

REPORT ON BOILERS.

No. 7844

Received at London Office 13 FEB 1928

Date of writing Report 4/2/1928 When handed in at Local Office 6/2/1928 Port of Trieste

No. in Reg. Book. Survey held at Rotterdam & Trieste Date, First Survey Dec 15, 1927 Last Survey Jan 28 1928

41648 on the T. P. S. Letitia (Number of Visits eight) Gross 2580 Tons Net 1116

Master Built at Monfalcone By whom built Capt. Nav. Triest. Yard No. 197 When built 1928

Engines made at Rotterdam By whom made Platt. Drossog Amy Engine No. 162/163 When made 1927

Boilers made at Rotterdam By whom made Platt. Drossog Amy Boiler No. 455/456 When made 1927

Nominal Horse Power 236 Owners Curacao'sche Stoomv. Maats. Port belonging to Willemstad

See also Rotterdam Report No 17045

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Witrowitzer B. & E. Gewerkschaft (Letter for Record 5)

Total Heating Surface of Boilers 4168 Is forced draught fitted yes Coal or Oil fired oil

No. and Description of Boilers Two single ended multitubular marine Working Pressure 180 lbs

Tested by hydraulic pressure to 320 Date of test 17.10.27 No. of Certificate 874 Can each boiler be worked separately yes

Area of Firegrate in each Boiler oil No. and Description of safety valves to each boiler Two high lifting spring loaded

Area of each set of valves per boiler as fitted 11.86 sq. Pressure to which they are adjusted 185 lbs 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 - Is oil fuel carried in the double bottom under boilers no

Smallest distance between shell of boiler and tank top plating no tank Is the bottom of the boiler insulated yes

Largest internal dia. of boilers 13' 0" Length 12' 3" Shell plates: Material SQM S Tensile strength 28-32 T

Thickness 13/32" Are the shell plates welded or flanged no Description of riveting: circ. seams end lap d.r. 3 1/16"

long. seams Double butt riddle Diameter of rivet holes in circ. seams 13/16" Pitch of rivets 8 1/8"

Percentage of strength of circ. end seams plate 62.9 rivets 52.5 Percentage of strength of circ. intermediate seam plate - rivets -

Percentage of strength of longitudinal joint plate 85.4 rivets 88 combined 88.2 Working pressure of shell by Rules 195 lbs 205

Thickness of butt straps outer 7/8" inner - No. and Description of Furnaces in each Boiler Two Main

Material SQM S Tensile strength 26-30 T Smallest outside diameter 3' 11 7/8"

Length of plain part top - bottom - Thickness of plates crown 2 1/32" bottom Description of longitudinal joint welded

Dimensions of stiffening rings on furnace or c.c. bottom none Working pressure of furnace by Rules 200 lbs

End plates in steam space: Material SQM S Tensile strength 26-30 T Thickness 1 1/8" Pitch of stays 17" x 16"

How are stays secured Forward in plate and milled outside Working pressure by Rules 210 lbs

Tube plates: Material front SQM S back SQM S Tensile strength 26-30 T Thickness 13/16" 3/4"

Mean pitch of stay tubes in nests 8" x 12" Pitch across wide water spaces 14 3/4" Working pressure front 197 lbs back 185 lbs

Girders to combustion chamber tops: Material SQM S Tensile strength 28-32 T Depth and thickness of girder

at centre 8 1/2" x 2 3/4" Length as per Rule 2' 7 1/2" Distance apart 8 1/2" No. and pitch of stays

in each two a 10" Working pressure by Rules 298 lbs Combustion chamber plates: Material SQM S

Tensile strength 26-30 T Thickness: Sides 7/8" Back 3/4" Top 7/8" Bottom 7/8"

Pitch of stays to ditto: Sides 9 3/4" x 10" Back 8" x 7 3/4" Top 10" x 8 1/2" Are stays fitted with nuts or riveted over riveted

Working pressure by Rules 207 lbs Front plate at bottom: Material SQM S Tensile strength 26-30 T

Thickness 13/16" Lower back plate: Material SQM S Tensile strength 26-30 Thickness 3/4"

