

REPORT ON BOILERS.

No. 52654.
THUR. 10 OCT 1907

Received at London Office

Date of writing Report

19

When handed in at Local Office

- 9 OCT 1907

Port of Newcastle on Tyne

No. in Survey held at
Reg. Book.

S. Shields

Date, First Survey

Last Survey 4th October 1907

(Number of Visits)

Gross 2815

Net 2426

on the

S.S. SPHEROID

Master G. Norris

Built at S. Shields

By whom built

J. Readhead & Sons

When built 1907

Engines made at

S. Shields

By whom made

J. Readhead & Sons

when made 1907

Boilers made at

S. Shields

By whom made

J. Readhead & Sons

when made 1907

Registered Horse Power

Owners

Derwentham Sons & Co.

Port belonging to London

MULTITUBULAR BOILERS MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel *Spencer, Lamburn.*(Letter for record *P.*) Total Heating Surface of Boilers *920* ^{sq} Is forced draft fitted *h.* No. and Description ofBoilers *One. Cyl. built. S. End. Working Pressure 80 lb* Tested by hydraulic pressure to *160 lb* Date of test *13-8-07.*No. of Certificate *7557* Can each boiler be worked separately ☒ Area of fire grate in each boiler *26.8* ^{sq} ft. No. and Description ofsafety valves to each boiler *2. Spring Load.* Area of each valve *8.29* ^{sq} in. Pressure to which they are adjusted *83 lb* ^{sq} in.Are they fitted with easing gear *yes* In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler *h.*Smallest distance between boilers or uptakes and bunkers or woodwork *On Deck.* Mean dia. of boiler *10'-6"* Length *9'-6"*Material of shell plates *S.* Thickness *7/8"* Range of tensile strength *28/32 T* Are the shell plates welded or flanged *h.*Descrip. of riveting: cir. seams *L.D.R.* long. seams *L.D.R.* Diameter of rivet holes in long. seams *1/32* Pitch of rivets *3 1/4"*Lap of plates or width of butt straps *5 1/8"* Per centages of strength of longitudinal joint rivets *70.3.* Working pressure of shell byrules *84 lb.* Size of manhole in shell *16" x 12"* Size of compensating ring *8" x 7/8"* plate *68.4.* No. and Description of Furnaces in eachboiler *2. Plain* Material *S.* Outside diameter *38"* Length of plain part top *73 1/2"* Thickness of plates crown *9/16"*Description of longitudinal joint *L.D.R.* No. of strengthening rings ☒ Working pressure of furnace by the rules *122 lb.* Combustion chamberplates: Material *S.* Thickness: Sides *1/2"* Back *1/2"* Top *1/2"* Bottom *5/8"* Pitch of stays to ditto: Sides *8 1/2" x 7 1/4"* Back *8 1/2" x 8"*Top *8 1/2" x 7 1/2"* If stays are fitted with nuts or riveted heads *h.* Working pressure by rules *112 lb.* Material of stays *I.* Diameter atsmallest part *1 1/8"* Area supported by each stay *68* Working pressure by rules *219 lb.* End plates in steam space: Material *S.* Thickness *3/4"*Pitch of stays *16"* How are stays secured *D.N.W.* Working pressure by rules *138 lb.* Material of stays *S.* Diameter at smallest part *2.87"*Area supported by each stay *256* Working pressure by rules *116 lb.* Material of Front plates at bottom *S.* Thickness *1 1/16"* Material ofLower back plate *S.* Thickness *1 1/16"* Greatest pitch of stays *15" x 8 1/2"* Working pressure of plate by rules *128 lb.* Diameter of tubes *3 1/4"*Pitch of tubes *4 1/2" x 4 3/8"* Material of tube plates *S.* Thickness: Front *1 1/16"* Back *1 1/16"* Mean pitch of stays *14 1/2" x 14 1/8"* Pitch across widewater spaces *13 1/2"* Working pressures by rules *116 lb.* Girders to Chamber tops: Material *S.* Depth and thickness ofgirder at centre *7 1/2" x 12"* Length as per rule *24"* Distance apart *8 1/2"* Number and pitch of Stays in each *2 x 7 1/2"*Working pressure by rules *247 lb.* Superheater or Steam chest: how connected to boiler *h.* Can the superheater be shut off and the boiler workedseparately ☒ Diameter ☒ Length ☒ Thickness of shell plates ☒ Material ☒ Description of longitudinal joint ☒ Diam. of rivetholes ☒ 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,

John Readhead & Sons Manufacturer.Dates of Survey
During progress of
work in shops - -
while
During erection on
building board vessel - - -

Please see Machinery report

Is the approved plan of boiler forwarded herewith *yes.*

Total No. of visits

GENERAL REMARKS

(State quality of workmanship, opinions as to class, &c.)

This Boiler has been constructed under special survey. The materials and workmanship are satisfactory. It has now been fitted on board the above vessel.

Survey Fee ... £ 2 : 2 :

When applied for, - 9 OCT 1907

Travelling Expenses (if any) £ :

When received, 16.10.07

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

Committee's Minute

Assigned



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