

REPORT ON WATER TUBE BOILERS.

No. 41994

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of writing Report 12/5 19 41 When handed in at Local Office

Port of NEW YORK

No. in Survey held at Carteret, N. J.

Date, First Survey 17th SEPT. 1940. Last Survey 6th MAY 1941

on the S.S. COLINA.

(Number of Visits 17.)

Built at Sparrows Point, Md. By whom built Bethlehem Steel Co. (Yard No. 4358)

Tons } Gross
Net

Engines made at By whom made When made

Boilers made at Carteret, N. J. By whom made Foster Wheeler Corp. (FWB 457-8) When made 1941

Registered Horse Power Owners Socony Vacuum Oil Co. Port belonging to

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

Letter for Record (S) Date of Approval of plan 10th July, 1940

Boilers 2 Foster Wheeler Water Tube Working Pressure 490 lb. Tested by Hydraulic Drum 980 lb. Number and Description or Type Boiler 735 lb. Date of Test 29/10/40 & 13/12/40.

To be issued at Baltimore Can each boiler be worked separately Yes Total Heating Surface of Boilers 14960 sq.ft. 7400

forced draught fitted Yes Area of fire grate (coal) in each Boiler Oil fired Total grate area of boilers in vessel including

in and Auxiliary No. and type of burners (oil) in each boiler No. and description of safety valves on

each boiler 2 Spring loaded Area of each valve 7.07 sq.in. Pressure to which they are adjusted

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 19'6" Width and Length 13'0" x 18'0"

Steam Drums:—Number in each boiler One Inside diameter 48" Material of plates Steel Thickness 1-9/16"

Range of Tensile Strength 70,000 lbs/in² minimum Are drum shell plates welded or flanged Fusion Weld Description of riveting:—

seams Fusion Weld long. seams Fusion Weld Diameter of rivet holes in long. seams Pitch of Rivets

of plate or width of butt straps Thickness of straps Percentage strength of long. joint:—Plate 90% Rivet

diameter of tube holes in drum 2-1/32" Pitch of tube holes (1 1/2" tubes) Alternate 2 1/2" & 2-3/4" Percentage strength of shell in way of tubes 48.7 & 54.8

Drum has a flat side state method of staying No flats & 4 1/2" (2" tubes) Depth and thickness of girders at centre

fitted) None Distance apart Number and pitch of stays in each Working pressure

rules 493 lb/in² Steam Drum Heads or Ends:—Material Steel Thickness 1-13/32 & 15/16" Radius or how stayed Ellipsoidal

of Manhole or Handhole 12" x 16" Water Drums:—Number in each boiler One Inside Diameter 32"

Material of plates Steel Thickness 1-1/16" Range of tensile strength 70000 minimum Are drum shell plates welded

flanged Fusion Weld Description of riveting:—Cir. seams Fusion Weld long. seams Fusion Weld Diameter of Rivet Holes in

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 1 9/16" & 2-1/32" Pitch of tube holes 2 1/2" mean &

percentage strength of drum shell in way of tubes 48.7 & 54.8 Water Drum Heads or Ends:—Material Steel Thickness 1-1/16 & 15/16"

Radius or how stayed Ellipsoidal Size of manhole or handhole 12" x 16" Headers or Sections:—Number 3, 7-3/4" x 7-3/4"

Material Steel Thickness 7/8" Tested by Hydraulic Pressure to Material of Stays

at smallest part Area supported by each stay Working Pressure by Rules Tubes:—Diameter 1 1/4", 2", 3"

Thickness 11, 9 & 8 BWG resp. Number 577, 70, 3 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 Interdeck Date of Approval of Plan 10th July, 1940 Tested by Hydraulic Pressure to Integral

of Test Is a safety valve fitted to each section of the superheater which can be shut off from the Boiler Superheater

Diameter of Safety Valve Pressure to which each is adjusted Is easing gear fitted

drain cock or valve fitted at lowest point of superheater Number, diameter, and thickness of tubes 164, 1 1/4", 10 BWG

Pressure Gear. Tubes Gaskets or joints:—Manhole Handhole Handhole plates

The foregoing is a correct description,

FOSTER WHEELER CORPORATION

Joe J. Kelly Manufacturer. VICE PRESIDENT

During progress of work in shops: SEPT. 17, 20, OCT. 1, 4, 11, 15, 29, NOV. 8, 12, 15, 26. Is the approved plan of boiler forwarded herewith
DEC. 3, 6, 13, - 1941. MAR. 14, APR. 22, MAY. 6.
During erection on board vessel: Total No. of visits

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) The Fusion Welded drums for these boilers have been built and tested in accordance with the approved plans, and the Rules for Fusion Welded Pressure Vessels, and the materials and workmanship are good. For particulars of tests see attached test reports. The drums have been forwarded to Sparrows Point, Md. and when the boilers have been completed and fitted on board in accordance with the Rules, to the satisfaction of the Society's Surveyors, the vessel will be eligible, in my opinion, to have the condition 2 WT(B) 490 lb.

Survey Fee ... \$280.00 : When applied for, June 2nd 1942 at Baltimore.
Travelling Expenses (if any) £30.70 : When received, 19

See Baltimore Rpt. 7699

C. Macpherson Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute NEW YORK JUL 1 1942

signed See First Entry Report.



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