

REPORT ON BOILERS.

DEC - 6 1940

Received at London Office

Date of writing Report 28th Nov. 1940. When handed in at Local Office 29th Nov. 1940. Port of Greenock

No. in Survey held at Greenock Date, First Survey 11th DECEMBER 1939 Last Survey 24th NOVEMBER 1940.

Reg. Book. Greenock (Number of Visits) Tons { Gross 4680, Net 3059 }

on the COULBEQ

Master Built at Port Glasgow. By whom built Messrs Liddings Ltd Yard No. 938 When built 1940

Engines made at Greenock By whom made Messrs Rankin & Blackmore Ltd Engine No. 471 When made 1940

Boilers made at Greenock By whom made Messrs Rankin & Blackmore Ltd Boiler No. 471 When made 1940

Nominal Horse Power 436 Owners The Dornoch Shipping Co. Ltd Port belonging to Glasgow

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Cochran Ltd (Letter for Record S)

Total Heating Surface of Boilers 5830 sq ft Is forced draught fitted Yes Coal or Oil fired Coal

No. and Description of Boilers 2 S.E. Cylindrical Working Pressure 220 lbs

Tested by hydraulic pressure to 380 lbs Date of test 30/8/40 No. of Certificate 2213 Can each boiler be worked separately Yes

Area of Firegrate in each Boiler 67 sq ft No. and Description of safety valves to each boiler 2 Cockburns improved High Lift

Area of each set of valves per boiler { per Rule 9.4 sq ft as fitted 11.8 sq ft Pressure to which they are adjusted 220 lbs 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 24" Is oil fuel carried in the double bottom under boilers No

Smallest distance between shell of boiler and tank top plating 26" Is the bottom of the boiler insulated Yes

Largest internal dia. of boilers 16'-3" Length 12'-0" Shell plates: Material S Tensile strength 29/33 tons

Thickness 1 19/32" Are the shell plates welded or flanged No Description of riveting: circ. seams { end D.R. inter. - }

long. seams T.R.D.B.S. Diameter of rivet holes in { circ. seams 1 5/8" long. seams 1 5/8" Pitch of rivets { 4.23" }

Percentage of strength of circ. end seams { plate 61.5 rivets 48.7 } Percentage of strength of circ. intermediate seam { plate 85.3 rivets 87.2 }

Percentage of strength of longitudinal joint { plate 85.3 rivets 87.2 combined 88.1 } Working pressure of shell by Rules 226 lbs

Thickness of butt straps { outer 1 1/4" inner 1 3/8" } No. and Description of Furnaces in each Boiler 4 Corrugated Right Hand Section

Material S Tensile strength 26/30 tons Smallest outside diameter 3'-5 5/16"

Length of plain part { top - bottom - } Thickness of plates { crown 2 1/32" bottom 2 1/32" } Description of longitudinal joint Weld

Dimensions of stiffening rings on furnace or c.c. bottom - Working pressure of furnace by Rules 232 lbs

End plates in steam space: Material S Tensile strength 26/30 tons Thickness 1 15/32" Pitch of stays 22" x 20"

How are stays secured O. nuts and washers Working pressure by Rules 229 lbs

Tube plates: Material { front S back S } Tensile strength { 26/30 tons } Thickness { 1 1/32" }

Mean pitch of stay tubes in nests 9 3/4" Pitch across wide water spaces 14" Working pressure { front 244 lbs back 250 lbs }

Girders to combustion chamber tops: Material S Tensile strength 29/33 tons Depth and thickness of girder -

at centre 10 1/2" x 1 1/2" Length as per Rule 34 7/16" Distance apart 9" No. and pitch of stays -

in each 3-8 1/2" Working pressure by Rules 230 lbs Combustion chamber plates: Material S

Tensile strength 26/30 tons Thickness: Sides 3/4" Back 3/4" Top 3/4" Bottom 7/8"

Pitch of stays to ditto: Sides 9 1/2" x 8 1/2" Back 9 1/2" x 8 1/2" Top 9 1/2" x 8 1/2" Are stays fitted with nuts or riveted over Nuts

Working pressure by Rules 244 lbs Front plate at bottom: Material S Tensile strength 26/30 tons

Thickness 1 1/32" Lower back plate: Material S Tensile strength 26/30 tons Thickness 1"

Pitch of stays at wide water space 14 1/4" x 9 1/2" Are stays fitted with nuts or riveted over Nuts

Working Pressure 220 lbs Main stays: Material S Tensile strength 28/32 tons

Diameter { At body of stay, 3 1/2" or 3 1/2" Over threads 3 1/2" } No. of threads per inch 6 Area supported by each stay 4/8 sq in

Working pressure by Rules 226 lbs Screw stays: Material S Tensile strength 26/30 tons

Diameter { At turned off part, 1 3/4" or 1 3/4" Over threads 1 3/4" } No. of threads per inch 9 Area supported by each stay 80 3/4 sq in



