

Port of Sunderland

Received at London Office

TUES. 18 AUG. 1908

No. in Survey held at Sunderland  
Reg. Book.Date, first Survey 9th Sept 07Last Survey 10th August 1908(Number of Visits 113)on the S. S. LutetianMaster L. E. BarretBuilt at SunderlandBy whom built Wm. J. Dickinson & Sons LtdGross 4754.50  
Tons Net 2966.62  
When built 1908Engines made at SunderlandBy whom made Wm. J. Dickinson & Sons Ltdwhen made 1908Boilers made at SunderlandBy whom made Wm. J. Dickinson & Sons Ltdwhen made 1908

Registered Horse Power

Owners Lutetian Navigation Co LtdPort belonging to LondonNom. Horse Power as per Section 28 417Is Refrigerating Machinery fitted for cargo purposes noIs Electric Light fitted Yes

## ENGINES, &amp;c.—Description of Engines

Inverted triple expansionNo. of Cylinders 3No. of Cranks 3Dia. of Cylinders 26" 43" 70"Length of Stroke 48"Revs. per minute 70

Dia. of Screw shaft

as per rule 14.49Material of steel (sk.)Is the screw shaft fitted with a continuous liner the whole length of the stern tube Yes

Is the after end of the liner made water tight

in the propeller boss Yes If the liner is in more than one length are the joints burned Yes

If the liner does not fit tightly at the part

between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive Yes

If two

liners are fitted, is the shaft lapped or protected between the liners YesLength of stern bush 5' 0"

Dia. of Tunnel shaft

as per rule 13.01

Dia. of Crank shaft journals

as per rule 13.66Dia. of Crank pin 14"Size of Crank webs 25" x 9 1/4"

Dia. of thrust shaft under

collars 14"Dia. of screw 17.6"Pitch of Screw 16.0"No. of Blades 4State whether moveable noTotal surface 90 ft<sup>2</sup>No. of Feed pumps 2Diameter of ditto 7"Stroke 18"Can one be overhauled while the other is at work YesNo. of Bilge pumps 2Diameter of ditto 4 1/2"Stroke 24"Can one be overhauled while the other is at work YesNo. of Donkey Engines 2Sizes of Pumps 4 1/2 x 4 1/2 x 10"6 x 5 1/2 x 6"

No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room 3 of 3 1/2"In Holds, &c. suctions for oil cargo onlyNo. of Bilge Injections 1sizes 6"Connected to condenser, or to circulating pump YesIs a separate Donkey Suction fitted in Engine room & size one - 3 1/2"Are all the bilge suction pipes fitted with roses YesAre the roses in Engine room always accessible YesAre the sluices on Engine room bulkheads always accessible YesAre all connections with the sea direct on the skin of the ship YesAre they Valves or Cocks bothAre they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates YesAre the Discharge Pipes above or below the deep water line aboveAre they each fitted with a Discharge Valve always accessible on the plating of the vessel YesAre the Blow Off Cocks fitted with a spigot and brass covering plate YesWhat pipes are carried through the bunkers noneHow are they protected YesAre all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times YesAre the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges YesDates of examination of completion of fitting of Sea Connections 1.7.08of Stern Tube 1.7.08Screw shaft and Propeller 17.7.08Is the Screw Shaft Tunnel watertight YesIs it fitted with a watertight door plate door with stuffing box worked fromBOILERS, &c.—(Letter for record S)Manufacturers of Steel Wm. J. Spencer & SonsTotal Heating Surface of Boilers 7096 ft<sup>2</sup>Is Forced Draft fitted noNo. and Description of Boilers 3 S.E. Cylindrical BuiltWorking Pressure 180 lbsTested by hydraulic pressure to 360 lbsDate of test 24.6.08No. of Certificate 2709Can each boiler be worked separately YesArea of fire grate in each boiler 62 ft<sup>2</sup>

No. and Description of Safety Valves to

each boiler 2 springArea of each valve 8.29 ft<sup>2</sup>Pressure to which they are adjusted 185 lbsAre they fitted with easing gear YesSmallest distance between boilers or uptakes and bunkers or woodwork 30"Mean dia. of boilers 15' 0"Length 11' 6"Material of shell plates SteelThickness 1 1/2"Range of tensile strength 28/32Are the shell plates welded or flanged noDescrip. of riveting: cir. seams d. & laplong. seams L & d. & s.Diameter of rivet holes in long. seams 1 5/16"Pitch of rivets 8 1/2"Lap of plates or width of butt straps 19 1/4"

Per centages of strength of longitudinal joint

rivets 92.2Working pressure of shell by rules 182.49 lbsSize of manhole in shell 16" x 12"Size of compensating ring 8 7/8" x 1 1/2"No. and Description of Furnaces in each boiler 3 BrightonMaterial steelOutside diameter 46"

Length of plain part

top 1'

