic Pressure to 980 lbs.  
 Sections:—Number 3, 7-3/4"x7-3/4" Material Steel Thickness 7/8" Steam Dome or Collector:—Description of diameter 1-1/4", 2", 3" Thickness 11, 9 & 8 BWG resp. Number 577, 70, 3  
 None Inside diameter - Thickness of shell plates - Range of tensile - Description of longitudinal joint - If fusion welded, state name of welding - Have all the requirements of the rules for Class I vessels been complied with - Diameter of rivet holes - Thickness of straps - Percentage strength of long. joint - Plate - Rivet - End Plates:—Range of tensile strength - Thickness - Radius or bow stayed -

HEATER. Drums or Headers:—Number in each boiler Interdeck Type Inside Diameter -  
 Material - Range of tensile strength - Are drum shell plates welded - If fusion welded, state name of welding firm - Have all the requirements of the rules vessels been complied with - Description of riveting:—Cir. seams - long. seams - rivet holes in long. seams - Pitch of rivets - Thickness of straps - Percentage strength of plates - Rivet - Diameter of tube holes in drum - Pitch of tube holes - Percentage strength of way of tubes - Drum Heads or Ends:—Thickness - Range of tensile strength - Radius or bow stayed -  
 w stayed - Size of manhole or handhole - Number, diameter, and thickness of tubes 164, 1 1/4" 10 BWG  
 un hydraulic Pressure to 735 lbs. Date of Test 20 - 12 - 41 Is a safety valve fitted to each section of the superheater which off from the boiler Superheater No. and description of Safety Valves 1 Consolidated high lift Area of each set 1.766 sq. ins. Pressure to which they are adjusted 435 lbs. per sq. in. Is easing gear fitted Yes  
 ear. Has the spare gear required by the rules been supplied Yes

The foregoing is a correct description,

Foster-Wheeler Corp. Jos. J. Nelis Manufacturer.

During progress of work in shops - Sept. 17, 20, Oct. 1, 4, 11, 15, 29; Nov. 8, 12, 15, 26  
 During erection on board vessel - Dec. 3, 6, 13, 1941 Mar. 14, Apr. 22, May 6  
 1941 Dec. 9, 20, 23, 26; 1942 Jan. 9, 13; Feb. 6, 11; Mar. 2, 23, 26, 28  
 Is the approved plan of boiler forwarded herewith No  
 Total No. of visits 29

a duplicate of a previous case Yes If so, state vessel's name and report No. "Corsicana" 7540

REMARKS (State quality of workmanship, opinions as to class, &c.) These boilers have been built and erected under Special Please refer to New York Report No. 41994 with attached electric welding particulars, in accordance with the approved plans and the workmanship and material throughout are good. Same have been hydraulically tested in board the vessel with all fittings and piping and subsequently seen under steam working conditions and are in my opinion to be classed and have the notation 2 W. T. boilers 490 lbs. F. D. made in the Register Book.

When applied for June 2, 1942  
 When received 19  
 £ N.Y. \$280.00  
 Balt. 120.00  
 £ N.Y. 30.70  
 Balt. 30.00

NEW YORK JUL 1 1942

2 WTB (Cpt) 490 lbs.

Wm. B. Brown  
 Engineer Surveyor to Lloyd's Register of Shipping.