

# REPORT ON WATER TUBE BOILERS.

No. 11679

Received at London Office

Date of writing Report July 13, 1959 When handed in at Local Office July 13, 1959 Port of Baltimore, Md.  
 No. in Survey held at Baltimore, Md. Date, First Survey June 10 Last Survey June 24, 1959  
 Reg. Bk. 3506 on the M.S. "HEDDA DAN" (Number of Visits 1) Gross Tons 5188 Net Tons 4188  
 Built at Beaumont, Texas By whom built Pennsylvania Shipyards, Inc. When built 1944  
 Engines made at Milwaukee, Wis. By whom made Nordberg Manf. Corp. When made 1944  
 Boilers made at Danville, N.Y. By whom made Foster Wheeler Corp. When made 1944  
 Nominal Horse Power 951 Owners J. Lauritzen, Copenhagen Port belonging to Esberg

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

Bethlehem Steel Corp.

Date of Approval of plan - Number and Description or Type 400 lbs Date of Test 27-10-44  
 Boilers one cross drum straight tube Working Pressure 65 lbs Tested by Hydraulic Pressure to 400 lbs  
 No. of Certificate American Bureau Can each boiler be worked separately yes Total Heating Surface of Boilers 761 sq.ft.  
 Forced draught fitted yes Area of fire grate (coal) in each Boiler oil fired  
 No. and type of burners (oil) in each boiler one Calorex Type R, Manually operated No. and description of safety valves on  
 each boiler two 2 1/2" Dia. Crosby Spring Loaded Area of each set of valves per boiler per rule 9.8 sq. ins. Pressure to which they  
 are adjusted - Are they fitted with easing gear yes In case of donkey boilers state whether steam from main boilers can enter  
 the donkey boiler yes Smallest distance between boilers or uptakes and bunkers or woodwork no wood work Height of boiler 13' 9 1/2"  
 Width and Length 4' 7 1/16" x 10' 8" Steam Drums:—Number in each boiler one Inside diameter 36"  
 Thickness of plates 11/16", 21/32" x 17/32" Range of Tensile Strength 65,000 lbs Min. Are drum shell plates welded  
 or flanged welded If fusion welded, state name of welding firm Wyatt Man. & Boiler Co. Have all the requirements of the rules  
 for Class I vessels been complied with ABS & USCG 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 1/32" Pitch of tube holes 7"  
 Percentage strength of shell in way of tubes - Steam Drum Heads or Ends:—Range of tensile strength 65,000 lbs min  
 Thickness of plates 11/16" Radius or how stayed Ellisodial Size of manhole or handhole 12" x 16" Water Drums:—Number  
 in each boiler - Inside Diameter - Thickness of plates - Range of tensile strength - Are drum shell plates  
 welded or 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. 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 - Water Drum Heads or Ends:—Range of Tensile strength -  
 Thickness of plates - Radius or how stayed - Size of manhole or handhole -  
 Headers or Sections:—Number 5 & 5 Material steel Thickness 5/8" walls 6 7/8" sq. Tested by Hydraulic Pressure to 400 lbs  
 Tubes:—Diameter 1 1/4" OD & 1" OD Thickness 12 gauge 9 gauge Number 240.5 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 -  
 Crown or End Plates:—Range of tensile strength - Thickness - Radius or how stayed -

## SUPERHEATER. Drums or Headers:—Number in each boiler

Thickness - Material - Range of tensile strength - Are drum shell plates welded  
 or 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. yes

The foregoing is a correct description,

Manufacturer.

Dates of Survey During progress of work in shops - - American Bureau & USCG Is the approved plan of boiler forwarded herewith -  
while building During erection on board vessel - - If higher h.p. is desired, all steam pipes to be gauged for suitability for increased pressure. See Bal letter 11/9/59. Total No. of visits -  
 Is this boiler a duplicate of a previous case yes If so, state vessel's name and report No. "GERDA DAN", "PAULA DAN", "MARNA DAN", "TENNA DAN"

## GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

This water tube boiler designed and partly constructed by Foster Wheeler Corp. was constructed under Special Survey by American Bureau and USCG, now examined internally. The  
 boilers and machinery of this vessel are in good condition and eligible in my opinion to be classed with this Society  
 with record 2 WTDB 65 lbs with record of DBS 6.59, subject to boiler being re-tubed by September 1959 (3 mos. limit).  
 Boilers examined under steam and safety valves adjusted under steam.

Survey Fee £ 8/20 00 When applied for, 19  
 Travelling Expenses (if any) £ : : When received, 19

Committee's Minute

Assigned 2 WTDB 65 lbs.

Engine Surveyor to Lloyd's Register of Shipping.