

REPORT ON BOILERS.

No. 8074.

WED. AUG. 20, 1913

Date of writing Report 18.8.13 1913 When handed in at Local Office 19.8. 1913 Port of Middlesbrough
 No. in Survey held at Stockton-on-Tees Date, First Survey 12th June. Last Survey 25 Sept 1913
 Reg. Book. on the Steel S.S. Helmsloch (Number of Visits 15) Gross 4460 Tons
 Master Sedford Built at Sunderland By whom built W. Pickersgill & Sons Ltd When built 1913
 Engines made at Sunderland By whom made John Dickinson & Sons Ltd When made 1913
 Boilers made at Stockton By whom made Messrs Riley Bros Ltd (No. 4530) When made 1913
 Registered Horse Power _____ Owners Strath & John Port belonging to Cardiff

MULTITUBULAR BOILERS - MAIN, AUXILIARY OR DONKEY. - Manufacturers of Steel John Spencer & Sons
 Letter for record (S) Total Heating Surface of Boilers 1090 sq ft Is forced draft fitted No No. and Description of Boilers One single ended Working Pressure 120 Tested by hydraulic pressure to 240 Date of test 14.8.13
 No. of Certificate 5139 Can each boiler be worked separately Area of fire grate in each boiler 35 1/2 sq ft No. and Description of safety valves to each boiler 2 Spring Area of each valve 5.4 sq in Pressure to which they are adjusted 123
 Are they fitted with easing gear Yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler No
 Smallest distance between boilers or uptakes and bunkers or woodwork 1' 3" Inside Mean dia. of boilers 11'-0" Length 10'-6"
 Material of shell plates steel Thickness 1/2 Range of tensile strength 28-32 Are the shell plates welded or flanged No
 Descrip. of riveting: cir. seams 2-R-lap long. seams 2B-3 Riv Diameter of rivet holes in long. seams 1 1/2 Pitch of rivets 7"
 Width of butt straps 13 3/8 x 1/2 Per centages of strength of longitudinal joint rivets 106 Working pressure of shell by rules 86.57
 Size of manhole in shell 19" x 15" Size of compensating ring 7 x 1 1/2 in. steel No. and Description of Furnaces in each boiler 2 plain Material steel Outside diameter 40" Length of plain part top 79 3/4 Thickness of plates crown 2 1/2 bottom 7 3/8
 Description of longitudinal joint Weld No. of strengthening rings none Working pressure of furnace by the rules 132 Combustion chamber plates: Material steel Thickness: Sides 3/8 Back 3/8 Top 3/8 Bottom 2 7/8 Pitch of stays to ditto: Sides 10 x 9 Back 9 x 9
 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 121 Material of stays steel Diameter at smallest part 1.45 Area supported by each stay 81 Working pressure by rules 143 End plates in steam space: Material steel Thickness 1 1/2
 How are stays secured nuts & washers Working pressure by rules 126 Material of stays steel Diameter at smallest part 2.87
 Area supported by each stay 2.36 Working pressure by rules 126 Material of Front plates at bottom steel Thickness 1/2 Material of cover back plate steel Thickness 1 1/2 Greatest pitch of stays 14 x 9 Working pressure of plate by rules 166 Diameter of tubes 3 1/2
 Pitch of tubes 4 3/4 x 4 3/4 Material of tube plates steel Thickness: Front 1/2 Back 1/2 Mean pitch of stays 11" Pitch across wide
 Working pressures by rules 129 Girders to Chamber tops: Material steel Depth and thickness of girder at centre 7 x 1 1/4 Length as per rule 30 Distance apart 7 1/2 Number and pitch of Stays in each 209
 Working pressure by rules 138 Superheater or Steam chest; how connected to boiler none Can the superheater be shut off and the boiler worked
 Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet
 Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness
 Stiffened with rings Distance between rings Working pressure by rules End plates: Thickness How stayed
 Working pressure of end plates Area of safety valves to superheater Are they fitted with easing gear

The foregoing is a correct description,
 RILEY BROS. (BOILERMAKERS) LIMITED, Manufacturer.

Is the approved plan of boiler forwarded herewith yes
 Total No. of visits 15 Return for duplicate Boiler
 Dates During progress of work in shops: June 12, 14, 28, July 25, 10, 11, 16, 23, 30, 31, Aug 1, 6, 8, 14
 During erection on board vessel: Sep 18, 22, 25

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built under special survey, is of good material and workmanship and on completion was tested by hydraulic pressure with satisfactory results. Secured in place, mounted and safety valves adjusted to W.P.

Survey Fee ... £ 3-13-0 When applied for, MONTHLY 1913
 Travelling Expenses (if any) £ ✓ When received, 1913
 J. J. Findlay
 Wm Morrison
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute TUE. OCT. 7-1913
 Signed _____
 Lloyd's Register Foundation