

## REPORT ON WATER TUBE BOILERS.

No. *N.Y.K. 52229.*

16 APR 1953

Received at London Office

of writing Report *Feb. 26<sup>th</sup> 1953* When handed in at Local Office *Quincy, Mass.* 19. Port of *Quincy, Mass. New York.*  
 in Survey held at *Quincy, Mass.* Date, First Survey *December 19<sup>th</sup> 1952* Last Survey *Mar 4<sup>th</sup> 1953*  
 g. Bk. on the *steel, screw steamer "CHRYSSI"* (Number of Visits *cont.*) Tons {Gross *18,732.*  
 at *Quincy, Mass.* By whom built *Bethlehem Steel Co.* When built *1953.*  
 ines made at *Quincy, Mass.* By whom made *Bethlehem Steel Co.* When made *1953.*  
 ers made at *Carteret, N.J.* By whom made *Foster Wheeler Corporation.* When made *1952 fitted 1953.*  
 ninal Horse Power *3,000* Owners *Santander Compania Naviera S.A.* Port belonging to *Panama, R.P.*

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

of Approval of plan *17<sup>th</sup> June 1952 New York.* Number and Description or Type

Boilers *Two, Type II oil fired* Working Pressure *675 lbs/□* Tested by Hydraulic Pressure to *11,680* Date of Test *11,680*

of Certificate *B4970 + B4971* Can each boiler be worked separately *Yes.* Total Heating Surface of Boilers *11,680 sq. ft.*

forced draught fitted *Yes.* Area of fire grate (coal) in each Boiler *21130*

and type of burners (oil) in each boiler *Four, Todd Mechanical atomization* No. and description of safety valves on

boiler *One, superheater safety valve* Area of each set of valves per boiler {per rule *624, 665/□* as fitted *660 + 675 lbs/□* Pressure to which they

adjusted *660 + 675 lbs/□* Are they fitted with easing gear *Yes.* 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 *24'-11 1/2"*

th and Length *18'-7" x 14'-10 3/8"* Steam Drums:—Number in each boiler *One* Inside diameter *3'-9 3/4" I.D.*

thness of plates *3 1/16" bott, 1 3/16" top* Range of Tensile Strength *70,000 lbs.* Are drum shell plates welded

anged *Welded.* If fusion welded, state name of welding firm *Foster Wheeler Corp.* Have all the requirements of the rules

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

meter of rivet holes in long. seams *—* Pitch of rivets *—* Thickness of straps *—* Percentage strength of

joint:—Plate *—* Rivet *—* Diameter of tube holes in drum *3.026* Pitch of tube holes *4" abt.*

entage strength of shell in way of tubes *31.3* Steam Drum Heads or Ends:—Range of tensile strength *70,000 lbs.*

thness of plates *1 3/16" plain* Radius or how stayed *Ellipsoidal* Size of manhole or handhole *16" x 12"* Water Drums:—Number

ch boiler *One, 1 3/16" man h'd.* Inside Diameter *2'-6 1/2"* Thickness of plates *2 5/16"* Range of tensile strength *70,000 lbs.* Are drum shell plates

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

Class I vessels been complied with *Yes.* Description of riveting:—Cir. seams *—* long. seam *—*

eter of rivet holes in long. seams *—* Pitch of rivets *—* Thickness of straps *—* Percentage strength of

entage strength of long. joint:—Plate *—* Rivet *—* Diameter of tube holes in drum *3.026* Pitch of tube holes *4" abt.*

entage strength of drum shell in way of tubes *13/16" plain, 1 3/16" man h'd* Water Drum Heads or Ends:—Range of tensile strength *70,000 lbs.*

thness of plates *1 3/16" plain, 1 3/16" man h'd* Radius or how stayed *Ellipsoidal* Size of manhole or handhole *16" x 12"*

ers or Sections:—Number *3.* Material *Steel A51.1* Thickness *7 1/4" outside sq.* Tested by Hydraulic Pressure to *1013 lbs/□*

es:—Diameter *1 1/4", 2" + 3" O.D.* Thickness *1 1/4" - 12 B.W.G.* Number *2" - 208.* Steam Dome or Collector:—Description of

to Shell *—* Inside diameter *3" - 5 B.W.G.* Thickness of shell plates *—* Range of tensile

th *—* Description of longitudinal joint *—* If fusion welded, state name of welding

of rivets *—* 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 *—*

Radius or how stayed *—*

PERHEATER. Drums or Headers:—Number in each boiler *Four* Inside Diameter *55,000 lbs.*

ness *1 1/2"* Material *alloy steel - U.S.C.G. par. 54-54 class B or "P-1" certified* Are drum shell plates welded

anged *Seamless.* Range of tensile strength *60,000 lbs.* Have all the requirements of the rules

lass I vessels been complied with *Yes.* Description of riveting:—Cir. seams *—* long. seams *—*

eter of rivet holes in long. seams *—* Pitch of rivets *—* Thickness of straps *—* Percentage strength of

joint:—Plate *—* Rivet *—* Diameter of tube holes in drum *1.270"* Pitch of tube holes *1 1/8", 1 3/4"*

shell in way of tubes *—* Drum Heads or Ends:—Thickness *7/8" min.* Range of tensile strength *65,000 lbs.*

s or how stayed *—* Size of manhole or handhole *—* Number, diameter, and thickness of tubes *788-1 1/4" O.D. 120" wall.*

l by Hydraulic Pressure to *1013 lbs/□* Date of Test *Nov. 10<sup>th</sup> 1952.* Is a safety valve fitted to each section of the superheater which

ried out shut off from the boiler *No.* No. and description of Safety Valves *One - outlet section, Crosby.* Area of each set

ves *—* Pressure to which they are adjusted *624 lbs/□* Is easing gear fitted *Yes.*

re Gear. Has the spare gear required by the rules been supplied *Yes.*

The foregoing is a correct description,

Manufacturer.

During progress of work in shops - - - *please see report No. 51933*  
 During erection on board vessel - - - *—*

Is the approved plan of boiler forwarded herewith *No.*

Total No. of visits *Continuous.*

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 main boilers have now been installed satisfactorily in accordance with the Rules & approved drawings, examined under steam, safety valves adjusted and accumulation tests carried out. The workmanship throughout is good. In my opinion, these boilers are eligible to have the notation 2 W.T.B. (Spt) 675 lbs/□*

Survey Fee *£* *✓* : : When applied for, *19*

Travelling Expenses (if any) *£* *✓* : : When received, *19*

Committee's Minute *NEW YORK MAR 25 1953*

igned *2 W.T.B. (Spt) 675 lbs/□*

Engineer Surveyor to Lloyd's Register of Shipping.