

REPORT ON WATER TUBE BOILERS.

REC'D NEW YORK OCT 2 1951

Received at London Office.

Date of writing Report 19... When handed in at Local Office 19... Port of Seattle, Washington
 No. in Survey held at Seattle, Washington Date, First Survey 25th July 1951 Last Survey 21st September 1951
 Reg. Bk. 08568 on the SS. "KAISANIEMI" (ex "EMPIRE CONSEQUENCE") (Number of Visits 30) Tons {Gross 2687
 Net 1919
 Built at Lubeck By whom built Lubecker Maschinenbau Gesetichaff When built 1940
 Engines made at Hamburg - Altona By whom made Ottenser Eisenwerk AG Abt. When made 1939
 Boilers made at Hamburg - Altona By whom made Ottenseult Steel Works When made 1940
 Nominal Horse Power 330 Owners Etela-Suomen, Laiva, O.Y. Port belonging to Helsinki, Finland

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

Date of Approval of plan Number and Description or Type of Boilers Two (2) Prudon Copus Working Pressure 235 lbs Tested by Hydraulic Pressure to 360 lbs Date of Test 13 Sept. 1951
 No. of Certificate Can each boiler be worked separately Yes per sq. in. Total Heating Surface of Boilers (2) 3660 sq. ft.
 Is forced draught fitted Yes Area of fire grate (coal) in each Boiler 45.2 sq. ft.
 No. and type of burners (oil) in each boiler No. and description of safety valves on each boiler Two (2) 2" Diam. Consolidated High Lift Area of each set of valves per boiler {per rule 4.55 sq. in.
 as fitted 6.30 sq. in. Pressure to which they are adjusted 235 lbs. per sq. in. 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 Well clear Height of boiler 13' 0"
 Width and Length 13' 4" x 12' 0" Steam Drums:—Number in each boiler 4 Inside diameter 17-23/32"
 Thickness of plates 1" Range of Tensile Strength 50,000 lbs. per sq. in. Are drum shell plates welded or flanged Welded If fusion welded, state name of welding firm Acetylene Welded 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 2" Pitch of tube holes 4-1/8 x 4-1/4"
 Percentage strength of shell in way of tubes 51.5% Steam Drum Heads or Ends:—Range of tensile strength 50,000 lbs. per sq. in.
 Thickness of plates 1" Radius or how stayed Ellipsoidal Size of manhole or handhole 8-17/16" x 7-1/2" Water Drums:—Number in each boiler 2 Inside Diameter 17-23/32" Thickness of plates 1" Range of tensile strength 50,000 Are drum shell plates welded or flanged Welded If fusion welded, state name of welding firm Acetylene welded 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 2" Pitch of tube holes 4-1/8" x 4-1/4"
 Percentage strength of drum shell in way of tubes 51.5% Water Drum Heads or Ends:—Range of Tensile strength 50,000
 Thickness of plates 1" Radius or how stayed Ellipsoidal Size of manhole or handhole 8-17/16" x 7-1/2"
 Headers or Sections:—Number Material Thickness Tested by Hydraulic Pressure to
 Tubes:—Diameter Thickness Number 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 Four (4) each Boiler Inside Diameter 4-3/4" x 6-1/4"
 Thickness 7/8" Material Steel Range of tensile strength 58,000 lbs. per sq. in. 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 yes No. and description of Safety Valves One (1) each boiler Area of each set of valves 2.40" Pressure to which they are adjusted 225 lbs. per sq. in. Is easing gear fitted
 Spare Gear. Has the spare gear required by the rules been supplied Yes, except no spare superheater tubes of type available here

The foregoing is a correct description,

Manufacturer.

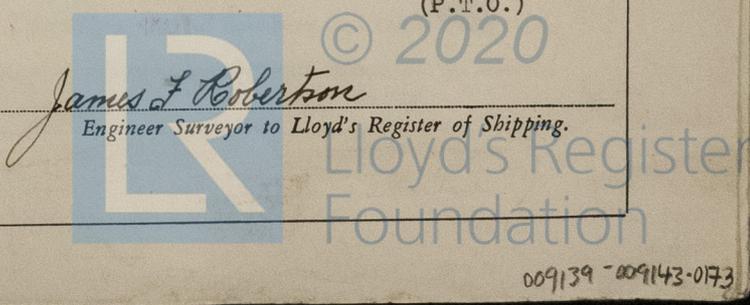
Dates of Survey } During progress of work in shops - -
 while building } During erection on board vessel - - -
 Is the approved plan of boiler forwarded herewith
 Total No. of visits

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

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) The two (2) Prudon Copus boilers were stated to have been constructed under the supervision and to the requirements of the Germanisher Lloyd Surveyors and have now been examined throughout and the materials and workmanship are considered satisfactory. The boilers were subject to hydrostatic test of 360 lbs. per sq. in. and also examined under steam and safety valves adjusted to 235 lbs. per sq. in.

Survey Fee £ See Rpt. : } When applied for, 19
 Travelling Expenses (if any) £ 9. : } When received, 19

Committee's Minute NEW YORK, OCT. 31 1951
 Assigned 2 W.T.B. 235 lbs. □ (See Rpt. 5a attached)



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and superheat to 225 lbs. per sq. in. respectively.

The boiler plan refers to acetylene welding of the longitudinal seams of the upper and lower drums and these welds have now been especially examined, and same appear to be sound and tight, under both hydrostatic and steam test.

The scantlings and arrangements have been verified as far as practicable and found to conform with the photostatic plan forwarded from New York.

JFR.

