

REPORT ON BOILERS.

No. 5894

Newcastle-on-Tyne 57167

Received at London Office **FRI. 25 III 1909**

MIDDLESBROUGH DISTRICT

Date of writing Report 19 22nd July 1909 Port of Stockton

No. in Survey held at Stockton Date, First Survey 1909 Last Survey 1909
Reg. Book. S.S. "Erington Court" (Number of Visits) Gross 4461 Tons Net 2782

Master James Haldin Built at Newcastle By whom built Northumberland Iron Co. Ltd When built 1909
Engines made at Stockton By whom made Messrs Blair & Co. Ltd when made 1909
Boilers made at Stockton By whom made Messrs Blair & Co. Ltd when made 1909
Registered Horse Power ✓ Owners James Haldin & Co Port belonging to London

MULTITUBULAR BOILERS ~~MAIN~~ AUXILIARY OR ~~DONKEY~~ Donkey 3.37. Manufacturers of Steel J. Spencer & Sons

(Letter for record (S)) Total Heating Surface of Boilers 1222 sq ft Is forced draft fitted no No. and Description of Boilers One single ended Working Pressure 180 Tested by hydraulic pressure to 360 Date of test 30.6.09

No. of Certificate 4289 Can each boiler be worked separately yes Area of fire grate in each boiler 39 sq ft No. and Description of safety valves to each boiler 2 direct spring Area of each valve 4.91 Pressure to which they are adjusted 185 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 8 ft ext diam. of boilers 12'-1" Length 10'-6"

Material of shell plates steel Thickness 1" Range of tensile strength 28-32 Are the shell plates welded or flanged no
Descrip. of riveting: cir. seams 2 Riv Lap long. seams 2B-3 Riv Diameter of rivet holes in long. seams 1 1/8" Pitch of rivets 7 3/8"
~~Temp of plates~~ width of butt straps 16 1/8" x 1 1/2" Per centages of strength of longitudinal joint rivets 90.0 Working pressure of shell by plate 85.6

rules 183 lbs Size of manhole in shell 16" x 12" Size of compensating ring 7 1/2" x 1" No. and Description of Furnaces in each boiler 2 Comy. (horizontal) Material steel Outside diameter 42 1/2" Length of plain part ✓ Thickness of plates 33" 24"
Description of longitudinal joint Welded No. of strengthening rings ✓ Working pressure of furnace by the rules 185 lbs Combustion chamber plates: Material steel Thickness: Sides 1/2" Back 1/2" Top 1/2" Bottom 25/32" Pitch of stays to ditto: Sides 10 1/2" x 8 1/4" Back 9 1/2" x 8 1/4"

Top 9 x 9 3/8" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 183 lbs Material of stays steel Diameter at smallest part 1.59 Area supported by each stay 88.88 Working pressure by rules 200 End plates in steam space: Material steel Thickness 1 1/8"

Pitch of stays 18" x 15 1/2" How are stays secured nuts & cone washers Working pressure by rules 190 Material of stays steel Diameter at smallest part 2.54
Area supported by each stay 297 Working pressure by rules 180 Material of Front plates at bottom steel Thickness 1 1/2" Material of Lower back plate steel Thickness 1 1/2" Greatest pitch of stays 16 1/2" x 9 1/2" Working pressure of plate by rules 185 Diameter of tubes 3 1/2"

Pitch of tubes 4 3/8" x 4 3/4" Material of tube plates steel Thickness: Front 1 1/2" Back 1 1/2" Mean pitch of stays 9 3/4" Pitch across wide water spaces 14 1/2" Working pressures by rules 181 lbs Girders to Chamber tops: Material steel Depth and thickness of girder at centre 7 1/2" x 1 1/2" Length as per rule 29 1/4" Distance apart 9" Number and pitch of Stays in each 20 9 3/8"

Working pressure by rules 191 Superheater or Steam chest: has connected to boiler no 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 —

The foregoing is a correct description,
Geo. Kettle Manufacturer.

Dates of Survey while building { During progress of work in shops - - } Included in report attached Is the approved plan of boiler forwarded to the Registrar yes
{ During erection on board vessel - - - } do. Total No. of visits do.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)
This boiler has been built under special survey in accordance with the approved plan, the Secretary's letter, and in general conformity with the Rules. The materials and workmanship are sound and good and on completion the boiler was tested by hydraulic pressure with satisfactory results.

Survey Fee ... £ Included in Report attached When applied for, 19
Travelling Expenses (if any) £ do. When received, 19

Wm Morrison
Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute FRI. 27 AUG 1909
Assigned

