

REPORT ON BOILERS.

No. 15293^C

Received at London Office

JUN 10 1930

Date of writing Report 3 June 1930 When handed in at Local Office

Port of Amsterdam

No. in Survey held at Amsterdam

Date, First Survey 7 Sept.

Last Survey 24 May 1930

on the Single Screw Motor Vessel "CARELIA"

(Number of Visits 14)

Tons { Gross 8033
Net 4724

Master [Signature]

Built at Amsterdam By whom built N.V. Ned. Scheepb. W. Yard No. 266 When built 1930

Engines made at Amsterdam

By whom made N.V. Werkhoven

Engine No. 701 When made 1930

Boilers made at Amsterdam

By whom made N.V. Werkhoven

Boiler No. 2787 When made 1930

Nominal Horse Power 502

Owners N.V. Petroleum M^o Co. Carona Port belonging to Gravenhage

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Shell Shel of Scotland Broomside Boiler works CH (Letter for Record)

Total Heating Surface of Boilers 2560 Is forced draught fitted Yes Coal or Oil fired oil fired

No. and Description of Boilers one horizontal Multitubular boiler Working Pressure 180 lbs

Tested by hydraulic pressure to 320 LBS Date of test 8-1-30 No. of Certificate 417 Can each boiler be worked separately ✓

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

Area of each set of valves per boiler per Rule approved Pressure to which they are adjusted 180 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 600 mm Is oil fuel carried in the double bottom under boilers no

Smallest distance between shell of boiler and tank top plating ✓ Is the bottom of the boiler insulated Yes

Largest internal dia. of boilers 4400 mm Length 3460 Shell plates: Material SMS Tensile strength 29.75/33 ton

Thickness 29 mm Are the shell plates welded or flanged no Description of riveting: circ. seams end abutted

long. seams dbl butt shops Diameter of rivet holes in triple lug ray rivets circ. seams 30 mm Pitch of rivets 87 mm

Percentage of strength of circ. end seams plate 67.5 rivets 42.3 Percentage of strength of circ. intermediate seam plate rivets ✓

Percentage of strength of longitudinal joint plate 85 rivets 85 combined 87 Working pressure of shell by Rules 104 lbs

Thickness of butt straps outer 25 mm inner 25 mm No. and Description of Furnaces in each Boiler 3 Morrison's furnaces

Material SMS Tensile strength 26-30 ton Smallest outside diameter 1130 mm

Length of plain part top Thickness of plates bottom 15 mm Description of longitudinal joint welded

Dimensions of stiffening rings on furnace or c.c. bottom ✓ Working pressure of furnace by Rules 193 LBS

End plates in steam space: Material S. A. S. Tensile strength 26-30 ton Thickness 29 mm Pitch of stays 440 x 450 mm

How are stays secured dbl nuts Working pressure by Rules

Tube plates: Material front SMS back SMS Tensile strength 26-30 ton Thickness 23 mm

Mean pitch of stay tubes in nests 240 mm Pitch across wide water spaces 360 mm Working pressure front 230 lbs back 210 lbs

Girders to combustion chamber tops: Material SMS Tensile strength 20-32 ton Depth and thickness of girder

at centre 220 x 30 mm Length as per Rule 700 mm Distance apart 220 mm No. and pitch of stays

in each 3-200 Working pressure by Rules 210 lbs Combustion chamber plates: Material SMS

Tensile strength 26-30 ton Thickness: Sides 10 mm Back 19 mm Top 10 mm Bottom 25 mm

Pitch of stays to ditto: Sides 200 x 200 mm Back 226 x 195 mm Top 200 x 220 mm Are stays fitted with nuts or riveted over riveted over

Working pressure by Rules 196 lbs Front plate at bottom: Material SMS Tensile strength 26-30 ton

Thickness 23 mm Lower back plate: Material SMS Tensile strength 26-30 ton Thickness 23 mm

Pitch of stays at wide water space 366 mm Are stays fitted with nuts or riveted over filled with nuts

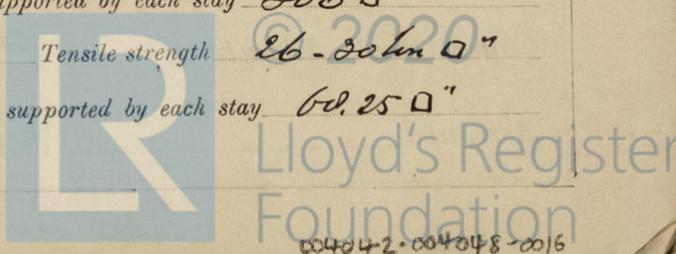
Working Pressure 190 lbs Main stays: Material SMS Tensile strength 20-32 ton

Diameter At body of stay, 3" No. of threads per inch 8 Area supported by each stay 306"

Working pressure by Rules 220 lbs Screw stays: Material SMS Tensile strength 26-30 ton

Diameter At turned off part, 1 1/2" No. of threads per inch 11 Area supported by each stay 60.25"

Is a Report also sent on the Hull of the Ship?



Working pressure by Rules 185 lbs Are the stays drilled at the outer ends Yes Margin stays: Diameter At turned off part, 1 5/8"
 No. of threads per inch 11 Area supported by each stay 77.5 sq" Working pressure by Rules 196 lbs
 Tubes: Material Iron External diameter Plain 2 3/4" Thickness Nº 9 2 5/8" No. of threads per inch 11
 Pitch of tubes 100 x 90 Working pressure by Rules 195 lbs & 225 lbs Manhole compensation: Size of opening in
 shell plate 370 x 470 Section of compensating ring 370" No. of rivets and diameter of rivet holes 54-32 mm
 Outer row rivet pitch at ends 220 mm Depth of flange if manhole flanged 80 mm 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
 Internal diameter _____ Working pressure by Rules _____ Thickness of crown _____ Rivets _____
 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 _____ 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 casing 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 or
 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 _____
WERKSPoor N.V. Shuppens The foregoing is a correct description, _____
 _____ Manufacturer.

Dates of Survey During progress of work in shops - - - Sept 7, 20 Oct 8 Dec 8-17-22-24 Jan 9. Are the approved plans of boiler and superheater forwarded herewith 10-1-37
while building During erection on board vessel - - - March 8-12 April 5-23 May 19-24 Total No. of visits 14
 (If not state date of approval.)

Is this Boiler a duplicate of a previous case Yes. If so, state Vessel's name and Report No. M.V. ONOBA Ans up 15126 b.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)
The Boiler has been made in accordance with approved plan, & Secretary's letter and in accordance with the Society's rules
Material duly tested, workmanship throughout good
Boiler hydraulic tested as per rules found sound & tight
Properly fastened aboard, placed in Motor room aft, in separate
boiler room on a special made tween deck

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

Burgdorff
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI 17 JUN 1938
 Assigned See Ans. J.C. 15293



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