

# REPORT ON BOILERS.

Received at London Office

JUL 25 1938

Date of writing Report 15. 7. 1938 When handed in at Local Office 192 Port of Rotterdam

No. in Reg. Book. Survey held at Flushing Date, First Survey 19. 5. 34. Last Survey 18. 1. 1938

on the Donkey boiler MV CLEODORA (Number of Visits 20) Tons { Gross 7236 Net 4724

Master Built at Flushing By whom built Hon. Mr. De Schelde Yard No. 206 When built 1938

Engines made at Amsterdam By whom made Werkspoor Engine No. 702 When made 1938

Boilers made at Flushing By whom made Hon. Mr. De Schelde Boiler No. 1042 When made 1938

Nominal Horse Power Owners Petroleum M. Co. Corona Port belonging to Graevenhage

## 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 ft Is forced draught fitted Yes Coal or Oil fired Oil.

No. and Description of Boilers One multitubular marine boiler. Working Pressure 180 lb.

Tested by hydraulic pressure to 320 lb. Date of test 18. 1. 38 No. of Certificate 1006 Can each boiler be worked separately Yes

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

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 Yes

Smallest distance between boilers or uptakes and bunkers or woodwork Yes Is oil fuel carried in the double bottom under boilers Yes

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

Largest internal dia. of boilers 4400 mm Length 3460 mm Shell plates: Material S. M. Steel Tensile strength 46.8-52 kg/mm<sup>2</sup>

Thickness 29 mm Are the shell plates welded or flanged Welded at outer ends in way of butt straps Description of riveting: circ. seams cap & riv

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 85% rivets 50% } Percentage of strength of circ. intermediate seam { plate 85% rivets 50% }

Percentage of strength of longitudinal joint { plate 85% rivets 85% combined 87% } Working pressure of shell by Rules 12.8 kg/cm<sup>2</sup>

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/mm<sup>2</sup> Smallest outside diameter 1130 mm

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

Dimensions of stiffening rings on furnace or c.c. bottom Yes Working pressure of furnace by Rules 13.21 kg/cm<sup>2</sup>

End plates in steam space: Material S. M. Steel Tensile strength 41.47 kg/mm<sup>2</sup> Thickness 29.5 mm Pitch of stays 440.450 mm

How are stays secured Secured in plates with nuts outside & inside Working pressure by Rules 12.65 kg/cm<sup>2</sup>

Tube plates: Material { front back } S. M. Steel Tensile strength { 41.47 kg/mm<sup>2</sup> } Thickness { 23 mm }

Mean pitch of stay tubes in nests 196 x 300 mm Pitch across wide water spaces 360 mm Working pressure { front back } 17.8 kg/cm<sup>2</sup>

Girders to combustion chamber tops: Material S. M. Steel Tensile strength 44.50 kg/mm<sup>2</sup> Depth and thickness of girder

at centre 120 x 12 x 19 mm Length as per Rule 476 mm Distance apart 220 mm No. and pitch of stays

in each 3 @ 200 mm Working pressure by Rules 17.2 kg/cm<sup>2</sup> Combustion chamber plates: Material S. M. Steel

Tensile strength 41.47 kg/mm<sup>2</sup> Thickness: Sides 18 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/cm<sup>2</sup> Front plate at bottom: Material S. M. Steel Tensile strength 41.47 kg/mm<sup>2</sup>

Thickness 23 mm Lower back plate: Material S. M. Steel Tensile strength 41.47 kg/mm<sup>2</sup> 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/cm<sup>2</sup> Main stays: Material S. M. Steel Tensile strength 44.50 kg/mm<sup>2</sup>

Diameter { At body of stay, Over threads } 3" / 3 1/4" No. of threads per inch 9 Area supported by each stay 190000 mm<sup>2</sup>

Working pressure by Rules 15.5 kg/cm<sup>2</sup> Screw stays: Material S. M. Steel Tensile strength 41.47 kg/mm<sup>2</sup>

Diameter { At turned off part, Over threads } 1 3/8" / 1 1/2" No. of threads per inch 9 Area supported by each stay 40000 mm<sup>2</sup>

