

## REPORT ON BOILERS.

Received at London Office.

3 JAN 1949

Date of writing Report 22<sup>nd</sup> Nov. 1948 When handed in at Local Office.....19..... Port of Amsterdam

No. in Reg. Book. 20140 Survey held at Amsterdam Date, First Survey 23<sup>rd</sup> June Last Survey 15<sup>th</sup> Nov. 1948

(Number of Visits...8.....) Gross 6453  
Tons Net 4025

Master..... Built at Rotterdam By whom built My. voor Scheeps- & Werktuigbouw "FYENOORD" Yard No..... When built 1918

Engines made at Rotterdam By whom made My. voor Scheeps- & Werktuigbouw "FYENOORD" Engine No..... When made 1918

Boilers made at Rotterdam By whom made — ditto — Boiler No. 1208  
1209 When made 1917  
1210  
1211

Nominal Horse Power 435 Owners N.V. Stoomv. ely: "Nederland" Port belonging to Amsterdam

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

Manufacturers of Steel..... (Letter for Record.....)

Total Heating Surface of Boilers 11480 sq. feet. Is forced draught fitted yes Coal or Oil fired oil

No. and Description of Boilers 4 Single ended Scotch boilers Working Pressure 180 lb

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

Area of Firegrate in each Boiler..... No. and Description of safety valves to each boiler 2 spring loaded

Area of each set of valves per boiler { per Rule 18.4 sq. in.  
as fitted 19.14 sq. in. Pressure to which they are adjusted 180 lb 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 2 3/4" Is oil fuel carried in the double bottom under boilers yes

Smallest distance between shell of boiler and tank top plating 13 1/2" Is the bottom of the boiler insulated yes

Largest internal dia. of boilers 15'-0" Length 13'-0" Shell plates: Material SM steel Tensile strength.....

Thickness 1 5/16" Are the shell plates welded or flanged riveted Description of riveting: circ. seams { end riveted lap joint (2 rows)  
inter " (3 rows)  
long. seams end 1 5/16" inter 1 3/8"  
Pitch of rivets { end 4 1/8" inter 4 5/8"  
long. seams 9 5/8"

Percentage of strength of circ. end seams { plate 68.2%  
rivets 41% Percentage of strength of circ. intermediate seam { plate 70.4%  
rivets 60.3%

Percentage of strength of longitudinal joint { plate 85.7%  
rivets 90.5% Working pressure of shell by Rules 193 lb  
combined 91.5%

Thickness of butt straps { outer 1 3/16"  
inner 1 3/16" No. and Description of Furnaces in each Boiler 3 corrugated - Morrison type

Material SM steel Tensile strength..... Smallest outside diameter 3' 10 1/4"

Length of plain part { top.....  
bottom..... Thickness of plates { crown 5/8"  
bottom..... Description of longitudinal joint welded

Dimensions of stiffening rings on furnace or c.c. bottom..... Working pressure of furnace by Rules 194 lb

End plates in steam space: Material SM steel Tensile strength..... Thickness 1 1/8" Pitch of stays 16 1/2" x 19 1/2"

How are stays secured flanged nuts, riv. to end plates Working pressure by Rules 218 lb

Tube plates: Material { front SM steel  
back SM steel Tensile strength..... Thickness { 15/16"  
3/4"

Pitch of stay tubes in nests 9 9/16" Pitch across wide water spaces 1' 3" Working pressure { front 335 lb  
back 210 lb

Stays to combustion chamber tops: Material SM steel Tensile strength..... Depth and thickness of girder

Centre 9" - 2 x 7/8" Length as per Rule 2' - 9 1/2" Distance apart 8 1/2" No. and pitch of stays

Each 3 - 8 1/4" Working pressure by Rules 234 lb Combustion chamber plates: Material SM steel

Tensile strength..... Thickness: Sides 1/16" Back 1/16" Top 1/16" Bottom 1"

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

Working pressure by Rules flat sides 173 lb Front plate at bottom: Material SM steel Tensile strength.....

Thickness 15/16" Lower back plate: Material SM steel Tensile strength..... Thickness 7/8"

Pitch of stays at wide water space 12 7/8" x 7 1/2" Are stays fitted with nuts or riveted over with nuts

Working pressure 187 lb Main stays: Material SM steel Tensile strength.....

Girder { At body of stay.....  
Over threads..... No. of threads per inch 6 Area supported by each stay 19 1/2" x 16 1/2"

Working pressure by Rules 250 lb Screw stays: Material SM steel Tensile strength.....

Girder { At turned off part.....  
Over threads..... No. of threads per inch 11 Area supported by each stay back 8" x 7 1/2"  
sides 8 1/4" x 7 3/4"

back 211 lb  
Working pressure by Rules *side 199 lb* Are the stays drilled at the outer ends *no* Margin stays: Diameter { At turned off part, *1 3/4"*  
or  
Over threads *1 3/4"*  
No. of threads per inch *11* Area supported by each stay *8 1/4" x 7 1/2"* Working pressure by Rules *293 lb*  
Tubes: Material *SM steel* External diameter { Plain *2 3/4"* Thickness { *4 mm*  
Stay *2 3/4"* *9 mm* No. of threads per inch *11*  
Pitch of tubes *3 3/4" x 3 7/8"* Working pressure by Rules *275 lb* Manhole compensation: Size of opening in  
shell plate *21 1/2" x 17 1/4"* Section of compensating ring *40 #"* No. of rivets and diameter of rivet holes *54 x 1 3/8"*  
Outer row rivet pitch at ends *6"* Depth of flange if manhole flanged *✓* 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 *none* Manufacturers of { Tubes *✓*  
Steel forgings *✓*  
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 *✓* forgings and castings *✓* and after assembly in place *✓* Are drain cocks o  
valves fitted to free the superheater from water where necessary *✓*  
Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with *yes*  
The foregoing is a correct description,  
Manufacturers

Dates of Survey { During progress of work in shops - - } *Is the*  
while building { During erection on board vessel - - } *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.)

*The boilers have been built under Special Survey of Bureau Veritas and the Netherlands Government Boiler Dept.*

*They have been examined internally and externally (insulation stripped) and found or brought in efficient condition (please Survey Rpt. 9)*

*The boilers were afterwards submitted to an hydraulic test with satisfactory results. After having fitted new insulation the boilers have been tried under steam and found in good working order; their safety valves have been adjusted under steam.*

*I am of opinion that these boilers merit the approval of the Committee*

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

*Alvan Pearce*  
Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute

Assigned *See minute on fe rpt*



© 2020

Lloyd's Register Foundation

Rpt. 13.  
CLAS  
Date of writ  
No. in  
Reg. B  
20140  
Built at  
Owners  
Electrical  
Is vessel  
Have plan  
Heating  
has the go  
trip switch  
if not com  
arranged t  
negat  
test for me  
of the gen  
near unpro  
injury and  
contact  
are they in  
and oil  
material is  
semi-insula  
Is the cons  
to pilot an  
side of swit  
switch  
change  
and for eac  
d. p.  
Are compa  
ammeters  
equaliser co  
Switches,  
per Rule  
protection o  
did they o  
Cables, are  
state maxim  
square inch