

# REPORT ON BOILERS.

No. 913.

27 MAY 1935

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Received at London Office

Report of writing Report 22nd May, 1935. When handed in at Local Office 22nd May, 1935. Port of HELSINGBORG.

No. in Survey held at Helsingborg Date, First Survey 25th April Last Survey 21st May, 1935.

80987 on the Steel Single Screw Steamer "MAURITZ". /ex Luksefjell, etc./ (Number of Visits --) Gross 1480 Tons Net 814.

ster J.N.Swensson. Built at Bergen. By whom built Bergens Mek.Vaerk. Yard No. 192 When built 1917.

ines made at Bergen. By whom made Bergens Mek. Vaerksted. Engine No. -- When made 1917.

lers made at Bergen. By whom made Bergens Mek. Vaerksted. Boiler No. -- When made 1917.

ninal Horse Power 151 Owners Råå Rederi A/B. Port belonging to Råå.

## MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

manufacturers of Steel The quality of steel used in the boilers found good. (Letter for Record S)

al Heating Surface of Boilers 2532 Is forced draught fitted No. Coal or Oil fired Coal.

and Description of Boilers 2 multitubular. Working Pressure 180 lbs/

ted by hydraulic pressure to NV Test. Date of test -- No. of Certificate -- Can each boiler be worked separately Yes.

ea of Firegrate in each Boiler 33,4 No. and Description of safety valves to each boiler 2, direct springloaded.

Diam. 8.12 1/2" Pressure to which they are adjusted 185 lbs Are they fitted with easing gear Yes.

case of donkey boilers, state whether steam from main boilers can enter the donkey boiler No donkey boiler fitted.

allest distance between boilers or uptakes and bunkers or woodwork 375 mm. Is oil fuel carried in the double bottom under boilers No.

allest distance between shell of boiler and tank top plating 535 mm. Is the bottom of the boiler insulated Yes.

to gtest internal dia. of boilers 12'-0" Length 10'-9 3/8" Shell plates: Material Steel. Tensile strength --

ickness 1" Are the shell plates welded or flanged None. Description of riveting: circ. seams end Single. Accepted

g. seams Double butt straps. Diameter of rivet holes in circ. seams 1.1/8". Pitch of rivets 2 1/2" 12" in outer. 9"

centage of strength of circ. end seams plate 55 rivets 32 Accepted Percentage of strength of circ. intermediate seam plate rivets

centage of strength of longitudinal joint plate rivets combined Working pressure of shell by Rules

ickness of butt straps outer 31/32" inner 31/32" No. and Description of Furnaces in each Boiler 2 furnaces, corrugated.

terial Steel. Tensile strength -- Smallest outside diameter 3'-3.9/16".

ngth of plain part top bottom Thickness of plates crown bottom 17/32" Description of longitudinal joint welded.

nensions of stiffening rings on furnace or c.c. bottom -- Working pressure of furnace by Rules --

d plates in steam space: Material Steel. Tensile strength -- Thickness 1.5/16" Pitch of stays 17"x24.3/8".

w are stays secured Passing through plates. Washers & nuts comb. Working pressure by Rules --

be plates: Material front Steel back Steel. Tensile strength -- Thickness 15/16" 7/8"

an pitch of stay tubes in nests 4 1/2"x4.5/8". Pitch across wide water spaces 14.1/4" Working pressure front back

ders to combustion chamber tops: Material Steel. Tensile strength -- Depth and thickness of girder

er centre 3"x1"x8 1/2" Length as per Rule 2'x9" 2'-7 3/8" Distance apart 11" No. and pitch of stays

each 2"x8.3/4". Working pressure by Rules -- Combustion chamber plates: Material Steel.

asile strength -- Thickness: Sides 49/64" Back 48/64" Top 48/64" Bottom 1".

ch of stays to ditto: Sides 12"x8.3/4". Back 10 1/2"x10 1/2". Top 8.3/4"x11". Are stays fitted with nuts or riveted over Fitted w.nuts.

orking pressure by Rules -- Front plate at bottom: Material Steel. Tensile strength --

ickness 15/16". Lower back plate: Material Steel. Tensile strength -- Thickness 7/8".

ch of stays at wide water space 10 1/2"x13 1/2". Are stays fitted with nuts or riveted over Fitted with nuts.

orking Pressure -- Main stays: Material Steel. Tensile strength --

imeter At body of stay, or Over threads 3.1/4". No. of threads per inch 6 Area supported by each stay 24.3/8"x17".

orking pressure by Rules -- Screw stays: Material Steel. Tensile strength --

imeter At turned off part, or Over threads 1.7/8". No. of threads per inch 9 Area supported by each stay 10 1/2"x10 1/2".



Working pressure by Rules -- Are the stays drilled at the outer ends No. Margin stays: Diameter { At turned off part, or Over threads. 2" ✓  
No. of threads per inch 9 ✓ Area supported by each stay 10 1/2" x 13 1/2". Working pressure by Rules --  
Tubes: Material Steel. External diameter { Plain 3.1/4". ✓ Thickness { 5/16". ✓ No. of threads per inch 11. ✓  
Pitch of tubes 4.5/8" x 4 1/2". ✓ Working pressure by Rules -- Manhole compensation: Size of opening in  
shell plate 520x412 mm. Section of compensating ring 25x400 mm<sup>2</sup> ✓ No. of rivets and diameter of rivet holes 44-1.3/16". ✓  
Outer row rivet pitch at ends 102 mm. Depth of flange if manhole flanged 80 mm. Steam Dome: Material None.  
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 -- Inner radius of crown -- Working pressure by Rules --  
How connected to shell -- Size of doubling plate under dome -- Diameter of rivet holes and pitch  
of rivets in outer row in dome connection to shell --

Type of Superheater Schmidts. Manufacturers of { Tubes -- Steel castings --  
Number of elements 2 x 28. Material of tubes Steel. Internal diameter and thickness of tubes 16 mm. 4 mm. ✓  
Material of headers Cast Steel. Tensile strength -- Thickness -- Can the superheater be shut off and  
the boiler be worked separately Yes. ✓ Is a safety valve fitted to every part of the superheater which can be shut off from the boiler Yes. ✓  
Area of each safety valve 1100 mm<sup>2</sup> ✓ Are the safety valves fitted with easing gear Yes. ✓ Working pressure as per  
Rules -- Pressure to which the safety valves are adjusted 185 lbs/sq. in. ✓ Hydraulic test pressure:  
tubes --, castings -- and after assembly in place --- Are drain cocks or valves fitted  
to free the superheater from water where necessary Yes. ✓

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with --

The foregoing is a correct description,

Manufacturer.

Dates of Survey { During progress of work in shops - - }  
while building { During erection on board vessel - - }

See Report 9.

Are the approved plans of boiler and superheater forwarded herewith Yes. (If not state date of approval.)

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.) These boilers have been carefully examined in- and externally /See Report on Form No.9/. The workmanship and materials are good. No signs of leakage or strain being observed.

Secretary's letters initiated "E" of the 18th April and 3rd May, 1935.

Opinion as to class please see Report 4.

Survey Fee .. Kr. 100:00, When applied for, 22nd May 1935.

Travelling Expenses (if any) £ : : When received, 27.7.35

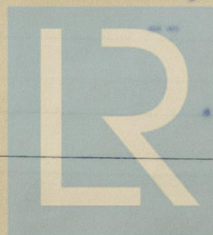
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute WED. 12 JUN 1935

TUE. 27 AUG 1935

Assigned

See Hbg. JE 9/13



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