

REPORT ON BOILERS.

No. 26776 d

APR 19 1938

Received at London Office

Date of writing Report 7-4-1938 When handed in at Local Office 1938 Port of Rotterdam

No. in Survey held at Rotterdam Date, First Survey 20-4-37 Last Survey 18-11-1937

Reg. Book. "OVULA" (Number of Visits 8) Tons Gross
Net

Master J.M. Built at Schiedam By whom built Wilton Tyenwood Yard No. 602 When built 1938

Engines made at Schiedam By whom made Wilton Tyenwood Engine No. When made 1938

Boilers made at Rotterdam By whom made Pott Droogd My Boiler No. 545 When made 1938

Nominal Horse Power 377 Owners Petroleum My "La Corona" Port belonging to 's Gvorenhege

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

Manufacturers of Steel The Steel Co of Scotland (Letter for Record S)

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

No. and Description of Boilers One Multitubular Marine boiler Working Pressure 180 lbs

Tested by hydraulic pressure to 320 lbs Date of test 10-11-37 No. of Certificate 1001 Can each boiler be worked separately ✓

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

Area of each set of valves per boiler per Rule as fitted 90 mm 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 Shichnus washers 3 23.5 mm

Smallest distance between boilers or uptakes and bunkers or woodwork ✓ Is oil fuel carried in the double bottom under boilers placed in tween deck aft

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

Largest internal dia. of boilers 4400 mm Length 5468 mm Shell plates: Material S.M. Steel Tensile strength 46.8-52 kg/mm²

Thickness 29 mm Are the shell plates welded Welded at outer ends Description of riveting: circ. seams end Cap 2 x 200

long. seams Double butt straps 3 x riv Diameter of rivet holes in circ. seams 30 mm Pitch of rivets 87 mm

Percentage of strength of circ. end seams plate 65% rivets 50% Percentage of strength of circ. intermediate seam plate ✓

Percentage of strength of longitudinal joint plate 85% rivets 85% combined 87% Working pressure of shell by Rules 12.8 kg/cm²

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

Material S.M. Steel Tensile strength 41-47 kg/mm² Smallest outside diameter 1130 mm

Length of plain part top ✓ bottom ✓ Thickness of plates crown 15 mm bottom 15 mm Description of longitudinal joint Welded

Dimensions of stiffening rings on furnace or c.c. bottom ✓ Working pressure of furnace by Rules 13.22 kg/cm²

End plates in steam space: Material S.M. Steel Tensile strength 41-47 kg/mm² Thickness 29.5 mm Pitch of stays 440-450 mm

How are stays secured Screwed in plates with nuts outside Working pressure by Rules 12.65 kg/cm²

Tube plates: Material front S.M. Steel back S.M. Steel Tensile strength 41-47 kg/mm² Thickness 13 mm

Mean pitch of stay tubes in nests 196 x 300 mm Pitch across wide water spaces 360 mm Working pressure front 17.8 kg/cm²

Girders to combustion chamber tops: Material S.M. Steel Tensile strength 44-50 kg/mm² Depth and thickness of girder

at centre 220 x 2 x 19 mm Length as per Rule 776 mm Distance apart 220 mm No. and pitch of stays

in each 3 @ 200 mm Working pressure by Rules 17.2 kg/cm² Combustion chamber plates: Material S.M. Steel

Tensile strength 41-47 kg/mm² Thickness: Sides 10 mm Back 19 mm Top 18 mm Bottom 25 mm

Pitch of stays to ditto: Sides 250 mm Back 200 x 195 mm Top 200 x 220 mm Are stays fitted with nuts or riveted over Riveted over

Working pressure by Rules 15.3 kg/cm² Front plate at bottom: Material S.M. Steel Tensile strength 41-47 kg/mm²

Thickness 23 mm Lower back plate: Material S.M. Steel Tensile strength 41-47 kg/mm² Thickness 23 mm

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

Working Pressure 17.7 kg/cm² Main stays: Material S.M. Steel Tensile strength 44-50 kg/mm²

Diameter At body of stay 3" Over threads 3 1/4" No. of threads per inch 9 Area supported by each stay 198000 mm²

Working pressure by Rules 15.5 kg/cm² Screw stays: Material S.M. Steel Tensile strength 41-47 kg/cm²

Diameter At turned off part 1 3/8" Over threads 1 1/2" No. of threads per inch 9 Area supported by each stay 40000 mm²

Working pressure by Rules 14.1 kg/cm² Are the stays drilled at the outer ends Yes Margin stays: Diameter { At turned off part, 1 1/16" or Over threads 1 3/8"

No. of threads per inch 9 Area supported by each stay 50091 mm² Working pressure by Rules 14.1 kg/cm²

Tubes: Material Iron External diameter { Plain 2 3/4" Stay 2 3/4" Thickness 0.9459" No. of threads per inch 9

Pitch of tubes 98 x 100 mm Working pressure by Rules 215 lbs Manhole compensation: Size of opening in shell plate 370 x 470 mm Section of compensating ring 700 x 880 x 32 mm 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 100 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 — 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 —

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 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 X

DE ROTTERDAMSCHER DROOGDOEK MIJ.
 The foregoing is a correct description,
M. Mape Manufacturer.

Dates of Survey { During progress of work in shops - - 24/9, 27/9, 29/9, 1/10, 12/10, 15/10, 18/10, 19/10, 21/10 while building { During erection on board vessel - - -

Are the approved plans of boiler and superheater forwarded herewith Retained (If not state date of approval.)
 Total No. of visits 8

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been made in accordance with the approved plan, Society's Rules, and Secretary's letters, material tested as required and workmanship good.

Survey Fee f 205.00 When applied for, 192
 Travelling Expenses (if any) £ — : — When received, 28.2 192 38.

J. J. Schoor
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI. 22 APR 1938

Assigned

See Rob. J.E. 26776

