

REPORT ON BOILERS.

No. 9862.

Received at London Office

Writing Report 1917 When handed in at Local Office 21.8.17 1917 Port of *Middlesbrough*
 Survey held at *Stockton-on-Tees* Date, First Survey *11th May 17* Last Survey *10th Aug 1917*
 Range on the *S/O 82 clis* (Number of Visits *12*) Gross Tons }
 Net Tons }
 Built at *Appledore* By whom built *P. Cook & Son* When built *1918*
 Made at *Newbury* By whom made *Thos Plenty & Son Lim.* When made
 Made at *Stockton* By whom made *Thos Riley Bros Lim. (Nº 5022)* When made *1917*
 Owners Port belonging to

LITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.

Manufacturers of Steel *John Spencer & Sons*for record (S) ✓ Total Heating Surface of Boilers *1271* ✓ Is forced draft fitted *No* No. and Description ofOne single ended ✓ Working Pressure *180* Tested by hydraulic pressure to *360* Date of test *10.8.17*Certificate *5791* Can each boiler be worked separately ✓ Area of fire grate in each boiler *38* ✓ No. and Description ofvalves to each boiler *Two Spring loaded* Area of each valve *4.91* ✓ Pressure to which they are adjusted *185* ✓they fitted with easing gear *Yes* In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler ✓Least distance between ~~boilers~~ or uptakes and bunkers *18"* ✓ *Inside* Mean dia. of boilers *12'-0"* Length *11'-0"*Material of shell plates *Steel* ✓ Thickness *3/32"* ✓ Range of tensile strength *28-32* ✓ Are the shell plates welded or flanged *No* ✓Pitch of riveting: cir. seams *2 R. lap* long. seams *2 R-3 Riv* Diameter of rivet holes in long. seams *1 1/2"* Pitch of rivets *7 1/2"* ✓of plates or width of butt straps *15 1/4" x 1 1/2"* ✓ Per centages of strength of longitudinal joint rivets *86.5* ✓ Working pressure of shell by*180* Size of manhole in shell *19" x 15"* Size of compensating ring *7 x 1" in. steel* No. and Description of Furnaces in each*2 Morrison* ✓ Material *steel* ✓ Outside diameter *44 1/2"* ✓ Length of plain part *top* ✓ Thickness of plates *bottom* } *3/8"* ✓Description of longitudinal joint *Weld* ✓ No. of strengthening rings ✓ Working pressure of furnace by the rules *190* ✓ Combustion chamberMaterial *Steel* ✓ Thickness: Sides *5/8"* ✓ Back *2 1/2"* ✓ Top *3/8"* ✓ Bottom *1 1/2"* ✓ Pitch of stays to ditto: Sides *9" x 8"* ✓ Back *8 1/4" x 9 1/2"* ✓*9" x 8"* If stays are fitted with nuts or riveted heads *nuts* ✓ Working pressure by rules *183* Material of stays *steel* ✓ *area* atleast part *1 1/2"* Area supported by each stay *72* ✓ Working pressure by rules *193* End plates in steam space: Material *steel* ✓ Thickness *1"* ✓of stays *16" x 1 1/2"* How are stays secured *nuts & washers* ✓ Working pressure by rules *188* Material of stays *steel* ✓ *area* at smallest part *4.57* ✓supported by each stay *261* ✓ Working pressure by rules *182* Material of Front plates at bottom *steel* ✓ Thickness *1"* ✓ Material ofback plate *steel* ✓ Thickness *1"* ✓ Greatest pitch of stays *14" x 9 1/4"* ✓ Working pressure of plate by rules *238* Diameter of tubes *3 1/2"* ✓of tubes *5" x 4 3/4"* Material of tube plates *steel* ✓ Thickness: Front *1"* ✓ Back *1 1/2"* ✓ Mean pitch of stays *11 1/4"* ✓ Pitch across widespaces *15"* ✓ Working pressures by rules *181* Girders to Chamber tops: Material *steel* ✓ Depth and thickness ofat centre *10" x 1 3/8"* ✓ Length as per rule *36"* ✓ Distance apart *8"* ✓ Number and pitch of Stays in each *3 @ 8"* ✓Working pressure by rules *181* Superheater or Steam chest: how connected to boiler *none* Can the superheater be shut off and the boiler worked

ately 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

fitted 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,

Geo W Riley

Manufacturer.

During progress of *1917. May 11. 15. June 5. 12. 21. 25. 27 July* Is the approved plan of boiler forwarded herewith *Yes*work in shops - - - *10. 18. Aug 3. 9. 10 Dec. 1918. 2. 11. Jan 2. 12. Feb 2* Total No. of visits *12 + 4*During erection on *1917. 6. 12. Dec. 1918. 2. 11. Jan 2. 12. Feb 2*

board vessel - - -

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
 This Boiler has now been fitted in the above vessel & its Safety Valves
 adjusted under steam to above pressure

Survey Fee ... £ *4-5-0* When applied for *Monthly a/c*

Travelling Expenses (if any) £ : : When received, 191

W Morrison

Engineer Surveyor to Lloyd's Register of Shipping.

G. A. Dryden Wye

TUE 18 MAR. 1919

Committee's Minute

FRI. 15 FEB. 1918

Signed *not for classing committee*

WS57-0071