Thickness of plates

crown 9/16"Description of longitudinal joint weldNo. of strengthening rings YesWorking pressure of furnace by the rules 191 lbsCombustion chamber plates: Material steelThickness: Sides 1/2"Back 1/2"Top 1/2"Bottom 7/8"Pitch of stays to ditto: Sides 8 1/2" x 10 1/2"Back 10" x 9"Top 8 1/2" x 10 1/4"If stays are fitted with nuts or riveted heads nutsWorking pressure by rules 180.5 lbsMaterial of stays steelDiameter at smallest part 2.03"Area supported by each stay 90 ft<sup>2</sup>Working pressure by rules 203 lbs

End plates in steam space:

Material steelThickness 1 3/4"Pitch of stays 17 1/2" x 21"How are stays secured d. & s.Working pressure by rules 180 lbsMaterial of stays steelDiameter at smallest part 6.7"Area supported by each stay 367.5 ft<sup>2</sup>Working pressure by rules 182 lbsMaterial of Front plates at bottom steelThickness 3/32"Material of Lower back plate SThickness 27/32"Greatest pitch of stays 13 1/4" x 9"Working pressure of plate by rules 192 lbsMean pitch of stays 10 7/8"Diameter of tubes 3"Pitch of tubes 4 1/2" x 4 1/4"Material of tube plates steelThickness: Front 3/32"Back 7/8"Mean pitch of stays 10 7/8"Pitch across wide water spaces 13 1/2"Working pressures by rules 185 lbsGirders to Chamber tops: Material steel

Depth and

thickness of girder at centre 6 1/2" x 2 1/2"Length as per rule 32 3/32"Distance apart 8 1/2"Number and pitch of stays in each 2-10 1/4"Working pressure by rules 201 lbsSuperheater or Steam chest; how connected to boiler Yes

Can the superheater be shut off and the boiler worked

separately YesDiameter YesLength YesThickness of shell plates YesMaterial YesDescription of longitudinal joint Yes

Diam. of rivet

holes YesPitch of rivets YesWorking pressure of shell by rules YesDiameter of flue YesMaterial of flue plates YesThickness YesIf stiffened with rings YesDistance between rings YesWorking pressure by rules YesEnd plates: Thickness YesHow stayed YesWorking pressure of end plates YesArea of safety valves to superheater YesAre they fitted with easing gear YesWorking pressure of end plates YesArea of safety valves to superheater YesAre they fitted with easing gear YesWorking pressure by rules YesEnd plates: Thickness YesHow stayed YesWorking pressure of end plates YesArea of safety valves to superheater YesAre they fitted with easing gear YesWorking pressure of end plates YesArea of safety valves to superheater YesAre they fitted with easing gear YesWorking pressure by rules YesEnd plates: Thickness YesHow stayed YesWorking pressure of end plates YesArea of safety valves to superheater YesAre they fitted with easing gear YesWorking pressure of end plates YesArea of safety valves to superheater YesAre they fitted with easing gear YesWorking pressure by rules YesEnd plates: Thickness YesHow stayed YesWorking pressure of end plates YesArea of safety valves to superheater YesAre they fitted with easing gear Yes

W147-0163



# VERTICAL DONKEY BOILER—

Manufacturers of Steel

No. \_\_\_\_\_ Description \_\_\_\_\_  
 Made at \_\_\_\_\_ By whom made \_\_\_\_\_ When made \_\_\_\_\_ Where fixed \_\_\_\_\_  
 Working pressure \_\_\_\_\_ tested by hydraulic pressure to \_\_\_\_\_ Date of test \_\_\_\_\_ No. of Certificate \_\_\_\_\_ Fire grate area \_\_\_\_\_ Description of Safety \_\_\_\_\_  
 Valves \_\_\_\_\_ No. of Safety Valves \_\_\_\_\_ Area of each \_\_\_\_\_ Pressure to which they are adjusted \_\_\_\_\_ Date of adjustment \_\_\_\_\_  
 If fitted with easing gear \_\_\_\_\_ If steam from main boilers can enter the donkey boiler \_\_\_\_\_ Dia. of donkey boiler \_\_\_\_\_ Length \_\_\_\_\_  
 Material of shell plates \_\_\_\_\_ Thickness \_\_\_\_\_ Range of tensile strength \_\_\_\_\_ Descrip. of riveting long. seams \_\_\_\_\_ Rivets \_\_\_\_\_  
 Dia. of rivet holes \_\_\_\_\_ Whether punched or drilled \_\_\_\_\_ Pitch of rivets \_\_\_\_\_ Lap of plating \_\_\_\_\_ Per centage of strength of joint \_\_\_\_\_ Plates \_\_\_\_\_  
 Working pressure of shell by rules \_\_\_\_\_ Thickness of shell crown plates \_\_\_\_\_ Radius of do. \_\_\_\_\_ No. of stays to do. \_\_\_\_\_ Dia. of stays \_\_\_\_\_  
 Diameter of furnace Top \_\_\_\_\_ Bottom \_\_\_\_\_ Length of furnace \_\_\_\_\_ Thickness of furnace plates \_\_\_\_\_ Description of joint \_\_\_\_\_  
 Working pressure of furnace by rules \_\_\_\_\_ Thickness of furnace crown plates \_\_\_\_\_ Stayed by \_\_\_\_\_  
 Diameter of uptake \_\_\_\_\_ Thickness of uptake plates \_\_\_\_\_ Thickness of water tubes \_\_\_\_\_ Dates of survey \_\_\_\_\_

