

## REPORT ON BOILERS.

No. 15848

Received at London Office

WED. NOV. 17 1920

of writing Report 101 When handed in at Local Office 15/11/20 Port of West Hartlepool  
 No. in Survey held at West Hartlepool Date, First Survey 29<sup>th</sup> Sept. Last Survey 12<sup>th</sup> Nov. 1920  
 on the Main Boiler (R 294) for S.S. "Branstone" Tons } Gross  
 Net  
 Built at Newcastle By whom built Shields Eng. & D.D. Co. Ltd. When built  
 By whom made Central Marine Eng. Works Ltd. When made 1919  
 Registered Horse Power 78. Owners Port belonging to

ULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel J. Spencer & Sons Ltd  
 Letter for record S. Total Heating Surface of Boilers 1468  $\text{ft}^2$  Is forced draft fitted no No. and Description of  
 Boilers One, single ended Working Pressure 130 lbs Tested by hydraulic pressure to 260 lbs Date of test 29.11.19  
 of Certificate 3553 Can each boiler be worked separately Area of fire grate in each boiler 44.3  $\text{ft}^2$  No. and Description of  
 Safety valves to each boiler Area of each valve Pressure to which they are adjusted  
 Are they fitted with easing gear 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 Mean dia. of boilers 13'-3" Length 10'-0"  
 Material of shell plates Steel Thickness  $\frac{27}{32}$ " Range of tensile strength 27/30 Are the shell plates welded or flanged yes  
 Description of riveting: cir. seams D.R.L. long. seams J.R.D.B.S. Diameter of rivet holes in long. seams  $\frac{15}{16}$ " Pitch of rivets  $6\frac{5}{8}$ "  
 of plates or width of butt straps 14" Per centages of strength of longitudinal joint 92 Working pressure of shell by  
 rules 133 lbs Size of manhole in shell 12" x 16" Size of compensating ring 2'-3  $\frac{1}{2}$ " x 2'-7  $\frac{1}{2}$ " x 2'-7  $\frac{1}{2}$ " No. and Description of Furnaces in each  
 boiler 3 Deighton Material Steel Outside diameter 3'-3  $\frac{3}{4}$ " Length of plain part top Thickness of plates crown } 13"  
 bottom } 32"  
 Description of longitudinal joint welded No. of strengthening rings Working pressure of furnace by the rules 143 lbs Combustion chamber  
 plates: Material Steel Thickness: Sides  $\frac{5}{8}$ " Centre  $\frac{9}{16}$ " Back Wing  $\frac{5}{8}$ " Top  $\frac{5}{8}$ " Bottom  $\frac{5}{8}$ " Pitch of stays to ditto: Sides 10" x 10" Back 10" x 9"  
 10" x 10" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 134 Material of stays Steel Diameter at  
 smallest part 1.5" Area supported by each stay 10" x 9" Working pressure by rules 133 End plates in steam space: Material Steel Thickness  $\frac{15}{16}$ "  
 Pitch of stays 16  $\frac{1}{4}$ " x 18" How are stays secured D. nuts Working pressure by rules 134 Material of stays Steel Diameter at smallest part 3.67"  
 Area supported by each stay 16  $\frac{1}{4}$ " x 18" Working pressure by rules 130 Material of Front plates at bottom Steel Thickness  $\frac{27}{32}$ " Material of  
 lower back plate Steel Thickness  $\frac{3}{4}$ " Greatest pitch of stays 14" x 10" Working pressure of plate by rules 131 Diameter of tubes 3  $\frac{1}{4}$ "  
 Pitch of tubes 4  $\frac{1}{2}$ " x 4  $\frac{1}{2}$ " Material of tube plates Steel Thickness: Front  $\frac{27}{32}$ " Back  $\frac{11}{16}$ " Mean pitch of stays 9" x 13  $\frac{1}{2}$ " Pitch across wide  
 inter spaces 14  $\frac{1}{4}$ " Working pressures by rules 134 lbs Girders to Chamber tops: Material Steel Depth and thickness of  
 girder at centre 7  $\frac{1}{8}$ " x 1  $\frac{1}{4}$ " Length as per rule 2'-4" Distance apart 10" Number and pitch of Stays in each Two 10" x 10"  
 Working pressure by rules 134 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  
 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,

Manufacturer.  
 MANAGING DIRECTOR, C.M.E.W.

Dates During progress of 1919. Sep 29. Oct 9. 29. Nov 11. 12. 14 Is the approved plan of boiler forwarded herewith Previously sent  
 Survey work in shops - - - 17. 19. 27. 28. 29. 1920. Nov 12. with duplicate.  
 while During erection on 17. 19. 27. 28. 29. 1920. Nov 12. (Report No. 15828)  
 building board vessel - - - See Newcastle Report 73916 Total No. of visits 12.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built  
 under Special Survey, and is in accordance with the Rules.  
 The materials and workmanship are good.  
 It has been put on board the above vessel, which has been  
 towed to the Tyne for completion

Survey Fee ... £ 3 : 18/- When applied for, 10/11/20.  
 Travelling Expenses (if any) £ : : When received, 11/12/20.

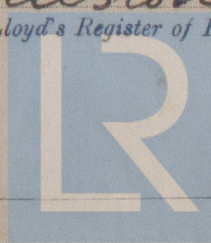
R.D. Shilston.

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

Committee's Minute

Assigned

TUE. DEC 14 1920



Lloyd's Register  
 Foundation