

REPORT ON MACHINERY.

Port of Sunderland Received at London Office TUES. 18 AUG 1908
 No. in Survey held at Sunderland Date, first Survey 9th Sept 07 Last Survey 10th August 1908
 Reg. Book. on the S. S. Lutetian (Number of Visits 113)
 Master L. E. Barret Built at Sunderland By whom built Sir J. Laing & Sons Ltd Tons { Gross 4754.50
 Engines made at Sunderland By whom made Messrs J. Dickinson & Sons Ltd when made 1908 Net 2966.62
 Boilers made at Sunderland By whom made Messrs J. Dickinson & Sons Ltd when made 1908
 Registered Horse Power 417 Owners Lutetian Navigation Co Ltd Port belonging to London
 Nom. Horse Power as per Section 28 417 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Inverted triple expansion No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 26" 43" 70" Length of Stroke 48" Revs. per minute 70 Dia. of Screw shaft 14.49" Material of screw shaft 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 Yes Length of stern bush 5.0"
 Dia. of Tunnel shaft 13.01" Dia. of Crank shaft journals 13.66" Dia. of Crank pin 14" Size of Crank webs 25 1/2 x 9 1/4" Dia. of thrust shaft under collars 14" Dia. of screw 17.6" Pitch of Screw 16.0" No. of Blades 4 State whether moveable no Total surface 90 sq ft
 No. of Feed pumps 2 Diameter of ditto 7" Stroke 18" Can one be overhauled while the other is at work Yes
 No. of Bilge pumps 2 Diameter of ditto 4 1/2" Stroke 24" Can one be overhauled while the other is at work Yes
 No. of Donkey Engines 2 Sizes 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 Ballast
 In Engine Room 3 of 3 1/2" In Holds, &c. suctions for oil cargo only
 No. of Bilge Injections 1 sizes 6" Connected to condenser, or to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size one - 3 1/2"
 Are all the bilge suction pipes fitted with roses Yes Are the roses in Engine room always accessible Yes Are the sluices on Engine room bulkheads always accessible Yes
 Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks both
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Yes Are the Discharge Pipes above or below the deep water line above
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Yes Are the Blow Off Cocks fitted with a spigot and brass covering plate Yes
 What pipes are carried through the bunkers none How are they protected Yes
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes
 Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges Yes
 Dates of examination of completion of fitting of Sea Connections 1.7.08 of Stern Tube 1.7.08 Screw shaft and Propeller 17.7.08
 Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door plate door with stuffing box worked from

BOILERS, &c.—(Letter for record S) Manufacturers of Steel Messrs J. Spencer & Sons
 Total Heating Surface of Boilers 7096 sq ft Is Forced Draft fitted no No. and Description of Boilers 3 S.E. Cylindrical Smith
 Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs Date of test 24.6.08 No. of Certificate 2709
 Can each boiler be worked separately Yes Area of fire grate in each boiler 627 sq ft No. and Description of Safety Valves to each boiler 2 spring
 Area of each valve 8.29 sq in Pressure to which they are adjusted 185 lbs Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 30" Mean dia. of boilers 15.0" Length 11.6" Material of shell plates Steel
 Thickness 1 1/32" Range of tensile strength 28/32 Are the shell plates welded or flanged no Descrip. of riveting: cir. seams d. & lap
 long. seams L & d. & s. Diameter of rivet holes in long. seams 1 5/16" Pitch of rivets 8 1/16" Lap of plates or width of butt straps 19 1/4"
 Per centages of strength of longitudinal joint rivets 92.2 Working pressure of shell by rules 182.49 lbs Size of manhole in shell 16 x 12"
 plate 85.3 Size of compensating ring 8 7/8 x 1 1/2" No. and Description of Furnaces in each boiler 3 Brighton Material steel Outside diameter 46"
 Length of plain part top 1 1/2" Thickness of plates crown 9/16" Description of longitudinal joint weld No. of strengthening rings Yes
 bottom 1 1/2" Working pressure of furnace by the rules 191 lbs Combustion chamber plates: Material steel Thickness: Sides 1/2" Back 1/2" Top 1/2" Bottom 7/8"
 Pitch of stays to ditto: Sides 8 7/8 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 nuts Working pressure by rules 180.5 lbs
 Material of stays steel Diameter at smallest part 2.03" Area supported by each stay 90 sq in Working pressure by rules 203 lbs End plates in steam space: Material steel
 Thickness 1 3/16" Pitch of stays 17 1/2 x 21" How are stays secured d. & w. Working pressure by rules 180 lbs Material of stays steel
 Diameter at smallest part 6.7" Area supported by each stay 367.5 sq in Working pressure by rules 182 lbs Material of Front plates at bottom steel
 Thickness 3/32" Material of Lower back plate S Thickness 27/32" Greatest pitch of stays 13 1/4 x 9" Working pressure of plate by rules 192 lbs
 Diameter of tubes 3" Pitch of tubes 4 1/2 x 4 1/2" Material of tube plates steel Thickness: Front 3/32" Back 7/8" Mean pitch of stays 10 5/8"
 Pitch across wide water spaces 13 1/2" Working pressures by rules 185 lbs Girders to Chamber tops: Material steel Depth and thickness of girder at centre 6 1/2 x 2 1/2" Length as per rule 32 2/32 Distance apart 8 1/2" Number and pitch of stays in each 2-10 1/4"
 Working pressure by rules 201 lbs Superheater or Steam chest; how connected to boiler Yes Can the superheater be shut off and the boiler worked separately Yes
 Diameter Yes Length Yes Thickness of shell plates Yes Material Yes Description of longitudinal joint Yes Diam. of rivet holes Yes
 Pitch of rivets Yes Working pressure of shell by rules Yes Diameter of flue Yes Material of flue plates Yes Thickness Yes
 If stiffened with rings Yes Distance between rings Yes Working pressure by rules Yes End plates: Thickness Yes How stayed Yes
 Working pressure of end plates Yes Area of safety valves to superheater Yes Are they fitted with easing gear Yes

