

REPORT ON BOILERS.

THU. AUG. 20. 1914 66535

No. 1197
FRI. JUN. 5-1914

Received at London Office

Date of writing Report 20th May 1914 When handed in at Local Office 191 Port of Newcastle-on-Tyne
 No. in Survey held at Newcastle Date, First Survey Mar 19 Last Survey May 15 1914
 Reg. Book. on the P.S. "Griakle" (Number of Visits 7) Gross Tons 321
 Net Tons 172
 Master Sill May Built at Sill May By whom built Wood Skinner & Co When built 1914
 Engines made at Coatbridge By whom made W.V.V. Lidgerwood 191 When made 1914
 Boilers made at Newcastle By whom made Palmer Co No. 773 When made 1914
 Registered Horse Power Owners Jarrow Tug & Lighter Co. Port belonging to North Shields

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Achene Nitter Belem & Palmes Co

(Letter for record S) Total Heating Surface of Boilers 700 sq ft Is forced draft fitted no No. and Description of Boilers one, single-ended Working Pressure 140 lbs Tested by hydraulic pressure to 280 lbs Date of test 15-5-14
 No. of Certificate 8654 Can each boiler be worked separately ✓ Area of fire grate in each boiler 28 sq ft No. and Description of safety valves to each boiler 2 Spring Patent Area of each valve 3.97 sq in Pressure to which they are adjusted 140 lbs
 Are they fitted with easing gear yes 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 26" Mean dia. of boilers 10'-0" Length 9'-0"
 Material of shell plates Steel Thickness 3/4" Range of tensile strength 28-32 Are the shell plates welded or flanged no
 Descrip. of riveting: cir. seams Lap long. seams HSB Rivet Diameter of rivet holes in long. seams 15/16" Pitch of rivets 5"
 Lap of plates or width of butt straps 10" Per centages of strength of longitudinal joint rivets 82.1 Working pressure of shell by rules 148 lbs plate 81.2
 Size of manhole in shell 16" x 12" Size of compensating ring 7" x 3/4" No. and Description of Furnaces in each boiler 2, plain Material Steel Outside diameter 36 5/8" Length of plain part top 66" Thickness of plates crown 19 1/2" bottom 72" 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 9/16" Back 9/16" Top 9/16" Bottom 13/16" Pitch of stays to ditto: Sides 8 3/4" x 8" Back 9" x 8 1/2"
 Top 9 3/4" x 7 1/4" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 142 lbs Material of stays Steel Diameter at smallest part 1.45" Area supported by each stay 76 1/2 sq in Working pressure by rules 57 lbs End plates in steam space: Material Steel Thickness 3/32"
 Pitch of stays 20 1/2" x 13 1/2" How are stays secured S. N. & W. Working pressure by rules 147 lbs Material of stays Steel Diameter at smallest part 4.11"
 Area supported by each stay 301 sq in Working pressure by rules 154 lbs Material of Front plates at bottom Steel Thickness 3/32" Material of Lower back plate Steel Thickness 3/32" Greatest pitch of stays 13" Working pressure of plate by rules 140 lbs Diameter of tubes 3 1/4"
 Pitch of tubes 4 1/2" x 4 1/2" Material of tube plates Steel Thickness: Front 3/32" Back 1/16" Mean pitch of stays 9" Pitch across wide water spaces 13 1/2" Working pressures by rules 184 lbs Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 7 1/2" x 1 3/8" Length as per rule 26 1/4" Distance apart 9 3/4" Number and pitch of Stays in each 2-7 1/4"
 Working pressure by rules 163 lbs 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 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 easing gear yes

For Palmer's Shipbuilding & Iron Co. Ltd.
 The foregoing is a correct description,
J. Cameron
 Manager, Boiler Manufacturing Dept.

Dates of Survey 9/14 During progress of work in shops: Mar 19, 24, Apr. 2, 17, 29, May 8, 15, 25 Is the approved plan of boiler forwarded herewith yes
 while building: ✓ During erection on board vessel: ✓ Total No. of visits 7

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This main boiler has been constructed under special survey & the materials & workmanship are found to be good.

Survey Fee ... £ 2 : 7 : 0 When applied for 19 Aug 1914
 Travelling Expenses (if any) £ 0 : 0 : 0 When received, 26/9/14 29/9/14
Thomas Field
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute FRI. AUG. 21. 1914
 Assigned
 Lloyd's Register Foundation
 606332-006342-0208