

Rpt. 5a.

# REPORT ON BOILERS

No. 8717.

DATE NOV. 14. 1914

Received at London Office

Date of writing Report 101 When handed in at Local Office Nov. 13 1914 Port of Middlesbrough  
 No. in Survey held at Stockton Date, First Survey September 30 Last Survey October 9 1914  
 Reg. Book. 41 on the S.S. Gaboon (Number of Visits 9) Gross Tons 1014 Net 1014  
 Master By whom built Newcastle By whom built The Iron B.B.C. Co. Ltd. When built 1914  
 Engines made at Newcastle By whom made A. E. Mowbray Eng When made 1915  
 Boilers made at Stockton By whom made Messrs Gile & Co. (No. 4745) When made 1914  
 Registered Horse Power                      Owners                      Port belonging to                     

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

(Letter for record S) Total Heating Surface of Boilers 9600 Is forced draft fitted no No. and Description of Boilers One S.S. multitubular Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs Date of test 9-11-14  
 No. of Certificate 5414 Can each boiler be worked separately Yes Area of fire grate in each boiler 28 3/4 No. and Description of safety valves to each boiler 2 Direct spring Area of each valve 3.54 Pressure to which they are adjusted 185 lbs  
 Are they fitted with casing 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                      dia. of boilers 10'-6" Length 10'-0"  
 Material of shell plates Steel Thickness 5 3/4 Range of tensile strength 29 1/2 - 33 Are the shell plates welded or flanged no  
 Descrip. of riveting: cir. seams 2 R. lap long. seams 2 B. - 3 R. Diameter of rivet holes in long. seams 1 5/16 Pitch of rivets 4" S.R.  
 Lap of plates or width of butt straps 15 x 3/4 Per centages of strength of longitudinal joint rivets 88.5 Working pressure of shell by rules 180 lbs Size of manhole in shell 10 x 15 Size of compensating ring 4 x 1 No. and Description of Furnaces in each boiler 2 plain Material Steel Outside diameter 36 Length of plain part 44 1/6 Thickness of plates crown 2 3/32 bottom 1 3/16 mean                       
 Description of longitudinal joint weld No. of strengthening rings none Working pressure of furnace by the rules 184 lbs combustion chamber plates: Material Steel Thickness: Sides 2 3/32 Back 5/8 Top 2 3/32 Bottom 1 5/16 Pitch of stays to ditto: Sides 10 x 8 Back 8 1/2 x 8 1/2  
 Top 9 x 8 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 182 lbs Material of stays Steel AREA                      at smallest part 1.43 Area supported by each stay 40 Working pressure by rules 108 lbs End plates in steam space: Material Steel Thickness 1 3/16  
 Pitch of stays 10 1/4 How are stays secured nuts Working pressure by rules 84 lbs Material of stays Steel AREA                      at smallest part 5.05  
 Area supported by each stay 291 Working pressure by rules 184 Material of Front plates at bottom Steel Thickness 1 3/16 Material of Lower back plate Steel Thickness 1 3/16 Greatest pitch of stays 14 x 8 1/2 Working pressure of plate by rules 244 lbs Diameter of tubes 3 1/2  
 Pitch of tubes 4 5/8 + 4 1/2 Material of tube plates Steel Thickness: Front 1 3/16 Back 1 3/16 Mean pitch of stays 11 1/6 Pitch across wide water spaces 14 Working pressures by rules 180 lbs Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 8 x 1 3/8 Length as per rule 28 Distance apart 9 Number and pitch of Stays in each 2 at 8  
 Working pressure by rules 186 lbs Superheater or Steam chest: not 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 casing gear

SURVEY REQUEST NO. 991 ATTACHED.

FOR THE FOREGOING IS A CORRECT DESCRIPTION, RILEY BROS. (BOILERMAKERS) LIMITED.

Manufacturer.                      SECRETARY.

Dates of Survey                      During progress of 1914. Sept 30. Oct 7. 9. 16. 19. 26 Nov. 3. 6. 9. Is the approved plan of boiler forwarded herewith Yes  
 while                      During erection on                      Total No. of visits 9 Returned 18/11/14  
 building                      board vessel                     

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been constructed under Special Survey, is of good material and workmanship, and has been tested by hydraulic pressure with satisfactory results. It has now been satisfactorily fitted and secured on board the vessel forwarded to Newcastle to be fitted on board

Survey Fee ... .. £ 3 : 4 : } When applied for, 191 /c.  
 Travelling Expenses (if any) £ : : } When received, 191 /c.

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

Committee's Minute                       
 Assigned See minute on how to be attached