SPARE GEAR. State the articles supplied:— 1 Propeller,  $\frac{1}{2}$ " Crank shaft, 1 Propeller shaft, 2 top end, 2 bottom end, 2 main bearing & set of coupling bolts, tail feed & bit pump valves, 2 main & 2 donkey feed check valves, 1 set Air & Circulating pump valves, 1 set 1" piston pump, 12 piston bolts & nuts, 1 eccentric strap & release complete, 1 slide rod complete, 1 pair top end & 1 pair bottom end braces, 1 air pump bucket & rod, 1 circulating pump bucket & rod, Bolts & nuts assorted and iron of sizes ✓  
 The foregoing is a correct description,  
 A.D. \_\_\_\_\_ Manufacturer.

Dates of Survey while building  
 During progress of work in shops— 1907, Sept 9, 30, Oct 3, 4, 9, 10, 14, 15, 17, 18, 21, 24, 28, 30, 31 Nov 1, 4, 5, 6, 7, 9, 12, 13, 14, 18, 19, 20, 21, 22, 23, 25, 26, 1908—  
 During erection on board vessel— 27, 28, 29 Dec 2, 4, 5, 9, 10, 12, 13, 16, 17, 18, 20, 23, Jan 6, 9, 10, 13, 14, 15, 16, 17, 18, 21, 23, 27, 30, Feb 1, 3, 5, 10, 12, 18, 20, 22, 24, 26, Mar 4, 10, 12, 14, 16, 17, 19, 26, Apr 3, 6, 8, 9, 13, 14, 15, 22, 24, 30 May 5, 8, 13, 21, 28 June 11, 16, 20, 23, 27, 30, July 1, 3, 9, 13, 15, 17, 21, 22, 23, 24, 29, 30 Aug 6, 10, 1908—  
 Total No. of visits 113  
 Is the approved plan of main boiler forwarded herewith Yes ✓  
 " " " donkey " " " Yes ✓

Dates of Examination of principal parts—Cylinders 16.12.07 Slides 16.12.07 Covers 23.12.07 Pistons 29.11.07 Rods 16.12.07  
 Connecting rods 29.11.07 Crank shaft 10.2.08 Thrust shaft 18.12.07 Tunnel shafts 23.12.07 Screw shaft 13.7.08 Propeller 27.7.08  
 Stern tube 24.2.08 Steam pipes tested 12, 15, 22, 1908 Engine and boiler seatings 1.7.08 Engines holding down bolts 21.7.08  
 Completion of pumping arrangements 30.7.08 Boilers fixed 21.7.08 Engines tried under steam 30.7.08  
 Main boiler safety valves adjusted 30.7.08 Thickness of adjusting washers P.A.  $\frac{5}{16}$ , P.F.  $\frac{3}{8}$ , C.P.  $\frac{1}{16}$ , C.S.  $\frac{13}{32}$ , S.A.  $\frac{13}{32}$ , S.F.  $\frac{3}{8}$  inch  
 Material of Crank shaft Steel Identification Mark on Do. 407B Material of Thrust shaft Steel Identification Mark on Do. 546 R.C.A.  
 Material of Tunnel shafts Steel Identification Marks on Do. 580, 570, 564 Material of Screw shafts Steel Identification Marks on Do. 587, 588 R.C.A.  
 Material of Steam Pipes Iron ✓ Test pressure 400 lbs ✓

General Remarks (State quality of workmanship, opinions as to class, &c. The Machinery of this vessel has been constructed under special survey, the workmanship and materials used are both of good quality, the engines have been tried under steam and worked satisfactorily)

I beg to recommend that this vessel is eligible in my opinion to have the record of L.M.C. 8.08 in the Register Book  
 It is submitted that this vessel is eligible for THE RECORD + L.M.C. 8.08.

The amount of Entry Fee... £ 3 : 0 : 0  
 Special ... £ 40 : 17 : 0  
 Donkey Boiler Fee ... £ : :  
 Travelling Expenses (if any) £ : :  
 When applied for, 13 Aug 1908  
 When received, 18 Aug 1908

Electric light.

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

Committee's Minute

FRI. 21 AUG 1908

Assigned

+ Lmc 8.08

MACHINERY WRITTEN.



© 2021

Lloyd's Register Foundation