

Rpt. 5a.

## REPORT ON BOILERS.

No. 6820.

Received at London Office  
THUR. 18 MAY 1911  
SAT. OCT. 7-1911

Date of writing Report 17.5.11 When handed in at Local Office 17.5.11 Port of MIDDLESBROUGH-ON-TEES  
No. in Survey held at Stockton-on-Tees Date, First Survey 10th Dec. 1910 Last Survey 12th May 1911  
Reg. Book. S.S. ROTHLEY. Blyth L.L. & D.D. Co's L.L. 159 S.S. No. 159 Tons { Gross 3942  
on the S.S. ROTHLEY. Blyth L.L. & D.D. Co's L.L. 159 S.S. No. 159 Tons { Net 2487  
Master Built at Blyth By whom built Blyth L.L. & D.D. Co's L.L. When built 1911  
Engines made at Newcastle By whom made North Eastern Marine when made 1911  
Boilers made at Stockton By whom made Thomas Hudron & Co. Ltd. (No. 2829) when made 1911  
Registered Horse Power Owners Port belonging to Newcastle

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel J. Spencer & Sons  
Letter for record (5) Total Heating Surface of Boilers 820  $\text{sq ft}$  Is forced draft fitted No. and Description of  
Boilers One single ended Working Pressure 120 Tested by hydraulic pressure to 240 Date of test 12.5.11  
No. of Certificate 4647 Can each boiler be worked separately ☒ Area of fire grate in each boiler 29  $\text{sq ft}$  No. and Description of  
Safety valves to each boiler Two springs  $\frac{1}{2}$  dia of each valve 2  $\frac{1}{2}$ " Pressure to which they are adjusted 120 lbs  
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 18" Mean dia. of boilers 10'-0" Length 10'-0"  
Material of shell plates steel Thickness  $2\frac{1}{2}$ " Range of tensile strength 29-33 Are the shell plates welded or flanged No  
Descrip. of riveting: cir. seams 2 Riv lap long. seams Quad Riv lap Diameter of rivet holes in long. seams  $\frac{15}{16}$  Pitch of rivets  $4\frac{1}{2}$ "  
Gap of plates on width of butt straps  $9\frac{1}{16}$  Per centages of strength of longitudinal joint rivets 79.11 Working pressure of shell by  
Rules 120 Size of manhole in shell 16" x 12" Size of compensating ring  $5\frac{1}{2} \times 7\frac{1}{8}$  plate 79.11  
Boiler 2 plain Material steel Outside diameter 36" Length of plain part top 78 7/8 Thickness of plates crown  $5\frac{1}{8}$   
Description of longitudinal joint welded No. of strengthening rings none Working pressure of furnace by the rules 124 Combustion chamber  
Plates: Material steel Thickness: Sides  $\frac{1}{2}$ " Back  $\frac{3}{8}$ " Top  $\frac{1}{2}$ " Bottom  $\frac{3}{4}$ " Pitch of stays to ditto: Sides  $8\frac{3}{4} \times 6\frac{1}{2}$  Back  $9\frac{1}{2} \times 9$   
Top  $8\frac{1}{2} \times 6\frac{1}{2}$  If stays are fitted with nuts or riveted heads nuts Working pressure by rules 128 Material of stays steel Diameter at  
Smallest part 1.36" Area supported by each stay 85.5 Working pressure by rules 136 End plates in steam space: Material steel Thickness  $\frac{7}{8}$ "  
Pitch of stays  $17\frac{1}{2} \times 16\frac{1}{8}$  How are stays secured nuts & n Working pressure by rules 120 Material of stays steel Diameter at smallest part 2.34  
Area supported by each stay 326.7 Working pressure by rules 138 Material of Front plates at bottom steel Thickness  $\frac{7}{8}$  Material of  
Lower back plate steel Thickness  $\frac{7}{8}$  Greatest pitch of stays  $13\frac{1}{2} \times 9$  Working pressure of plate by rules 124 Diameter of tubes  $3\frac{1}{4}$ "  
Pitch of tubes  $4\frac{3}{4} \times 4\frac{3}{8}$  Material of tube plates steel Thickness: Front  $\frac{7}{8}$ " Back  $\frac{3}{4}$ " Mean pitch of stays 11.3" Pitch across wide  
Water spaces 14" Working pressures by rules 140 Girders to Chamber tops: Material steel Depth and thickness of  
Order at centre 6" x 1  $\frac{1}{4}$ " Length as per rule 25" Distance apart 8  $\frac{1}{2}$ " Number and pitch of Stays in each 2 @ 6  $\frac{1}{2}$ "  
Working pressure by rules 122 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,

THOMAS HUDRON &amp; CO. LIMITED. Manufacturer.

Dates { During progress of 1910 Dec. 20. 1911 May 24. Feb. 1. 7. 9. Mar. 2. 9. Is the approved plan of boiler forwarded herewith yes  
Survey work in shops - - -  
while { During erection on Apr. 11. 19. 21. 25 May 1. 4. 5. 9. Total No. of visits 17  
building board vessel - - -  
See Newcastle Report 61138

GENERAL REMARKS (State quality of workmanship, opinions as to class, &amp;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

Now fitted on board &amp; all mountings fitted &amp; valves adjusted

Survey Fee ... £ 2-15-0

Travelling Expenses (if any) £ :

When applied for, 19

When received, 19

Wm Morrison, J. S. Llewellyn

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

Committee's Minute

FRI. OCT. 13. 1911

Assigned

Lloyd's Register  
Foundation  
WS2-0188