

REPORT ON BOILERS.

Inbn No. 5065.

Hull - 19197

Received at London Office

FRI. 19 JUL 1907

Date of writing Report 30th May 1907 When handed in at Local Office 30th May 1907 Port of MIDDLESBROUGH-ON-TEES

No. in Survey held at Stockton Date, First Survey 9th April of Last Survey 17th 7th 1907

Reg. Book. 935 on the Main Boiler (No 3820) S. K. City of Aberdeen (Number of Visits) } Gross 88
Tons } Net 14

Master _____ Built at Selby By whom built Cochrane Sons When built 1907

Engines made at Bolchesses 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 35 Owners London & Peterhead S. F. Co. Ltd Port belonging to Peterhead

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

(Letter for record (S)) Total Heating Surface of Boilers 760 ft² Is forced draft fitted _____ No. and Description of Boilers One Cyl. Multi single ended Working Pressure 140 Tested by hydraulic pressure to 280 Date of test 24-5-07

No. of Certificate 3928 Can each boiler be worked separately _____ Area of fire grate in each boiler 28.4 ft² No. and Description of safety valves to each boiler Two Spring Area of each valve 3.14 ft² 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 _____

Smallest distance between boilers or uptakes and bunkers or woodwork 4" ^{Intt} Mean dia. of boilers 9'-6" Length 9-0

Material of shell plates Steel Thickness 21/32" Range of tensile strength 28.4 tons Are the shell plates welded or flanged no

Descrip. of riveting: cir. seams D.R.L. long. seams D. Butt St. Diameter of rivet holes in long. seams 15" Pitch of rivets 5 1/2" 3 rows

Lap of plates or width of butt straps Butt 13" x 1/2" Lower 14 1/2" x 1/2" Per centages of strength of longitudinal joint rivets 96 Working pressure of shell by rules 140 Size of manhole in shell 12" x 16" Size of compensating ring 7" x 16" plate 91 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 11" bottom 7'-10" bottom 7'

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 19/32" 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 ft² Working pressure by rules 140 End plates in steam space: Material Steel Thickness 7/8" Pitch of stays 17 1/2" x 16" How are stays secured Drum stay Working pressure by rules 140 Material of stays Steel Diameter at smallest part 2 3/8" Area supported by each stay 284 ft² 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 21/32" 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 two 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 ✓ Diameter 2'-6" Length 2'-0" Thickness of shell plates 1/2" Material Steel Description of longitudinal joint S.R.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 2 Stay Working pressure of end plates ✓ Area of safety valves to superheater ✓ Are they fitted with easing gear ✓

FOR THE FOREGOING IS A CORRECT DESCRIPTION,
A. J. Riley Manufacturer.

Dates of Survey } During progress of work in shops - - } 1907. Apr 9. 23. 25. 29. May 1. 4. 7. 10. 16. 23. 24 Is the approved plan of boiler forwarded herewith Yes
 while building } During erection on board vessel - - - }
 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 fitted on board, tested under steam, found satisfactory, & eligible in my opinion to be classed with the notation of L.M.C. 7.07 in the Register Book.

Survey Fee £ : : } When applied for, 19
 Travelling Expenses (if any) £ 2:13:4 } When received, 29 Jul 1907

T.C.D. Shilston Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute _____
 Assigned _____

