

REPORT ON BOILERS.

No. 5060

Recd. No. 19175
THUR. 11 JUL 1907

Received at London Office

Date of writing Report 24th May 1907 When handed in at Local Office 24th May 1907 Port of MIDDLESBROUGH-ON-TEES

No. in Survey held at Stockton Date, First Survey 9th April 1907 Last Survey 19
 Reg. Book. Main Boiler (No. 3821) S. K. City of Belfast (Number of Visits _____) Tons Gross _____
 on the Main Boiler (No. 3821) S. K. City of Belfast Net _____
 Master _____ Built at Selby By whom built Bochane Sons When built 1907
 Engines made at Bolchester By whom made A. G. Mumford Ltd when made 1907
 Boilers made at Stockton By whom made Riley Bros Ltd when made 1907
 Registered Horse Power _____ Owners _____ Port belonging to _____

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel J. Spencer & Sons Ltd
 (Letter for record (S)) Total Heating Surface of Boilers 760 ft² Is forced draft fitted No No. and Description of Boilers One Cyl. Mult. single ended Working Pressure 140 lbs Tested by hydraulic pressure to 280 lbs Date of test 16-5-07
 No. of Certificate 3924 Can each boiler be worked separately — Area of fire grate in each boiler 28.4 ft² No. and Description of safety valves to each boiler Two Spring Area of each valve 3.14 sq in Pressure to which they are adjusted 140 lbs
 Are they fitted with easing gear Yes 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 4' Int^l Mean dia. of boilers 9'-6" Length 9'-0"
 Material of shell plates Steel Thickness 4/16" Range of tensile strength 28/32 Are the shell plates welded or flanged no
 Descrip. of riveting: cir. seams DR L long. seams J.R. DR S Diameter of rivet holes in long. seams 15/16" Pitch of rivets 5 1/8"
 Lap of plates or width of butt straps 13" x 16" Per centages of strength of longitudinal joint rivets 96 Working pressure of shell by rules 140.5 Size of manhole in shell 12" x 16" Size of compensating ring 7" x 4/16" plate 81.75
 boiler 2 plain Material Steel Outside diameter 2'-11" Length of plain part top 5'-8" Thickness of plates crown } 4/16" bottom } 7'-10"
 Description of longitudinal joint welded No. of strengthening rings — Working pressure of furnace by the rules 154 Combustion chamber plates: Material Steel Thickness: Sides 7/16" Back 3/32" Top 7/16" Bottom 3/4" Pitch of stays to ditto: Sides 8 1/2" x 8" Back 8 1/2" x 9 1/2"
 Top 8" x 8" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 150 Material of stays Steel Diameter at smallest part 1 3/8" Area supported by each stay 80.75 sq in Working pressure by rules 146 End plates in steam space: Material Steel Thickness 7/8"
 Pitch of stays 1 1/2" x 16" How are stays secured Angled Stay Working pressure by rules 140 Material of stays Steel Diameter at smallest part 2 3/8"
 Area supported by each stay 284 sq in Working pressure by rules 156 Material of Front plates at bottom Steel Thickness 7/8" Material of Lower back plate Steel Thickness 7/8" Greatest pitch of stays 11 x 8 1/2" Working pressure of plate by rules 275 Diameter of tubes 3 1/4"
 Pitch of tubes 4 1/4" x 4 1/4" Material of tube plates Steel Thickness: Front 7/8" Back 3 1/2" Mean pitch of stays 9 5/8" Pitch across wide water spaces 13 1/2" Working pressures by rules 161 Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 6 3/4" x 1 1/2" Length as per rule 2'-3" Distance apart 8" Number and pitch of Stays in each 2 8"
 Working pressure by rules 164 Superheater or Steam chest; how connected to boiler riveted Can the superheater be shut off and the boiler worked separately no Diameter 2'-6" Length 2'-0" Thickness of shell plates 1/2" Material Steel Description of longitudinal joint SR L Diam. of rivet holes 13/16" Pitch of rivets 2" Working pressure of shell by rules 231 Diameter of flue — Material of flue plates — Thickness —
 If stiffened with rings — Distance between rings — Working pressure by rules — End plates: Thickness 3/4" How stayed 2 Stays
 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. (BOILERMAKERS) LIMITED Manufacturer.

Dates of Survey } During progress of } 1907. Apr 9. 15. 17. May 4. 7. 10. 16.
 while } work in shops - - }
 building } During erection on }
 board vessel - - - }

Is the approved plan of boiler forwarded herewith Retained for duplicate
 Total No. of visits _____

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c. This boiler has been built under Special Purvey. The materials and workmanship are good. On completion it satisfactorily withstood the hydraulic test. The boiler fitted on board, tested under steam, found satisfactory, reliable in my opinion to be classed with the rotation of L.M.C. 7.07 in the Register Book.)

Survey Fee ... £ 2 13 4 When applied for, 19
 Travelling Expenses (if any) £ : : When received, 20-8-1907

R. D. Shilston James Barclay
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping. 3.7.07

Committee's Minute FRI. 12 JUL 1907
 Assigned _____

