

# REPORT ON BOILERS.

No. 51000

19 NOV 1930

Received at London Office

Date of writing Report 4-11-1930 When handed in at Local Office 15-11-1930 Port of Glasgow

No. in Reg. Book 10061 Survey held at Glasgow Date, First Survey 21-11-29 Last Survey 11-11-1930

on the MV. "NORFOLD" (Number of Visits 65) Gross 6370 Tons Net 3830

Master Glasgow Built at Glasgow By whom built Barclay Curle & Co Yard No. 642 When built 1930

Engines made at Glasgow By whom made Barclay Curle & Co Ltd Engine No. 642 When made 1930

Boilers made at Glasgow By whom made Barclay Curle & Co Ltd Boiler No. 642 When made 1930

Nominal Horse Power \_\_\_\_\_ Owners \_\_\_\_\_ Port belonging to \_\_\_\_\_

(WASTE-HEAT) <sup>7</sup>

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

Manufacturers of Steel D. Colville & Co Ltd, J. Dunlop & Co Ltd, W. Beardmore & Co Ltd (Letter for Record (S))

Total Heating Surface of Boilers 2142 sq ft Is forced draught fitted no Coal or Oil fired waste heat

No. and Description of Boilers 1 S.B. Working Pressure 120 lbs

Tested by hydraulic pressure to 230 lbs Date of test 16-5-30 No. of Certificate 18730 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 (H.L.)

Area of each set of valves per boiler per Rule 11.880 Pressure to which they are adjusted 120 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 well clear Is oil fuel carried in the double bottom under boilers yes

Smallest distance between shell of boiler and tank top plating on upper flat Is the bottom of the boiler insulated yes

Largest internal dia. of boilers 13'6" Length 11'0" Shell plates: Material Steel Tensile strength 29/33 Ton

Thickness 3/4" Are the shell plates welded or flanged no Description of riveting: circ. seams end 3.008" inter. 6"

long. seams T.R.D.B.S. Diameter of rivet holes in circ. seams 15/16" long. seams 13/16" Pitch of rivets 6"

Percentage of strength of circ. end seams plate 68.83 rivets 48.57 Percentage of strength of circ. intermediate seam plate 86.45 rivets 85.58

Percentage of strength of longitudinal joint plate 86.45 rivets 85.58 Working pressure of shell by Rules 122 lbs

Thickness of butt straps outer 9/16" inner 11/16" No. and Description of Furnaces in each Boiler 2. Brighton Section

Material Steel Tensile strength 26-30 Ton Smallest outside diameter 3'4 3/4"

Length of plain part top 3'8" bottom 3'8" Thickness of plates 3/8" Description of longitudinal joint weld

Dimensions of stiffening rings on furnace or c.c. bottom \_\_\_\_\_ Working pressure of furnace by Rules 168 lbs

End plates in steam space: Material Steel Tensile strength 26-30 Ton Thickness 1" Pitch of stays 19 1/2" x 19 1/2"

How are stays secured D.N. Working pressure by Rules 120 lbs

Tube plates: Material front Steel back Steel Tensile strength 26-30 Ton Thickness 5/8"

Mean pitch of stay tubes in nests 10.6" Pitch across wide water spaces 14" Working pressure front 130 lbs back 121 "

Girders to combustion chamber tops: Material Steel Tensile strength 28/32 Ton Depth and thickness of girder 8 1/4" x 9 1/16" dbil

at centre 8 1/4" x 9 1/16" dbil Length as per Rule 32.78" Distance apart 10" No. and pitch of stays 2 @ 10"

Working pressure by Rules 123 lbs Combustion chamber plates: Material Steel

Tensile strength 26/30 Ton Thickness: Sides 19/32" Back 19/32" Top 19/32" Bottom 19/32"

Pitch of stays to ditto: Sides 10" x 10" Back 10 1/2" x 9 1/2" Top 10" x 10" Are stays fitted with nuts or riveted over nuts

Working pressure by Rules 120 lbs Front plate at bottom: Material Steel Tensile strength 26/30 Ton

Thickness 23/32" Lower back plate: Material Steel Tensile strength 26-30 Ton Thickness 11/16"

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

Working Pressure 129. lbs Main stays: Material Steel Tensile strength 28/32 Ton

Diameter At body of stay, 2 5/8" Over threads, 2 5/8" No. of threads per inch 6 Area supported by each stay 380 sq"

Working pressure by Rules 130 lbs Screw stays: Material Steel Tensile strength 26-30 Ton

Diameter At turned off part, 1 5/8" Over threads, 1 5/8" No. of threads per inch 9 Area supported by each stay 100 sq"



