

REPORT ON WATER TUBE BOILERS. No. 500

30 JUL 1955

Received at London Office

Date of writing Report 8.7.1955 When handed in at Local Office 26.7.1955 Port of NANTES.
 No. in Survey held at SAINT NAZAIRE Date, First Survey 29.12.53 Last Survey 22.6.1955
 Reg. Book. 91109 on the SINGLE SCREW S.S. "ISIDORA" (Number of Visits 32) Gross 20.700 Tons
 Built at SAINT NAZAIRE By whom built CHANT DE SAINT NAZAIRE (PENHOET) Yard No. P15 When built 1955
 Engines made at SAINT NAZAIRE By whom made CHANT DE SAINT NAZAIRE (PENHOET) Engine No. P15 When made 1955
 Boilers made at SAINT NAZAIRE By whom made CHANT DE SAINT NAZAIRE (PENHOET) Boiler No. 1832 21833 When made 1955
 HS for Register Book 122.800 sq. ft. Owners SOCIETE MARITIME SHELL Port belonging to LE HAYRE

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

Date of Approval of plan 13.5.53, 15.4.53, 10.6.53, 8.9.53, 5.11.53 No. and Description or Type of Boilers TWO WATERTUBE - FOSTER WHEELER TYPE Working Pressure 50 Kps Tested by Hydraulic Pressure to 79 Kps Date of Test 15.10.54
 No. of Certificate 1832 21833 Can each boiler be worked separately YES Total Heating Surface of Boilers 6385 sq. ft. Superheaters 1370 sq. ft.
 Half Economisers 3645 sq. ft. Is forced draught fitted YES Area of Fire Grate (coal) in each Boiler ✓
 No. and type of burners (oil) in each boiler 4 - PENHOET TYPE No. and description of safety valves on each boiler 2 "CROSBY" FULL BORE TYPE Area of each set of valves per boiler as fitted 2 x 1.2868 sq. ins. Pressure to which they are adjusted 5.475 - 46.6 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 ✓ Height of boiler 10.200
 Width and length 3.495 x 6.00 Steam Drums:—Number in each boiler ONE Inside diameter MEAN - 1300
 Thickness of plates 40 & 80 (TUBE PLATE) Range of tensile strength 44/50 Are drum shell plates welded or flanged WELDED If fusion welded, state name of welding firm CHANT DE SAINT NAZAIRE (PENHOET) Have all the requirements of the Rules for Class I vessels been complied with YES Description of riveting:—Circ. seams ✓ long. seams ✓
 Diameter of rivet holes in long. seams ✓ Pitch of rivets ✓ Thickness of straps 109 - 89.75 Percentage strength of long. joint:—Plate ✓ Rivet ✓ Diameter of tube holes in drum 51.25 - 35.25 Pitch of tube holes AS PLAN
 Percentage strength of shell in way of tubes 40.2 (MIN) Steam Drum Heads or Ends:—Range of tensile strength 44/50
 Thickness of plates 60 & 65 (MANHOLE) Radius or how stayed ELLIPTICAL 1235 x 650 Size of manhole or handhole 400 x 300 Water Drums:—Number in each boiler ONE Inside diameter 760 Thickness of plates 50 Range of tensile strength 44/50 Are drum shell plates welded or flanged WELDED If fusion welded, state name of welding firm CHANT DE SAINT NAZAIRE (PENHOET) Have all the requirements of the Rules for Class I vessels been complied with YES Description of riveting:—Circ. seams ✓ long. seams ✓
 Diameter of rivet holes in long. seams ✓ Pitch of rivets ✓ Thickness of straps 109 - 89.75 Percentage strength of long. joint:—Plate ✓ Rivet ✓ Diameter of tube holes in drum 51.25 - 35.25 Pitch of tube holes AS PLAN
 Percentage strength of drum shell in way of tubes 40.2 (MIN) Water Drum Heads or Ends:—Range of tensile strength 44/50
 Thickness of plates 40 & 45 (MANHOLE) Radius or how stayed ELLIPTICAL 765 x 404 Size of manhole or handhole 400 x 300
 Headers or Sections:—Number 3 Material O.H. STEEL Thickness 26 Tested by hydraulic pressure to 79 Kps
 Tubes:—Diameter 108 - 89 - 51 - 35 Thickness 10 - 10 - 5 - 3 Number 6 - 2 - 207 - 979 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 for 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 TWO Inside diameter 228
 Thickness 32 Material CR. NO. STEEL Range of tensile strength 44/50 Are drum shell plates welded or flanged SOLID DRAWN 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:—Circ. 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 30.25 Pitch of tube holes 45 Percentage strength of drum shell in way of tubes 36.4 Drum Heads or Ends:—ENDS Thickness 45 Range of tensile strength 44/50
 Radius or how stayed FLAT Size of manhole or handhole 51.5 Number, diameter, and thickness of tubes 215 - 30 - 3
 Tested by hydraulic pressure to 184 Kps Date of test 15.10.54 22.10.54 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 1 "CROSBY" FULL BORE TYPE Area of each set of valves 1 x 1.8385 sq. ins. Pressure to which they are adjusted 2.85 - 43.5 Is easing gear fitted YES
 Spare Gear. Has the spare gear required by the Rules been supplied YES

The foregoing is a correct description,

Manufacturer.

Dates During progress of work in shops 29.12.53 - 11.1.54, 18.2, 20.2, 22.2, 4.3, 8.3, 3.4, 7.4, 14.4, 16.4, 26.4
 while building During erection on board vessel 18.2.55 - 29.3.55, 1.6, 8.6, 9.6, 20.6, 21.6, 22.6 Total No. of visits 32
 Is the approved plan of boiler forwarded herewith NO

Is this boiler a duplicate of a previous case. YES If so, state vessel's name and report No. "SANDA" NTS RPT 480

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c. These boilers have been constructed under special survey in accordance with approved plans, rule requirements & Secretary's letter. The quality of materials & workmanship is good. The boilers have been satisfactorily installed on board & examined under full working conditions. The boilers are in my opinion eligible to be classed as part of the machinery with the notation of + L.M.C. 6.55

Survey Fee ... £ 262.760 : When applied for 19

Travelling Expenses (if any) £ 10.220 : When received 19

U. for Class I Pres. Vessels. 40.000

Date FRIDAY - 9 SEP 1955

Committee's Minute See Rpt. 4

Engineer Surveyor to Lloyd's Register of Shipping.