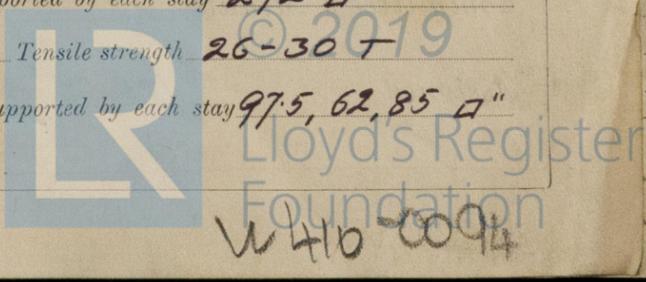
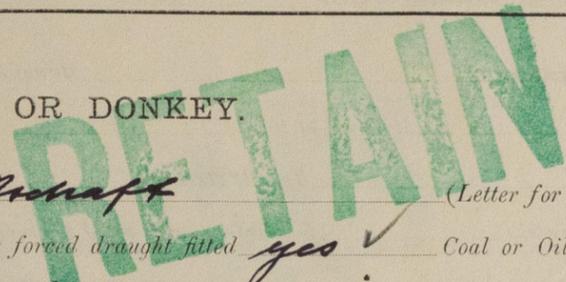
Pitch of stays at wide water space 15 5/8" Are stays fitted with nuts or riveted over nuts

Working Pressure 312 lbs Main stays: Material SQM S Tensile strength 26-30 T

Diameter At body of stay, 2 1/2" or Over threads 2 3/4" No. of threads per inch 9 Area supported by each stay 272 sq. in.

Working pressure by Rules 203 lbs Screw stays: Material SQM S Tensile strength 26-30 T

Diameter At turned off part, 1 3/8" or Over threads 1 1/2" No. of threads per inch 9 Area supported by each stay 97.5, 62, 85 sq. in.



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Working pressure by Rules ^{185 lbs} ~~202 lbs~~ ~~212 lbs~~ Are the stays drilled at the outer ends *no* Margin stays: Diameter { At turned off part, ^{1 5/8"} or Over threads ^{1 3/4"}

No. of threads per inch *9* Area supported by each stay *84 sq"* Working pressure by Rules *216 lbs*

Tubes: Material *steel* External diameter { Plain ^{2 3/4"} Stay ^{2 3/4"} Thickness { *No 8 LSG* ^{21/64 & 9/32} No. of threads per inch *9*

Pitch of tubes *4"* Working pressure by Rules *207 lbs* Manhole compensation: Size of opening in shell plate *20 3/4" x 16 3/4"* Section of compensating ring *8 1/4 x 8 1/8"* No. of rivets and diameter of rivet holes *42 @ 1 3/16"*

Outer row rivet pitch at ends *7 1/4"* Depth of ^{ring} flange if manhole flanged *3 1/2"* Steam Dome: Material

Tensile strength Thickness of shell Description of longitudinal joint

Diameter of rivet holes Pitch of rivets Percentage of strength of joint { Plate Rivets

Internal diameter Working pressure by Rules Thickness of crown No. and diameter of stays

How connected to shell Inner radius of crown Working pressure by Rules

of rivets in outer row in dome connection to shell Size of doubling plate under dome Diameter of rivet holes and pitch

Type of Superheater Manufacturers of { Tubes Steel castings

Number of elements Material of tubes Internal diameter and thickness of tubes

Material of headers Tensile strength Thickness Can the superheater be shut off and the boiler be worked separately

Is a safety valve fitted to every part of the superheater which can be shut off from the boiler

Area of each safety valve Are the safety valves fitted with easing gear Working pressure as per Rules

Pressure to which the safety valves are adjusted Hydraulic test pressure: tubes, castings and after assembly in place Are drain cocks or valves fitted to free the superheater from water where necessary

Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with *yes*

The foregoing is a correct description, Manufacturer.

Dates of Survey { During progress of work in shops - - - } *See Rotterdam Rpt 17045* Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.)

while building { During erection on board vessel - - - } *1927 Dec 15, 22, 1928 Jan 5, 12, 14, 21, 25, 28,* Total No. of visits *eight.*

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

These boilers have been built at Rotterdam under special survey and satisfactorily fitted on board this vessel by the Cantiere Navale Triestino at Monfalcone. The installation for oil fuel has been fitted as per approved plans and in accordance with the requirements of Section 49 of the Rule 1921-22

Survey Fee *See Machinery Report* When applied for, 192

Travelling Expenses (if any) £ : : When received, 192

R. P. ...
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute *TUES. 21 FEB 1928*

Assigned *See Rpt. attached*



Rpt. 13.
RE
Date of writ
No. in Reg. Book *41648*
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