

REPORT ON BOILERS.

No. 16125

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Date of writing Report 18/10/1939 When handed in at Local Office 19/10/1939 Port of MIDDLESBROUGH

No. in Survey held at Stockton-on-Tees Date, First Survey 27th July 1939 Last Survey 13/10/1939

on the T.S. Steel Tank "Collingwood" (Number of Visits 8) Tons {Gross 89.80 Net 39.06

Master Built at By whom built Yard No. When built

Engines made at By whom made Engine No. When made

Boilers made at Stockton By whom made Stockton Chemical Engg. & Riley 3674 Boiler No. 6396 When made 1939

Nominal Horse Power Owners Port belonging to

MULTITUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Appleby-Frodingham Steel Co Ltd (Letter for Record S)

Total Heating Surface of Boilers 890^{sq} Is forced draught fitted Coal or Oil fired

No. and Description of Boilers 1-Single Ended Working Pressure 130 lbs

Tested by hydraulic pressure to 245 lbs Date of test 13/10/39 No. of Certificate 6979 Can each boiler be worked separately

Area of Firegrate in each Boiler 29^{sq} No. and Description of safety valves to each boiler

Area of each set of valves per boiler {per Rule Pressure to which they are adjusted Are they fitted with easing gear

In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler

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

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

Largest internal dia. of boilers 10'-0" Length 10'-0" Shell plates: Material Steel Tensile strength 29-33

Thickness 5/8" Are the shell plates welded or flanged No Description of riveting: circ. seams {inter. 2R

Long. seams T.R.D.B.S Diameter of rivet holes in {circ. seams 15/16" Pitch of rivets {3" inter. 5" long. seams 13/16"

Percentage of strength of circ. end seams {plate 68.75 rivets 58.30 Percentage of strength of circ. intermediate seam {plate rivets

Percentage of strength of longitudinal joint {plate 83.75 rivets 98.40 Working pressure of shell by Rules 132 lbs

Thickness of butt straps {outer 17/32" inner 21/32" No. and Description of Furnaces in each Boiler 2-Corrugated-Morrison

Material Steel Tensile strength 26-30 Smallest outside diameter 35"

Length of plain part {top bottom Thickness of plates {crown 3/8" bottom Description of longitudinal joint Weld

Dimensions of stiffening rings on furnace or c.c. bottom Working pressure of furnace by Rules 151 lbs

End plates in steam space: Material Steel Tensile strength 26-30 Thickness 27/32 Pitch of stays 17"x11 1/2"

How are stays secured D. Nuts & washers Working pressure by Rules 186 lbs

Tube plates: Material {front Steel Tensile strength {26-30 Thickness {27/32 back Steel

Mean pitch of stay tubes in nests 10 1/2" Pitch across wide water spaces 14" Working pressure {front 131 lbs back 134"

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

at centre 6 1/2" 2@ 5/8" Length as per Rule 28" Distance apart 8 1/2" No. and pitch of stays

in each 2@ 8 1/2" Working pressure by Rules 135.5 lbs Combustion chamber plates: Material Steel

Tensile strength 26-30 Thickness: Sides 9/16" Back 17/32" Top 9/16" Bottom 1/16"

Pitch of stays to ditto: Sides 9 1/2"x8 1/2" Back 9"x8" Top 8 1/2"x8 1/2" Are stays fitted with nuts or riveted over Nuts

Working pressure by Rules 132 lbs Front plate at bottom: Material Steel Tensile strength 26-30

Thickness 27/32 Lower back plate: Material Steel Tensile strength 26-30 Thickness 27/32

Pitch of stays at wide water space 14"x9" Are stays fitted with nuts or riveted over Nuts

Working Pressure 233 lbs Main stays: Material Steel Tensile strength 28-32

Diameter {At body of stay, 2 1/2" No. of threads per inch 6 Area supported by each stay 190.5 sq"

Working pressure by Rules 227 lbs Screw stays: Material Steel Tensile strength 26-30

Diameter {At turned off part, 1 3/8" No. of threads per inch 9 Area supported by each stay 72 sq"



