

REPORT ON BOILERS.

No. 14034

Received at London Office 16 APR 1930

Date of writing Report 9.4.1930 When handed in at Local Office 9.4.1930 Port of MIDDLESBROUGH.

No. in Survey held at STOCKTON Date, First Survey 13 Dec/29 Last Survey 7.4.1930

Reg. Book. on the "PORT ALFRED" (Number of Visits 19) Gross 4918 Tons Net 3005

Master Built at South Bank By whom built Smitts Dock Co. Ltd. Yard No. 912 When built 1930

Engines made at South Bank By whom made Smitts Dock Co. Ltd. Engine No. 381 When made 1930

Boilers made at Stockton By whom made Blair & Co (1926) Ltd Boiler No. C 780 When made 1930

Nominal Horse Power Owners The Antarctic Shipping Co. Port belonging to Middlesbrough

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Appleby Iron Co. (Letter for Record S.)

Total Heating Surface of Boilers 6626 sq ft Is forced draught fitted Yes Coal or Oil fired Coal

No. and Description of Boilers 3 S.B. Working Pressure 200 lbs.

Tested by hydraulic pressure to 350 lbs. Date of test 7.4.30 No. of Certificate 6774 Can each boiler be worked separately Yes

Area of Firegrate in each Boiler 49.2 sq ft No. and Description of safety valves to each boiler Pair Coeyburns Improved High Lift

Area of each set of valves per boiler 6.4 Pressure to which they are adjusted 205 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 2'-1" Is oil fuel carried in the double bottom under boilers No

Smallest distance between shell of boiler and tank top plating 2'-2 1/2" Is the bottom of the boiler insulated Yes

Largest internal dia. of boilers 14'-0" Length 12'-0" Shell plates: Material Steel Tensile strength 29/33

Thickness 1 1/4" Are the shell plates welded or flanged No Description of riveting: circ. seams DR.

long. seams T.R.D.B.S. (5 rivets) Diameter of rivet holes in 1 1/4" Pitch of rivets 3.64"

Percentage of strength of circ. end seams 67.5 Percentage of strength of circ. intermediate seam 86.1

Percentage of strength of longitudinal joint 86.1 Working pressure of shell by Rules 203 lbs.

Thickness of butt straps 3 1/2" No. and Description of Furnaces in each Boiler 3 C.F.

Material Steel Tensile strength 26/30 Smallest outside diameter 3'-4 1/2"

Length of plain part 19" Thickness of plates 3/32" Description of longitudinal joint Weld

Dimensions of stiffening rings on furnace or c.c. bottom Yes Working pressure of furnace by Rules 211 lbs.

End plates in steam space: Material Steel Tensile strength 26/30 Thickness 1 3/16" Pitch of stays 19 1/2" x 18"

How are stays secured D.N.C.W. Working pressure by Rules 207 lbs.

Tube plates: Material Steel Tensile strength 26/30 Thickness 3/4" Working pressure 209 lbs.

Mean pitch of stay tubes in nests 9 3/8" Pitch across wide water spaces 13 1/2" x 7 1/2" Working pressure 228 "

Girders to combustion chamber tops: Material Steel Tensile strength 28/32 Depth and thickness of girder 15"

at centre 9 3/8" x 7 1/8" (double) Length as per Rule 3'-0 1/2" Distance apart 8" No. and pitch of stays 15"

in each 3'-8 1/2" Working pressure by Rules 223 lbs. Combustion chamber plates: Material Steel

Tensile strength 26/30 Thickness: Sides 21/32" Back 21/32" Top 21/32" Bottom 3/4"

Pitch of stays to ditto: Sides 8 3/4" x 8 1/2" Back 8 3/4" x 8 1/2" Top 8 1/2" x 8" Are stays fitted with nuts or riveted over nuts

Working pressure by Rules 201 lbs. Front plate at bottom: Material Steel Tensile strength 26/30

Thickness 1" Lower back plate: Material Steel Tensile strength 26/30 Thickness 15/16"

Pitch of stays at wide water space 13 1/2" x 8 1/8" Are stays fitted with nuts or riveted over nuts

Working Pressure 222 lbs. Main stays: Material Steel Tensile strength 28/32

Diameter 3 3/8" No. of threads per inch 6 Area supported by each stay 343 sq in

Working pressure by Rules 214 lbs. Screw stays: Material Steel Tensile strength 26/30

Diameter 1 5/8" No. of threads per inch 8 Area supported by each stay 72.3 sq in

The foregoing is a correct description,
For BEAIR & CO. (1926) LIMITED.

DURING PROGRESS OF WORK IN SHOPS		DURING ERECTION ON BOARD VESSEL		TOTAL	
Dates of Survey while building	During progress of work in shops - -	During erection on board vessel - -	Are the approved plans of boiler and machinery forwarded herewith (If not state date of approval.)	Yes	Also copy of approved plan of Superheated boxes.
1929: Dec 13, 19, 1930: Jan 6, 14, 20, 27, Feb 18, 27, Mar 3, 7, 11, 12, 17, 19, 24, 28, Apr 2, 7, 11					
			Total No. of visits	19	

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