

REPORT ON WATER TUBE BOILERS.

No. 9433

of writing Report 15 March, 1950. When handed in at Local Office 15th Mar. 1950. Port of PHILADELPHIA, PA. 11 APR 1950
 No. in Survey held at Chester, Pa.
 Date, First Survey 20th Dec., 1949 Last Survey 13th Feb. 1950
 on the S.S. "SOVAC DAYLIGHT" - Sun Hull No. 575 (Number of Visits ten)

Boilers at Chester, Pa.
 By whom built Sun S.B. & D.D. Co.
 Engines made at Trenton, N.J.
 By whom made de Laval Steam Turbine Co.
 Boilers made at Barberton, Ohio
 By whom made Babcock & Wilcox Co.
 Minimal Horse Power 3096
 Owners Tankers Navigation Co.
 When made 1949
 When made "

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel Worth Steel Co.
 Date of Approval of plan Dec. 28, 1948, Feb. 2, 1949

Boilers 2 Marine (2) Drum Type Working Pressure 685 psi Tested by Hydraulic Pressure 1028 PSI Date of Test 24 Jan. '50
 No. of Certificate 819, 820 Can each boiler be worked separately YES
 Total Heating Surface of Boilers 2040 sq. ft. Each superhtr. economizer boiler 7390 " " "

forced draught fitted YES
 Area of fire grate (coal) in each Boiler Four (4) Straight Mechanical
 No. and description of safety valves on
 Area of each set of valves per boiler { per rule - as fitted - Pressure to which they

685# blrs. adjusted 627 superhtrs. 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 4 ft.
 Width and Length 17'2" Height of boiler 22'6"

Thickness of plates Wrapper 1 3/16" Tube 3 3/4" Range of Tensile Strength 70,000 Minimum Inside diameter 46 27/32" average
 flanged Welded If fusion welded, state name of welding firm Babcock & Wilcox Co. Are drum shell plates welded
 Class I vessels been complied with Yes Have all the requirements of the rules

Diameter of rivet holes in long. seams - Description of riveting:—Cir. seams No riveting long. seams -
 g. joint:—Plate - Pitch of rivets - Thickness of straps -
 Percentage strength of shell in way of tubes 27.14% Diameter of tube holes in drum 1 1/4"-2"-3 1/4" Pitch of tube holes 1.75"

8th Sept. Thickness of plates 1 13/16" Radius or how stayed ellipsoidal Size of manhole 12" x 16" Range of tensile strength 70,000 min.
 each boiler one Inside Diameter 29 5/8" Thickness of plates 3/4" Tube 2 1/2" Range of tensile strength 70,000 min. Water Drums:—Number
 ded or flanged welded If fusion welded, state name of welding firm Babcock & Wilcox Co. Are drum shell plates

Class I vessels been complied with yes 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 1 1/4"-2"-3 1/4" Pitch of tube holes 1.75"

Percentage strength of drum shell in way of tubes 27.14% Water Drum Heads or Ends:—Range of Tensile strength 70,000 Min.
 Thickness of plates Manhead 1 3/16" 2 Rear 0.875" Blankhead 1.00" 1 Side 1.25" 11 BWG 8 BWG
 Radius or how stayed ellipsoidal Size of manhole 12" x 16" Tested by Hydraulic Pressure to 1370 psi

Steam Dome or Collector:—Description of Range of tensile
 Description of longitudinal joint - If fusion welded, state name of welding
 Have all the requirements of the rules for Class I vessels been complied with - Diameter of rivet holes -
 Thickness of straps - Plate Rivet -

OWN OR END PLATES:—Range of tensile strength Thickness - Radius or how stayed
 Inside Diameter 5 1/4" square
 Are drum shell plates welded
 Have all the requirements of the rules

PERHEATER:—Number in each boiler 3
 Material Carbon Steel Range of tensile strength 70,000 min.
 flanged Seamless If fusion welded, state name of welding firm -
 Class I vessels been complied with yes Description of riveting:—Cir. seams - long. seams -

Diameter of rivet holes in long. seams - Pitch of rivets - Thickness of straps -
 g. joint:—Plate - Rivet - Diameter of tube holes in drum 1 1/4"-2"-3 1/4" Pitch of tube holes 1.75"
 Percentage strength of

Percentage strength of
 Size of manhole or handhole 3 3/4" x 3 3/8" Number, diameter, and thickness of tubes 148-1 1/4" x .135"
 Date of Test - Is a safety valve fitted to each section of the superheater which
 No. and description of Safety Valves - Area of each set
 Pressure to which they are adjusted - Is easing gear fitted

are Gear. Has the spare gear required by the rules been supplied -
 MB 4343 Boilers 1 and 2
 The foregoing is a correct description,
 Manufacturer.

Is boiler a duplicate of a previous case yes
 If so, state vessel's name and report No. Sun Hulls 570-576
 During progress of work in shops - May 2, Aug. 1, 2, 4, 9, 16, 1949
 During erection on board vessel - Dec. 20, 29, 1949 - Jan. 5, 11, 13, 19, 27
 Feb. 6, 8, 13, 1950
 Is the approved plan of boiler forwarded herewith
 Total No. of visits 16

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) The above boilers have been satisfactorily
 stalled on board the vessel, tested by hydraulic pressure to 1078 lbs. and found in good order.
 e safety valves have been adjusted under steam to 685 lbs. on the boilers and 627 on the super-
 aters. It is recommended that these boilers receive the record of 2 WTB 685 lbs. (SPT.)

Survey Fee \$110.00 : When applied for 1 March, 1950
 Travelling Expenses (if any) £ 20.00 : per F.A.G.
 Cleveland A/c 290.00 : When received, 19

Committee's Minute
 signed 2 W.T.B (SPT) 685 lbs.
 NEW YORK MAR 22 1950
 Engineer Surveyor to Lloyd's Register of Shipping.