

REPORT ON BOILERS.

No. 5040

SAT. 15 JUN 1907

Received at London Office

Date of writing Report 10th May 1907 When handed in at Local Office 11th May 1907 Port of MIDDLESBROUGH-ON-TEES

No. in Survey held at Stockton Date, First Survey 9th April of Last Survey 1907

Reg. Book. 135 on the Main Boiler (No 3810) So. K. City of Glasgow (Number of Visits) } Gross 88
 } Net 14

Master Built at Selby By whom built Bochane Sons When built 1907

Engines made at Colchester By whom made A. G. Mumford Ltd when made 1907

Boilers made at Stockton By whom made Riley Bros Ltd when made 1907

Registered Horse Power 6 Owners London & Peterhead S. F. Coys Port belonging to Peterhead

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY—Manufacturers of Steel J. Spencer & Son Ltd

(Letter for record (S)) Total Heating Surface of Boilers 460 sq ft Is forced draft fitted No No. and Description of

Boilers One Cyl. Multi single ended Working Pressure 140 lb Tested by hydraulic pressure to 280 lb Date of test 10-5-07

No. of Certificate 3919 Can each boiler be worked separately — Area of fire grate in each boiler 28.4 sq ft No. and Description of

safety valves to each boiler Two Spring Area of each valve 3.14 sq in Pressure to which they are adjusted 143 lbs

Are they fitted with easing 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 4" Int'l Mean dia. of boilers 9'-6" Length 9'-0"

Material of shell plates Steel Thickness 4 1/8" Range of tensile strength 28/32 Are the shell plates welded or flanged no

Descrip. of riveting: cir. seams DR & L long. seams JR, DR, S. Diameter of rivet holes in long. seams 7/16" Pitch of rivets 5 1/8"

Lap of plates or width of butt straps 13" x 4 1/8" Per centages of strength of longitudinal joint rivets 96 Working pressure of shell by plate 81.75

rules 140.5 Size of manhole in shell 12" x 16" Size of compensating ring 7" x 7/8" No. and Description of Furnaces in each boiler 2 plain

Material Steel Outside diameter 2'-11" Length of plain part top 5'-8" Thickness of plates crown 1/4" bottom 7/16"

Description of longitudinal joint welded No. of strengthening rings ✓ Working pressure of furnace by the rules 154 Combustion chamber plates: Material Steel Thickness: Sides 9/16" Back 1/2" Top 9/16" Bottom 3/4" Pitch of stays to ditto: Sides 8 3/4" x 8" Back 9 1/2" x 8 1/2"

Top 8" x 8" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 150 Material of stays Steel Diameter at smallest part 1 3/8" Area supported by each stay 80.75 sq in Working pressure by rules 146 End plates in steam space: Material Steel Thickness 7/8"

Pitch of stays 1 1/2" x 16" How are stays secured DR riv stays Working pressure by rules 140 Material of stays Steel Diameter at smallest part 2 3/8"

Area supported by each stay 284 sq in Working pressure by rules 156 Material of Front plates at bottom Steel Thickness 7/8" Material of

Lower back plate Steel Thickness 7/8" Greatest pitch of stays 11" x 8 1/2" Working pressure of plate by rules 275 Diameter of tubes 3 1/4"

Pitch of tubes 4 1/4" x 4 1/4" Material of tube plates Steel Thickness: Front 7/8" Back 2 1/2" Mean pitch of stays 9 5/8" Pitch across wide

water spaces 13 1/2" Working pressures by rules 161 Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 6 3/4" x 1 1/2" Length as per rule 2'-3" Distance apart 8" Number and pitch of Stays in each 2 8"

Working pressure by rules 164 Superheater or Steam chest; how connected to boiler riveted Can the superheater be shut off and the boiler worked separately no Diameter 2'-6" Length 2'-0" Thickness of shell plates 1/2" Material Steel Description of longitudinal joint SR & L Diam. of rivet holes 13/16" Pitch of rivets 2" Working pressure of shell by rules 231 Diameter of flue ✓ Material of flue plates ✓ Thickness ✓

If stiffened with rings ✓ Distance between rings ✓ Working pressure by rules ✓ End plates: Thickness 3/4" How stayed Diagonal 2 Stays

Working pressure of end plates ✓ Area of safety valves to superheater ✓ Are they fitted with easing gear ✓

FOR RILEY BROS. (BOILERMAKERS) LIMITED. The foregoing is a correct description, Manufacturer.

J. G. Mumford

Dates of Survey } During progress of work in shops - - } 1907 Feb 4 - 14 - 22 - 28 May 1 - 4 - 10
 while building } During erection on board vessel - - - } Apr 9 - 17 - 20 - 23 - 30 May 4

Is the approved plan of boiler forwarded herewith retained for duplicate

Total No. of visits

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c. This boiler has been built under Special Survey. The materials and workmanship are good and efficient.

This boiler has been fitted on board, tested under steam, found satisfactory and now eligible in my opinion to be classed with the notation of X. L. M. G. 6. 07 in the Register Book, as per machinery Rpt.

Survey Fee £ : : When applied for,
 Travelling Expenses (if any) £ 2 : 8 : 4 When received, 20. 8. 19

1/2 of survey fee to be credited to Middlesbrough

James Barclay
R. D. Philston
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute FRI. 2 AUG 1907

Assigned all minute on Wm Rpt 9213

