

# REPORT ON WATER TUBE BOILERS.

No. 106705

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Report 25<sup>th</sup> Oct. 1949 When handed in at Local Office 19 Port of NEWCASTLE-on-TYNE  
 Survey held at South Shields Date, First Survey Last Survey 19  
 on the TURBO ELECTRIC 'ZIE TOUN' (Number of Visits) Tons { Gross 10720 Net 6370  
 Mobile, Alabama By whom built Alabama D.D. & S.B. Co. When built 1945  
 Made at Lynn By whom made General Electric Co. When made 1945  
 Made at New York By whom made Combustion Eng. Co. When made 1945  
 Horse Power 1495 Owners Baltic Trading Co. Ltd. Port belonging to London

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

Approval of plan Number and Description or Type  
 2 - S.M. type Working Pressure 500 lbs. Tested by Hydraulic Pressure to 750 lbs. Date of Test  
 Certificate Can each boiler be worked separately Yes Total Heating Surface of Boilers 11,354 sq. ft.  
 Draught fitted Yes Area of fire grate (coal) in each Boiler  
 Type of burners (oil) in each boiler 4 - B&W type (Loddie 'Hot-Press') No. and description of safety valves on  
 2 - (1 5/8" dia. Starke Consolidated type. Area of each set of valve 4.14 sq. ins x 2 Pressure to which they are adjusted 500 lbs.  
 Fitted with easing gear Yes In case of donkey boilers state whether steam from main boilers can enter the donkey boiler None  
 Distance between boilers or uptakes and bunkers or woodwork 5' 0" Height of boiler 21' 0" Width and Length 11' 10" x 17' 6"  
 Drums:—Number in each boiler 1 Inside diameter 42" Thickness of plates 1 3/32" & 3/4"  
 Tensile Strength 70,000 Min. Are drum shell plates welded or flanged Welded Description of riveting:—  
 long. seams Diameter of rivet holes in long. seams Pitch of rivets  
 Material or width of butt straps Thickness of straps Percentage strength of long. joint:—Plate Rivet  
 Diameter of tube holes in drum 4" + 1/32" Pitch of tube holes 7" Percentage strength of shell in way of tubes  
 Pressure by rules Steam Drum Heads or Ends:—Range of tensile strength 70,000 lbs. Thickness of plates 1 1/4"  
 How stayed Elliptical Size of manhole or handhole 16" x 12" Working pressure by rules Water Drums:—Number  
 Boiler Inside Diameter Thickness of plates Range of tensile strength Are drum shell plates  
 Flanged Description of riveting:—Cir. seams long. seams Diameter of rivet holes in  
 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 Pitch of tube holes  
 Percentage strength of drum shell in way of tubes Working pressure by rules Water Drum Heads or Ends:—Range of  
 Thickness of plates Radius or how stayed  
 Manhole or handhole Working pressure by rules Headers or Sections:—Number 14  
 Steel Thickness 9/16" Tested by Hydraulic Pressure to 750 lbs. Tubes:—Diameter 1 1/4" 1 1/2" & 4"  
 13,106 & 5 BWG Number 1148, 568 & 48 Steam Drum or Collector:—Description of Joint to Shell + Nipped  
 Diameter 7 1/4" x 7 1/4" Thickness of shell plates 3/4" Range of tensile strength  
 Description of longitudinal joint Diameter of rivet holes Pitch of rivets Lap of plate or width of  
 Thickness of straps Percentage strength of long. joint Plate Rivet  
 Pressure of shell by rules Crown or End Plates:—Range of tensile strength Working pressure by rules  
 Radius or how stayed  
 REHEATER. Interdeck Drums or Headers:—Number in each boiler 2 Inside Diameter 7 1/4" x 7 1/4"  
 9/16" at facing Material Steel Range of tensile strength Are drum shell plates welded  
 Description of riveting:—Cir. seams long. seams Diameter of rivet holes in  
 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 1/4" Pitch of tube holes 2 1/8"  
 Percentage strength of drum shell in way of tubes Working pressure by rules Drum Heads or Ends:—  
 Range of tensile strength Radius or how stayed Size of manhole or handhole  
 Pressure by rules Number, diameter, and thickness of tubes 145 - 1 1/4" - 11 BWG Tested by Hydraulic Pressure to  
 Test Is a safety valve fitted to each section of the superheater which can be shut off from the boiler No  
 Description of Safety Valves 1 - 1 1/2" Consolidated type Area of each set of valves 1.227 sq. ins.  
 To which they are adjusted 480 lbs. Is easing gear fitted Yes

Gear. Has the spare gear required by the rules been supplied  
 A number of 1 1/4" : 2" : 4" & 1 1/2" water tubes The foregoing is a correct description,  
 Manufacturer.

During progress of work in shops - - - Is the approved plan of boiler forwarded herewith  
 During erection on board vessel - - - Total No. of visits

Is 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.)  
 The water tube boilers and superheaters have been constructed under the supervision of the U.S. Coast Guard and the American Bureau of Shipping. The scantlings have been verified as far as practicable. The materials and workmanship considered good.

Fee ... £ : : When applied for, 19  
 Billing Expenses (if any) £ : : When received, 19

TUES. 20 DEC 1949

Eng. W. White © 2021  
 Engineer Surveyor to Lloyd's Register of Shipping.

Boiler's Minute  
 See minute on file rpt

