

REPORT ON BOILERS.

No. 5254

THUR. 24 OCT 1907

Received at London Office

Date of writing Report

10

When handed in at Local Office

10

Port of

MIDDLESBROUGH-ON-TEES.

Date, First Survey 24th JuneLast Survey 13th Oct.

1907

(Number of Visits 15)

Gross

Tons

Net

No. in

Survey held at Stockton

Description of Safety

Reg. Book.

L.S.

Donkey Boiler No 3867 for S.S. Snowdonian

ment

length

Master

Built at Stockton

By whom built

Richardson Duck & Co.

When built 1907

Engines made at

Stockton

By whom made

Wolain & Co. Ltd

when made 1907

Boilers made at

Stockton

By whom made

Riley Bros Ltd

when made 1907

Registered Horse Power

Owners

Port belonging to

J. Spencer & Son Ltd

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel

No. and Description of

(Letter for record (3)) Total Heating Surface of Boilers 863 $\frac{1}{2}$ Is forced draft fitted no Date of test 2-8-07

Boilers One Cyl. Multi Single ended Working Pressure 100 lb Tested by hydraulic pressure to 200 lb No. and Description of

No. of Certificate 3985 Can each boiler be worked separately ☒ Area of fire grate in each boiler 29 $\frac{1}{2}$ $\frac{1}{2}$ Pressure to which they are adjusted 100 lbsafety valves to each boiler Two, spring Area of each valve 5-94 $\frac{1}{2}$ $\frac{1}{2}$ In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler no

Are they fitted with easing gear Yes Mean dia. of boilers 10'-0" Length 10'-0"

Smallest distance between boilers or uptakes and bunkers or woodwork 12" Are the shell plates welded or flanged no

Material of shell plates Steel Thickness $\frac{19}{32}$ Range of tensile strength 28/32 Pitch of rivets 4"Descrip. of riveting: cir. seams DR L long. seams DR DBS Diameter of rivet holes in long. seams $\frac{15}{16}$ Working pressure of shell byLap of plates or width of butt straps 9 $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ Per centages of strength of longitudinal joint plate 76.5

rules 105 lb Size of manhole in shell 16" x 21" Size of compensating ring 9" x 1" No. and Description of Furnaces in each

boiler 2 plain Material Steel Outside diameter 3'-0" Length of plain part top 6'-6 $\frac{1}{2}$ $\frac{1}{2}$ Thickness of plates crown 19" bottom 8'-8" bottom 32"

Description of longitudinal joint welded No. of strengthening rings Working pressure of furnace by the rules 101 Combustion chamber

plates: Material Steel Thickness: Sides $\frac{1}{2}$ Back $\frac{17}{32}$ Top $\frac{7}{16}$ Bottom $\frac{5}{8}$ Pitch of stays to ditto: Sides 9 $\frac{1}{2}$ x 7 Back 9 $\frac{1}{2}$ x 8 $\frac{1}{4}$

Top 7 x 7 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 109 Material of stays Steel Diameter at

smallest part 1 $\frac{1}{8}$ Area supported by each stay 78.4 Working pressure by rules 104 Material of stays Steel Diameter at smallest part 2 $\frac{1}{8}$ Pitch of stays 17 x 18 How are stays secured DR riv. stay Working pressure by rules 104 Material of stays Steel Thickness $\frac{13}{16}$ Material ofArea supported by each stay 315 $\frac{1}{2}$ Working pressure by rules 112 Material of Front plates at bottom Steel Thickness $\frac{13}{16}$ Diameter of tubes 3 $\frac{1}{2}$ Lower back plate Steel Thickness $\frac{13}{16}$ Greatest pitch of stays 12 x 9 $\frac{1}{2}$ Working pressure of plate by rules 195 Pitch across widePitch of tubes 4 $\frac{1}{2}$ x 5 $\frac{1}{8}$ Material of tube plates Steel Thickness: Front $\frac{13}{16}$ Back $\frac{9}{16}$ Mean pitch of stays 9 $\frac{5}{8}$ Depth and thickness ofwater spaces 15 $\frac{1}{2}$ Working pressures by rules 105 Girders to Chamber tops: Material Steel Thickness 2 7"girder at centre 5" x 1 $\frac{1}{2}$ Length as per rule 2'-3" Distance apart 7" Number and pitch of Stays in each 2 7"

Working pressure by rules 106 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

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

Manufacturer.

Dates of Survey During progress of 1904, June 24, 25, July 11, 14, 20, 24, Aug 1, 2

while work in shops - - -

building During erection on board vessel - - -

Sept. 19, 25, 30, Oct 4, 9, 11, 15

Is the approved plan of boiler forwarded herewith Yes

Total No. of visits 15

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. After fitting and securing on board it has been tried under steam and the safety valves adjusted

Survey Fee ... £ 2 : 2 :

Travelling Expenses (if any) £ :

When applied for, 7.9.1904 R.D.

When received, 14.9.1904

R.D. Philston & Geo. A. Milner.

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

FRI. 25 OCT 1907

Committee's Minute

Assigned

ish & Foreign Shipping.