

Rpt. 5a.

REPORT ON BOILERS.

No. 7199
WED. JUL. 17. 1912
MON. JAN. 1 - 1912.

Received at London Office

Date of writing Report 30/12/11 When handed in at Local Office 20.12.11 Port of MIDDLESBROUGH-ON-TEES,
 No. in Survey held at Stockton-on-Tees Date, First Survey 4.11.10 Last Survey 19.12.11
 Reg. Book. on the S. S. Twickenham (Number of Visits 11) (Gross Tons 55) (Net Tons 470)
 Master Built at Stockton By whom built James Popner & Sons When built
 Engines made at By whom made when made
 Boilers made at Stockton By whom made James Riley Bros (No. 4313) when made 1912
 Registered Horse Power Owners Port belonging to

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

(Letter for record (a)) Total Heating Surface of Boilers 1160 sq ft Is forced draft fitted No. and Description of Boilers One single ended Working Pressure 120 Tested by hydraulic pressure to 240 Date of test 19.12.11
 No. of Certificate 4798 Can each boiler be worked separately Area of fire grate in each boiler 32 sq ft No. and Description of safety valves to each boiler 2 direct spring Area of each valve 7.07 sq in Pressure to which they are adjusted 125
 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 side 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 Riv lap long. seams 2 B-3 Riv Diameter of rivet holes in long. seams 15/16" Pitch of rivets 6 3/4"
 Top of plates or width of butt straps 13 x 1/2" Per centages of strength of longitudinal joint rivets 88.0 Working pressure of shell by plate 86.1
 rules 129 Size of manhole in shell 16" x 12" Size of compensating ring 9 in = 9 in No. and Description of Furnaces in each boiler 2 plain Material steel Outside diameter 39 1/2" Length of plain part top 6'-4" Thickness of plates crown 5/16" bottom 5'-8" bottom 1/8"
 Description of longitudinal joint welded No. of strengthening rings none Working pressure of furnace by the rules 141 Combustion chamber plates: Material steel Thickness: Sides 3/8" Back 3/8" Top 3/8" Bottom 3/4" Pitch of stays to ditto: Sides 10" x 9" Back 9" x 9 1/2"
 Top 9" x 9" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 121 Material of stays iron Diameter at smallest part 1 1/2" Area supported by each stay 90 Working pressure by rules 172 End plates in steam space: Material steel Thickness 15/16"
 Pitch of stays 17" x 19" to tubes How are stays secured nuts & 8 x 3/8 washers Working pressure by rules 120 Material of stays iron Diameter at smallest part 2.79
 Area supported by each stay 340 Working pressure by rules 134 Material of Front plates at bottom steel Thickness 15/16" Material of Lower back plate steel Thickness 15/16" Greatest pitch of stays 14 1/2" x 9 1/2" Working pressure of plate by rules 212 Diameter of tubes 3 1/2"
 Pitch of tubes 4 1/2" x 4 1/2" Material of tube plates steel Thickness: Front 15/16" Back 1/2" Mean pitch of stays 10 5/8" Pitch across wide water spaces 14" Working pressures by rules 150 Girders to Chamber tops: Material steel Depth and thickness of girder at centre 7 1/2" x 1 1/2" Length as per rule 29" Distance apart 9" Number and pitch of Stays in each 2 @ 9"
 Working pressure by rules 146 Superheater or Steam chest: has 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

FOR THE FOREGOING IS A CORRECT DESCRIPTION,
 RILEY BROS. (BOILER MAKERS) LIMITED, Manufacturer.

Dates of Survey: During progress of work in shops - - - 1911. Nov. 4, 7, 9, 12, 20, 22. Dec. 4, 6, 12, 14, 19. Is the approved plan of boiler forwarded herewith yes
 while building: During erection on board vessel - - - 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 is to be fitted on board at this port. This boiler has now been satisfactorily secured on board, examined under steam and the safety valves adjusted.

Survey Fee ... £ 3-17-0 When applied for, MONTHLY A/c. When received, 2/11/11
 Travelling Expenses (if any) £ ...

Committee's Minute FRI. JUL. 19. 1912
 Assigned see Minute on Ind. Rpt 7452
 W. Morrison & J. W. Dawkins, Engineer Surveyors to Lloyd's Register of British and Foreign Shipping.

