

REPORT ON WATER TUBE BOILERS.

No. 3941

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 Last Survey 21st September 1951
Reg. Bk. 08568 on the SS. "KAISANIEMI" (ex "EMPIRE CONSEQUENCE") (Number of Visits 30) { Gross 2887
Tons { Net 1919
Built at Lubeck By whom built Lubecker Maschinenbau Gesellschaft 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 X Number and Description or Type
of Boilers Two (2) Prudon Copus Working Pressure 235 lbs Tested by Hydraulic Pressure to 360 per sq. in. Date of Test 13 Sept. 1951
No. of Certificate X Can each boiler be worked separately. Yes 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 X 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 X 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 X Description of riveting:—Cir. seams X long. seams X
Diameter of rivet holes in long. seams X Pitch of rivets X Thickness of straps X Percentage strength of
long. joint:—Plate X Rivet X 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 No Description of riveting:—Cir. seams X long. seam X
Diameter of rivet holes in long. seams X Pitch of rivets X Thickness of straps X
Percentage strength of long. joint:—Plate X Rivet X 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 X Material X Thickness X Tested by Hydraulic Pressure to X
Tubes:—Diameter X Thickness X Number X Steam Dome or Collector:—Description of
joint to Shell X Inside diameter X Thickness of shell plates X Range of tensile
strength X Description of longitudinal joint X If fusion welded, state name of welding
firm X Have all the requirements of the rules for Class I vessels been complied with X Diameter of rivet holes X
Pitch of rivets X Thickness of straps X Percentage strength of long. joint X Plate X Rivet X
Crown or End Plates:—Range of tensile strength X Thickness X Radius or how stayed X
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 X If fusion welded, state name of welding firm X Have all the requirements of the rules
for Class I vessels been complied with X Description of riveting:—Cir. seams X long. seams X
Diameter of rivet holes in long. seams X Pitch of rivets X Thickness of straps X Percentage strength of
long. joint:—Plate X Rivet X Diameter of tube holes in drum X Pitch of tube holes X Percentage strength of
drum shell in way of tubes X Drum Heads or Ends:—Thickness X Range of tensile strength X
Radius or how stayed X Size of manhole or handhole X Number, diameter, and thickness of tubes X
Tested by Hydraulic Pressure to X Date of Test X 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 No
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 - - X Is the approved plan of boiler forwarded herewith...
while } During erection on board vessel - - - X Total No. of visits X
building }

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

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 Germanischer 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.
(P.T.O.)

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

Committee's Minute

Assigned 2 W.T.B. 235 lbs. 5" (See Rpt. 5a attached)

NEW YORK OCT. 31 1951

Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register
Foundation

009139-009143-0173

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.



© 2020

Lloyd's Register
Foundation