

# REPORT ON WATER TUBE BOILERS.

REC'D NEW YORK MAY 11 1956

No. 10496

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Date of writing Report 2nd May, 1956 When handed in at Local Office 2nd May, 1956 Port of PHILADELPHIA, PA.  
 No. in Survey held at Mountaintop, Pa. Date, First Survey 31st Oct. 1955 Last Survey 1st May, 1956  
 Reg. Bk. on the Boiler drums (5568/9) for Hull 1823 (Number of Visits 13) {Gross Tons }  
 {Net Tons }  
 Built at Trieste By whom built Cantieri Riuniti Dell'Adriatico When built  
 Engines made at \_\_\_\_\_ By whom made \_\_\_\_\_ When made \_\_\_\_\_  
 Drums \_\_\_\_\_ By whom made \_\_\_\_\_ When made \_\_\_\_\_  
 Plates made at Mountaintop, Pa. By whom made Foster Wheeler Corp. When made 1956  
 Nominal Horse Power \_\_\_\_\_ Owners \_\_\_\_\_ Port belonging to \_\_\_\_\_

**WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel** Lukens Steel Co., Coatesville, Pa.

Date of Approval of plan 29th July, 1955 Number and Description or Type

Boilers Drums - 2 upper, 2 lower Working Pressure 675 psi Tested by Hydraulic Pressure to 1063 psi Date of Test 28 Mar.

of Certificate Welded Can each boiler be worked separately \_\_\_\_\_ Total Heating Surface of Boilers 6710 sq ft 16 Apr.

forced draught fitted \_\_\_\_\_ Area of fire grate (coal) in each Boiler 20,980 sq ft 1 May

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

each boiler \_\_\_\_\_ Area of each set of valves per boiler {per rule \_\_\_\_\_ Pressure to which they

as fitted \_\_\_\_\_

Are they adjusted \_\_\_\_\_ Are they fitted with easing gear \_\_\_\_\_ In case of donkey boilers state whether steam from main boilers can enter

donkey boiler \_\_\_\_\_ Smallest distance between boilers or uptakes and bunkers or woodwork \_\_\_\_\_ Height of boiler \_\_\_\_\_

and Length \_\_\_\_\_ Steam Drums:—Number in each boiler One Inside diameter 46-7/8" 24

Thickness of plates 1-3/16" & 3-7/16" Range of Tensile Strength 70,000 lbs. sq. in. Are drum shell plates welded

\_\_\_\_\_ welded If fusion welded, state name of welding firm Foster Wheeler Corp. Have all the requirements of the rules

for Class I vessels been complied with Yes Description of riveting:—Cir. seams \_\_\_\_\_ long. seams \_\_\_\_\_

Diameter of rivet holes in long. seams \_\_\_\_\_ Pitch of rivets \_\_\_\_\_ Thickness of straps \_\_\_\_\_ Percentage strength of

long. joint:—Plate \_\_\_\_\_ Rivet \_\_\_\_\_ Diameter of tube holes in drum 1.278" 2.028" Pitch of tube holes 1-7/8" 4 1/2" (Long.)

Percentage strength of shell in way of tubes 31.3 min. Steam Drum Heads or Ends:—Range of tensile strength 70,000 psi

Thickness of plates 1-3/16" Radius or how stayed ellipsoidal Size of manhole or handhole 12" x 16" Water Drums:—Number

each boiler one 1-13/16" Inside Diameter 30-1/2" Thickness of plates 2-5/16" Range of tensile strength 70,000 Are drum shell plates

welded or flanged welded If fusion welded, state name of welding firm Foster Wheeler Corp. Have all the requirements of the rules

for Class I vessels been complied with yes Description of riveting:—Cir. seams \_\_\_\_\_ long. seam \_\_\_\_\_

Diameter of rivet holes in long. seams \_\_\_\_\_ Pitch of rivets \_\_\_\_\_ 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 31.4 min. Water Drum Heads or Ends:—Range of Tensile strength 70,000 lbs.

