

REPORT ON WATER TUBE BOILERS.

No. 6062

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of writing Report 13th Dec., 1943 When handed in at Local Office 13th Dec., 1943 Port of Vancouver, B. C.
 Survey held at Vancouver, B. C. Date, First Survey 12th August, 1943 Last Survey 8th December, 1943
 on the Steel Single Screw Steamer "FORT ST. CROIX" (Number of Visits 30) Gross 7160.44 Tons Net 4244.62
 at Vancouver, B. C. By whom built Vancouver Iron Works, Ltd. When built 1943
 lines made at Toronto, Ont. By whom made John Inglis Co. Ltd. When made 1943
 ers made at Vancouver, B. C. By whom made Vancouver Iron Works, Ltd. When made 1943
 ninal Horse Power 643 628 Owners Minister of Munitions & Supply of Canada Port belonging to --

ATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY—Manufacturers of Steel Steel Co. of Canada, Page-Hersey Tubes, & Combustion Eng. Co., Chattanooga.
 of Approval of plan 17-7-43 Number and Description or Type
 Boilers 2 Sinuous Header Watertube. Working Pressure 250 lbs. Tested by Hydraulic Pressure to 425 lbs. Date of Test 20-8-43 & 23-8-43
 of Certificate Nos. 560 & 561 Can each boiler be worked separately Yes Total Heating Surface of Boilers 9704 Sq. Ft. (2 Birs.)
 forced draught fitted Yes Area of fire grate (coal) in each Boiler
 and type of burners (oil) in each boiler 4 Todd "Hex-Press" Burners

boiler One Twin 4" Consolidated Area of each set of valves per boiler { per rule 22.9 sq. in. ex. sp. 23.9 with 1 1/2" 450° F
 as fitted 25.14 sq. in. + 1.76 sq. in.
 adjusted 250 lbs. 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 23" Height of boiler 16'-5-5/8"

th and Length 14'-7-3/4" x 18'-7-1/2" Steam Drums:—Number in each boiler One Inside diameter 47-3/8"
 kness of plates 15/16" Range of Tensile Strength 70,000 to 82,000 lbs. Are drum shell plates welded
 langed Welded If fusion welded, state name of welding firm Vancouver Iron Works, Ltd. Have all the requirements of the rules
 Class I vessels been complied with Yes Description of riveting:—Cir. seams -- long. seams --

meter of rivet holes in long. seams -- Pitch of rivets -- Thickness of straps -- Percentage strength of
 joint:—Plate -- Rivet -- Diameter of tube holes in drum 4-1/32" Pitch of tube holes 7"
 entage strength of shell in way of tubes 42.5% Steam Drum Heads or Ends:—Range of tensile strength 65,000 to 77,000 lbs.

kness of plates 15/16" Radius or how stayed 38" Size of manhole or handhole 12" x 16" Water Drums:—Number
 ach boiler One Inside Diameter 5-3/4" sq. thickness of plates 3/4" Range of tensile strength 60,000-70,000 lbs. Are drum shell plates
 led or flanged Solid drawn If fusion welded, state name of welding firm -- Have all the requirements of the rules
 Class I vessels been complied with -- Description of riveting:—Cir. seams -- long. seam --

meter of rivet holes in long. seams -- Pitch of rivets -- Thickness of straps --
 entage strength of long. joint:—Plate -- Rivet -- Diameter of tube holes in drum 4-1/32" Pitch of tube holes 7"
 entage strength of drum shell in way of tubes 42.5% Water Drum Heads or Ends:—Range of Tensile strength 60,000 to 70,000 lbs.

kness of plates 9/16" min. Radius or how stayed Handholes in end Size of manhole or handhole 4-1/2" x 5-1/2"
 ders or Sections:—Number 22 Material Steel Thickness 9/16" Tested by Hydraulic Pressure to 500 lbs.
 es:—Diameter 2" & 4" Thickness 10&6 BWG (.134" .203") Number 602-2". 44-4". Steam Dome or Collector:—Description of
 t to Shell -- Inside diameter -- Thickness of shell plates -- Range of tensile

trigth -- 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 --
 of rivets -- Thickness of straps -- Percentage strength of long. joint -- Plate -- Rivet --
 ae. own or End Plates:—Range of tensile strength -- Thickness -- Radius or how stayed --

UPERHEATER. Drums or Headers:—Number in each boiler Two Inside Diameter 6" Square
 kness 5/8" Material Steel Range of tensile strength 60,000 to 70,000 lbs. Are drum shell plates welded
 langed Forged If fusion welded, state name of welding firm -- Have all the requirements of the rules
 Class I vessels been complied with -- Description of riveting:—Cir. seams -- long. seams --

meter of rivet holes in long. seams -- Pitch of rivets -- Thickness of straps -- Percentage strength of
 joint:—Plate -- Rivet -- Diameter of tube holes in drum 2-1/64" Pitch of tube holes 3-3/4" Percentage strength of
 n shell in way of tubes 46% Drum Heads or Ends:—Welded to inlet & outlet nozzles. Range of tensile strength --

ius or how stayed -- Size of manhole or handhole 4 1/2" x 5 1/2" Number, diameter, and thickness of tube 22 off 2" OD 10BWG
 ed by Hydraulic Pressure to 425 lbs. Date of Test 20-8-43 & 23-8-43 Is a safety valve fitted to each section of the superheater which
 be shut off from the boiler Yes No. and description of Safety Valves One Area of each set
 valves 1.76 sq. inches Pressure to which they are adjusted 230 lbs. Is easing gear fitted No

are Gear. Has the spare gear required by the rules been supplied Yes
 te:— Headers, Superheater headers and mud drums
 nufactured by Combustion Engineering Co. Inc., Chattanooga, Tennessee, under American Bureau
 spection. 1943. August 12, 13, 16, 18, 19, 20, 23, 24. The foregoing is a correct description.
 During progress of work in shops -- 1943. Oct. 21, 25, 26, 28. Nov. 4, 10, 13, 1943. Dec. 1, 2, 3, 4, 6, 7, 8. MANUFACTURER
 During erection on board vessel --

Is the approved plan of boiler forwarded herewith No. Plans in U.K.
 Total No. of visits 30
 Is boiler a duplicate of a previous case Yes If so, state vessel's name and report No. "FORT COLUMBIA" (Vanc. Rpt. No. 5942)

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These boilers have been built and fitted on
 ard under Special Survey in accordance with the approved plans, New York letters and the Rules.
 e workmanship is good and the materials tested as per Rule. Satisfactorily tested under hydraulic

essure as above, examined under working conditions, safety valves adjusted to the W.P. and a
 tisfactory accumulation test carried out. Survey Fee \$150.00 When applied for 14-Dec-1943
 Travelling Expenses (if any) \$15.00 When received, 19

mmittee's Minute TUES. 15 FEB 1944
 signed Lee fe machy v/h
 Engineer Surveyor to Lloyd's Register of Shipping.