

pt. 5a.

REPORT ON BOILERS.

No. 7659

Received at London Office SAT. NOV. 23. 1912

Date of writing Report 22/11/12 When handed in at Local Office 22. 11. 1912 Port of Middlesbrough
 No. in Survey held at Stockton-on-Tees Date, First Survey 9th Sept. Last Survey 21st Nov. 1912
 Reg. Book. S.S. No. 206 (Number of Visits 11) Gross Tons 11 Net Tons 11
 on the Stockton-on-Tees Owners John Spencer & Sons
 Master Sudbrook Built at Sudbrook By whom built C. H. Walker & Co When built 1912
 Engines made at Stockton By whom made Messrs Thos Sudron & Co (No. 3132) When made 1912
 Boilers made at Stockton By whom made Messrs Thos Sudron & Co (No. 3132) When made 1912
 Registered Horse Power 11 Port belonging to Stockton-on-Tees

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

(Letter for record (S)) Total Heating Surface of Boilers 1054 sq ft Is forced draft fitted no No. and Description of Boilers One single ended
 Working Pressure 125 Tested by hydraulic pressure to 250 Date of test 10.10.12
 No. of Certificate 4960 Can each boiler be worked separately no Area of fire grate in each boiler 36 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 125
 Are they fitted with easing gear no 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 11'-0" Mean dia. of boilers 11'-0" Length 10'-0"
 Material of shell plates steel Thickness 1/4" Range of tensile strength 29-33 Are the shell plates welded or flanged no
 Descrip. of riveting: cir. seams 2 Riv lap long. seams 2 Riv Diameter of rivet holes in long. seams 15/16 Pitch of rivets 5"
3 Rivts per pitch Per centages of strength of longitudinal joint 89.2 Working pressure of shell by plate 81.2
 No. of plates or width of butt straps 9 7/8 x 1/2 in Size of manhole in shell 16" x 12" Size of compensating ring 5 1/2 x 15/16 No. and Description of Furnaces in each boiler 2 plain Material steel Outside diameter 40 1/2" Length of plain part 79 7/8 Thickness of plates 2 1/32 crown 7 1/2 man bottom 104
 Description of longitudinal joint weld No. of strengthening rings none Working pressure of furnace by the rules 125 Combustion chamber plates: Material steel Thickness: Sides 19/32 Back 9/16 Top 19/32 Bottom 13/16 Pitch of stays to ditto: Sides 9 1/2 one Back 8 3/4 x 9 1/2 Top 8 one If stays are fitted with nuts or riveted heads nuts Working pressure by rules 131 Material of stays steel Diameter at smallest part 1.45 Area supported by each stay 83 Working pressure by rules 140 End plates in steam space: Material steel Thickness 25/32
 Pitch of stays 15 x 14 1/2 How are stays secured nuts Working pressure by rules 177 Material of stays steel Diameter at smallest part 2 1/16
 Area supported by each stay 222 Working pressure by rules 125 Material of Front plates at bottom steel Thickness 25/32 Material of lower back plate steel Thickness 25/32 Greatest pitch of stays 4 x 9 1/2 Working pressure of plate by rules 147 Diameter of tubes 3 1/2"
 Pitch of tubes 4 3/4 x 4 3/4 Material of tube plates steel Thickness: Front 25/32 Back 23/32 Mean pitch of stays 11 7/8 Pitch across wide water spaces 14" Working pressure by rules 127 Girders to Chamber tops: Material steel Depth and thickness of girder at centre 6 3/4 x 1 1/4 Length as per rule 25 1/8 Distance apart 8" Number and pitch of Stays in each one
 Working pressure by rules 160 Superheater or Steam chest: how connected to boiler none Can the superheater be shut off and the boiler worked separately no
 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.

Dates of Survey 1912. Sept. 9. 17. 24. 27. Oct. 2. 4. 9. 10. Nov. 2. 8. 1912 Is the approved plan of boiler forwarded herewith yes
 while building Return for duplicate Pls
 Total No. of visits 11

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 was also examined under full working steam pressure and afterwards examined internally & externally & found satisfactory

Survey Fee ... £ 3-10-0 When applied for, MONTHLY 191 10/6
 Travelling Expenses (if any) £ ✓ : : When received, 191

Wm Morrison
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute FRI. MAR. 7-1913
 Assigned



Recd. 26/11/12

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