Thickness of plates 13/16" & 1-3/16" Radius or how stayed dished Size of manhole or handhole 12" x 16"

Readers or Sections:—Number \_\_\_\_\_ Material \_\_\_\_\_ Thickness \_\_\_\_\_ Tested by Hydraulic Pressure to \_\_\_\_\_

Tubes:—Diameter \_\_\_\_\_ Thickness \_\_\_\_\_ Number \_\_\_\_\_ Steam Dome or Collector:—Description of

joint to Shell \_\_\_\_\_ Inside diameter \_\_\_\_\_ Thickness of shell plates \_\_\_\_\_ Range of tensile

strength \_\_\_\_\_ Description of longitudinal joint \_\_\_\_\_ If fusion welded, state name of welding

firm \_\_\_\_\_ Have all the requirements of the rules for Class I vessels been complied with \_\_\_\_\_ Diameter of rivet holes \_\_\_\_\_

Pitch of rivets \_\_\_\_\_ Thickness of straps \_\_\_\_\_ Percentage strength of long. joint \_\_\_\_\_ Plate \_\_\_\_\_ Rivet \_\_\_\_\_

ROWN OR END PLATES:—Range of tensile strength \_\_\_\_\_ Thickness \_\_\_\_\_ Radius or how stayed \_\_\_\_\_

**SUPERHEATER. Drums or Headers:—Number in each boiler \_\_\_\_\_ Inside Diameter \_\_\_\_\_**

Thickness \_\_\_\_\_ Material \_\_\_\_\_ Range of tensile strength \_\_\_\_\_ Are drum shell plates welded

\_\_\_\_\_ flanged \_\_\_\_\_ If fusion welded, state name of welding firm \_\_\_\_\_ Have all the requirements of the rules

for Class I vessels been complied with \_\_\_\_\_ Description of riveting:—Cir. seams \_\_\_\_\_ long. seams \_\_\_\_\_

Diameter of rivet holes in long. seams \_\_\_\_\_ Pitch of rivets \_\_\_\_\_ 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 \_\_\_\_\_ Drum Heads or Ends:—Thickness \_\_\_\_\_ Range of tensile strength \_\_\_\_\_

Radius or how stayed \_\_\_\_\_ Size of manhole or handhole \_\_\_\_\_ Number, diameter, and thickness of tubes \_\_\_\_\_

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 \_\_\_\_\_ No. and description of Safety Valves \_\_\_\_\_ Area of each set

of valves \_\_\_\_\_ Pressure to which they are adjusted \_\_\_\_\_ Is easing gear fitted \_\_\_\_\_

Spare Gear. Has the spare gear required by the rules been supplied \_\_\_\_\_

The foregoing is a correct description,

Foster Wheeler Corporation Manufacturer.

Dates of Survey while building } During progress of work in shops - - - } Oct. 31, Nov. 7, 14, 17, Dec. 2, 20, Jan. 27

During erection on board vessel - - - } Feb. 16, 22, Mar. 7, 28, Apr. 16, May 1, 1956

Is the approved plan of boiler forwarded herewith \_\_\_\_\_ No. \_\_\_\_\_

Total No. of visits \_\_\_\_\_

Is this boiler a duplicate of a previous case \_\_\_\_\_ If so, state vessel's name and report No. \_\_\_\_\_

**GENERAL REMARKS** (State quality of workmanship, opinions as to class, &c.) These fusion welded drums have been made and tested in accordance with the approved plans and the requirements of the Rules for Class I Welded Pressure Vessels. The workmanship and materials are good and, in my opinion, these drums are suitable for use in construction of boilers for a vessel intended to be classed with this Society.

Survey Fee \_\_\_\_\_ £ For: fees } When applied for, 2nd May 1956  
Travelling Expenses (if any) £ slip at: } When received, \_\_\_\_\_ 19 \_\_\_\_\_

NEW YORK MAY 16 1956

FRIDAY 25 OCT 1957  
See Rpt. 1

Engineer Surveyor to Lloyd's Register of Shipping and Per Conto del Registro Italiano

Committee's Minute \_\_\_\_\_  
Assigned Transmit to London

Genoa Surveyors