

REPORT ON BOILERS.

No. 10160.

Received at London Office TUE. III 10 1918

When handed in at Local Office **13.7.18** Port of **Middlesbrough**
 Survey held at **Stockton-on-Tees** Date, First Survey **27th Dec 17** Last Survey **29th May 1918**
 on the **Boiler for the Admiralty Drifter P-71** **FLAME** (Number of Visits **27**) Gross Tons }
S-S No 174 Net }
 Built at **Sandhaven** By whom built **J & G Forbes** When built
 made at **Stockton** By whom made **Messrs Riley Bros Ltd (No 5114)** When made
 Owners **Port belonging to**

TITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel **John Spencer & Co**
 for record (S) Total Heating Surface of Boilers **814 ft** Is forced draft fitted
One single ended Working Pressure **180** Tested by hydraulic pressure to **360** No. and Description of
 Certificate **5894** Can each boiler be worked separately Area of fire grate in each boiler **30 1/2 ft** No. and Description of
 valves to each boiler **2 direct spring** Area of each valve **3.98 sq ft** Pressure to which they are adjusted
 fitted with easing gear In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler
 distance between boilers or uptakes and bunkers or woodwork **Inside** Mean dia. of boilers **10'-0"** Length **9'-6"**
 of shell plates **steel** Thickness **27/32** Range of tensile strength **28-32** Are the shell plates welded or flanged **no**
 of riveting: cir. seams **2-R. lap** long. seams **2 B-3 Riv** Diameter of rivet holes in long. seams **15/16"** Pitch of rivets **7"**
 plates on width of butt straps **13 3/4 x 7/8 in** Per centages of strength of longitudinal joint rivets **87.5** Working pressure of shell by
 plate **86.57**
 Size of manhole in shell **16" x 12"** Size of compensating ring **6" x 27/32** No. and Description of Furnaces in each
 top **72 1/2"** Thickness of plates crown **7/8"**
 bottom **99"** Thickness of plates bottom **65 mean**
 Material **steel** Outside diameter **38"** Length of plain part **3 1/4 x 3 x 7/16** Working pressure of furnace by the rules **180** Combustion chamber
 No. of strengthening rings **one**
 Material **steel** Thickness: Sides **9/16"** Back **9/16"** Top **9/16"** Bottom **9/16"** Pitch of stays to ditto: Sides **7 1/4 x 8"** Back **8" x 7 1/2"**
 If stays are fitted with nuts or riveted heads **nuts** Working pressure by rules **182** Material of stays **steel** Area at
 part **1.504** Area supported by each stay **60** Working pressure by rules **200** End plates in steam space: Material **steel** Thickness **7/8"**
 of stays **14 x 14** How are stays secured **nuts & 5 1/2 x 7/8 Washers** Working pressure by rules **185** Material of stays **steel** Area at smallest part **3.43**
 supported by each stay **189** Working pressure by rules **189** Material of Front plates at bottom **steel** Thickness **7/8"** Material of
 back plate **steel** Thickness **7/8"** Greatest pitch of stays **14 1/4 x 7 1/2"** Working pressure of plate by rules **205** Diameter of tubes **3 1/4"**
 tubes **4 3/8 x 4 1/4** Material of tube plates **steel** Thickness: Front **7/8"** Back **1/2"** Mean pitch of stays **9 1/4"** Pitch across wide
 plates **13 1/4 doubled** Working pressures by rules **180** Girders to Chamber tops: Material **steel** Depth and thickness of
 centre **8" x 1 1/8"** Length as per rule **28 1/2"** Distance apart **7"** Number and pitch of Stays in each **2 @ 8"**
 pressure by rules **191** Steam dome: description of joint to shell **none** % of strength of joint
 Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes
 rivets Working pressure of shell by rules Crown plates Thickness How stayed

HEATER. Type **none** Date of Approval of Plan Tested by Hydraulic Pressure to
 Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler
 of Safety Valve Pressure to which each is adjusted Is Easing Gear fitted
 SURVEY REQUEST NO. 1416. ATTACHED. FOR THE FOREGOING IS A CORRECT DESCRIPTION, RILEY BROS. (BOILERMAKERS) LIMITED. Manufacturer.
 SECRETARY.

During progress of work in shops - - - 1917. Dec 27. 1918. Jan 4. 10. 14. 16. 22. Feb 1. Is the approved plan of boiler forwarded herewith **yes**
 During erection on board vessel - - - 22. 26. May 2. 6. 10. 17. 29. Total No. of visits **27** Return for duplicate Boiler

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) **This boiler has been built under special
 in accordance with the Rules, the approved plan and the Specification. The materials and
 workmanship are sound and good and on completion the boiler was tested by hydraulic pressure with
 satisfactory results. The boiler is to be fitted on board at Dundee**
 satisfactorily fitted on board S. Drifter "Flame" Please see bounden Rpt 8094, J. H. Mackenzie

Survey Fee £ **4-10-0** When applied for, 191. When received, 191.
 Shipping Expenses (if any) £ : :
 Committee's Minute **FRI. NOV. 15. 1918**
 W. Morrison
 Engineer Surveyor to Lloyd's Register of Shipping.



17-7-18

Returned 17-7-18