

# REPORT ON WATER TUBE BOILERS.

No. 28626

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Date of writing Report 10-10-1939 When handed in at Local Office 19 Port of ROTTERDAM.

No. in Survey held at ROTTERDAM. Date, First Survey 2.3.39 Last Survey 19-9-1939  
 Reg. Bk. on the TWIN SCREW STEAMER "SATDJA" (Number of Visits 17) Gross 6671 Tons Net 3801  
 Built at SCHIEDAM. By whom built SCHEEPSBOUW My Nieuwe Watergang 1939  
 Engines made at ROTTERDAM By whom made ROTT DROOGD. My When made 1939  
 Boilers made at ROTTERDAM By whom made ROTT DROOGD My When made 1939  
 Nominal Horse Power 733. Owners NED IND. TANKSTOOMBOOT My Port belonging to S GRAVENHAGE

## WATER TUBE BOILERS—MAIN, ~~WATER TUBE BOILERS~~—Manufacturers of Steel

Date of Approval of plan \_\_\_\_\_ Number and Description or Type of Boilers Two Babcock & Wilcock WT. Working Pressure 220 LBS Tested by Hydraulic Pressure to 380 LBS Date of Test 14-9-39  
 No. of Certificate 1024 Can each boiler be worked separately Yes Total Heating Surface of Boilers 2 x 5320 sq ft  
 Is forced draught fitted Yes Area of fire grate (coal) in each Boiler OIL FIRED  
 No. and type of burners (oil) in each boiler 5 Smith's patent No. and description of safety valves on each boiler 2 spring loaded Dia of each set of valve 88 mm. Pressure to which they are adjusted 220 lb.  
 Are they fitted with easing gear Yes 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 4 ft. Height of boiler 11' 1 3/4" Width and Length 19' 4 3/4" - 13' 7 1/2"  
 Steam Drums:—Number in each boiler 0 Ins. dia 3-6" Thickness of plates 9/16" in way of tubes 1/8"  
 Range of Tensile Strength 28-32 Are drum shell plates welded or flanged Welded at ends Description of riveting:—  
 Cir. seams Lap 2 x 2 1/2" long. seams Double Butt 2 x 1/2" diameter of rivet holes in long. seams 2 1/2" Pitch of rivets 3.49107"  
 Lap of plate or width of butt straps 9/16" Thickness of straps 9/16" Percentage strength of long. joint:—Plate 74.04% Rivet 96.77%  
 Diameter of tube holes in drum 4.047" Pitch of tube holes 7" Percentage strength of shell in way of tubes 41.73%  
 Working pressure by rules 278.2 lb/sq" Steam Drum Heads or Ends:—Range of tensile strength 26-30 and Thickness of plates 7/8"  
 Radius or how stayed 3'0" Size of manhole or handhole 16" x 12" Working pressure by rules 335.8 lb. Water Drums:—Number in each boiler \_\_\_\_\_ Inside Diameter \_\_\_\_\_ Thickness of plates \_\_\_\_\_ Range of tensile strength \_\_\_\_\_ Are drum shell plates welded or flanged \_\_\_\_\_ Description of riveting:—Cir. seams \_\_\_\_\_ long. seam \_\_\_\_\_ Diameter of rivet holes in long. 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 \_\_\_\_\_ Pitch of tube holes \_\_\_\_\_ Percentage strength of drum shell in way of tubes \_\_\_\_\_ Working pressure by rules \_\_\_\_\_ Water Drum Heads or Ends:—Range of Tensile strength \_\_\_\_\_ Thickness of plates \_\_\_\_\_ Radius or how stayed \_\_\_\_\_ Size of manhole or handhole \_\_\_\_\_ Working pressure by rules \_\_\_\_\_ Headers or Sections:—Number 29. Material 1/2" M.S.C. Thickness 3/4" Tested by Hydraulic Pressure to 380 LBS Tubes:—Diameter 1 13/16" Thickness No. 10, 9, 6, 5, 9 Number 1024. Steam Dome or Collector:—Description of Joint to Shell \_\_\_\_\_ Inside diameter \_\_\_\_\_ Thickness of shell plates \_\_\_\_\_ Range of tensile strength \_\_\_\_\_ Description of longitudinal joint \_\_\_\_\_ Diameter of rivet holes \_\_\_\_\_ Pitch of rivets \_\_\_\_\_ Lap of plate or width of butt straps \_\_\_\_\_ Thickness of straps \_\_\_\_\_ Percentage strength of long. joint \_\_\_\_\_ Plate \_\_\_\_\_ Rivet \_\_\_\_\_ Working Pressure of shell by rules \_\_\_\_\_ Crown or End Plates:—Range of tensile strength \_\_\_\_\_ Thickness \_\_\_\_\_ Radius or how stayed \_\_\_\_\_ Working pressure by rules \_\_\_\_\_ SUPERHEATER. Drums or Headers:—Number in each boiler \_\_\_\_\_ Inside Diameter \_\_\_\_\_ Thickness \_\_\_\_\_ Material \_\_\_\_\_ Range of tensile strength \_\_\_\_\_ Are drum shell plates welded or flanged \_\_\_\_\_ Description of riveting:—Cir. seams \_\_\_\_\_ long. seams \_\_\_\_\_ Diameter of rivet holes in long. 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 \_\_\_\_\_ Pitch of tube holes \_\_\_\_\_ Percentage strength of drum shell in way of tubes \_\_\_\_\_ Working pressure by rules \_\_\_\_\_ Drum Heads or Ends:—Thickness \_\_\_\_\_ Range of tensile strength \_\_\_\_\_ Radius or how stayed \_\_\_\_\_ Size of manhole or handhole \_\_\_\_\_ Working pressure by rules \_\_\_\_\_ 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.

*[Signature]* Manufacturer.

Dates of Survey while building } During progress of work in shops } 1/7 17 12/17 12/16 7/14 19/23 29/3 5/11 17/15 } the approved plan of boiler forwarded herewith RETAINED  
 } During erection on board vessel } MACHINERY REPORT Total No. of visits 17.

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

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) THESE BOILERS HAVE BEEN EXAMINED DURING CONSTRUCTION, MATERIAL TESTED AS REQUIRED, AND WORKMANSHIP GOOD ALL IN ACCORDANCE WITH THE APPROVED PLANS AND SOCIETY'S RULES

Survey Fee ... £ On Mach } When applied for, 10  
 Travelling Expenses (if any) £ report : } When received, 10

Committee's Minute assigned See Rot. No. 28626

Engineer Surveyor to Lloyd's Register of Shipping.

