

REPORT ON BOILERS.

No. 9774

SAT. 25 AUG. 1917

Received at London Office

Date of writing Report 1917 When handed in at Local Office 8.6.17 Port of Middlesbrough
 No. in Survey held at Stockton-on-Tees Date, First Survey 4th April 1916 Last Survey 30th May 1917
 Reg. Book. on the Donkey Boiler of S.S. Embleton (Number of Visits (S.S.N^o 509)) Tons } Gross
 Master Built at Stockton By whom built Messrs Ropner & Sons When built
 Engines made at Stockton By whom made Messrs Blair & Co Lim. When made
 Boilers made at Stockton By whom made Messrs John Sudron & Co Ld (N^o 3663) When made 1917
 Registered Horse Power Owners Port belonging to

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel John Spencer & Sons

(Letter for record (P)) Total Heating Surface of Boilers 991 sq ft Is forced draft fitted no No. and Description of Boilers One single ended Working Pressure 100 Tested by hydraulic pressure to 200 Date of test 30.5.17
 No. of Certificate 5765 Can each boiler be worked separately Area of fire grate in each boiler 34 sq ft No. and Description of safety valves to each boiler 2 direct spring Area of each valve 5.94 Pressure to which they are adjusted 105 lb
 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 on upper deck External dia. of boilers 10'-6" Length 10'-6"
 Material of shell plates Steel Thickness 5/8" Range of tensile strength 29-33 Are the shell plates welded or flanged no
 Descrip. of riveting: cir. seams S. lap long. seams 3 Riv. lap Diameter of rivet holes in long. seams 15/16" Pitch of rivets 3 5/8"
 Lap of plates or width of butt straps 6 1/2" Per centages of strength of longitudinal joint rivets 77.9 Working pressure of shell by rules 74.15
 No. and Description of Furnaces in each boiler 2 plain Material steel Outside diameter 38" Length of plain part top 84 1/2" Thickness of plates crown 19/32" bottom 5/16"
 Description of longitudinal joint Weld No. of strengthening rings none Working pressure of furnace by the rules 100 Combustion chamber plates: Material steel Thickness: Sides 9/16" Back 1/2" Top 9/16" Bottom 1/16" Pitch of stays to ditto: Sides 9 1/2" Back 8 1/2" x 9" Top 9 1/4" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 100 Material of stays iron Diameter at smallest part 1.69 Area supported by each stay 95 Working pressure by rules 106 End plates in steam space: Material steel Thickness 13/16" Pitch of stays 8 1/2" x 18 1/2" How are stays secured nuts + washers Working pressure by rules 100 Material of stays steel Diameter at smallest part 4.3
 Area supported by each stay 402 Working pressure by rules 111 Material of Front plates at bottom steel Thickness 13/16" Material of Lower back plate steel Thickness 13/16" Greatest pitch of stays 14" x 9" Working pressure of plate by rules 159 Diameter of tubes 3 1/4"
 Pitch of tubes 4 3/16" x 4 5/8" Material of tube plates steel Thickness: Front 13/16" Back 5/8" Mean pitch of stays 11 15/32" Pitch across wide water spaces 13 3/4" Working pressures by rules 106 Girders to Chamber tops: Material iron Depth and thickness of girder at centre 7" x 1 1/2" Length as per rule 26 1/4" Distance apart 9 1/4" Number and pitch of Stays in each one
 Working pressure by rules 138 Superheater or Steam chest; how connected to boiler none Can the superheater be shut off and the boiler worked separately? Diameter Length Thickness of shell plates" Material Description of longitudinal joint Diam. of rivet holes Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness If 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,
 THOMAS SUDRON & CO. LIMITED. Manufacturer.

R. Johnston

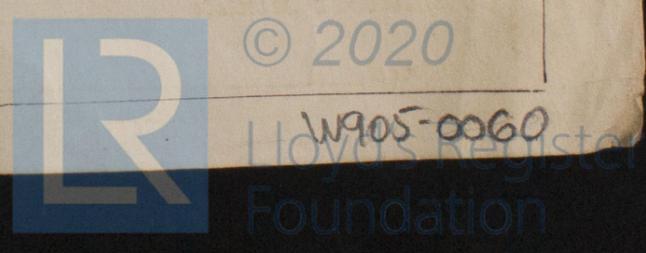
Dates of Survey } During progress of } 1916. Apr 4.11. July 12.18. Aug 11.24 Is the approved plan of boiler forwarded herewith yes
 while } work in shops - - }
 building } During erection on }
 board vessel - - - }
 Total No. of visits 14

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. The boiler is to be fitted on board at this port. The boiler has been satisfactorily secured on board, examined under steam and safety valves adjusted.

Survey Fee ... £ 3-6-0 When applied for, Monthly a/c
 Travelling Expenses (if any) £ : : When received, 1917
Wm Morrison
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

TUE. AUG. 28 1917.

Committee's Minute
 Assigned



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