

REPORT ON MACHINERY.

Port of Nantes

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No. in Survey held at Nantes & St. Nazaire Date, first Survey 30th Apr. -12 Last Survey 19

Reg. Book. on the Single screw steamer SAINT LOUIS (Number of Visits)

Master built at St. Nazaire By whom built Me. & Cham. de la Loire When built 1913

Engines made at Nantes By whom made ditto when made 1913

Boilers made at Nantes By whom made ditto when made 1913

Registered Horse Power ✓ Owners Cie navale de l'Océanie Port belonging to Bordeaux

with aux. boiler ✓ Nom. Horse Power as per Section 28 446 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted Yes

ENGINES, &c. — Description of Engines Triple expansion, reciprocating No. of Cylinders 3 No. of Cranks 3

Dia. of Cylinders 25.6 42.52 68.5 Length of Stroke 57.2 Revs. per minute 70 Dia. of Screw shaft as per rule 15.136 Material of screw shaft as fitted 15.157 steel

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 ✓ 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 ✓ Length of stern bush 61 13/16"

Dia. of Tunnel shaft as per rule 13.15 as fitted 13.23 Dia. of Crank shaft journals as per rule 13.81 as fitted 13.86 Dia. of Crank pin 14.25 Size of Crank webs 5 1/16 x 9 1/16 Dia. of thrust shaft under collars 13.86 Dia. of screw 228.35 Pitch of Screw 20 1/2 No. of Blades 4 State whether moveable Yes Total surface 108

No. of Feed pumps 2 Diameter of ditto 3 3/32 Stroke 25 5/8 Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2 Diameter of ditto 3 3/32 Stroke 25 5/8 Can one be overhauled while the other is at work Yes

No. of Donkey Engines 1 Galcast pump Warrington dia 9 1/8 x 10 7/8 stroke 4 3/4 x 5 1/2 No. and size of Suctions connected to both Bilge and Donkey pumps In Engine Room 2 centre 4 wing (2 each side) each 3 1/2 In Holds, &c. in each of nos. 1-2-3 holds. 1-3 1/2 centre 2-2 1/4 wings (one each side) no 4 hold. 1-3 1/2 centre 2-2 1/4 wings (one each side) also suction to tunnel well & chain locker each 2 3/8

No. of Bilge Injections 1 sizes 7/8 Connected to condenser, or to circulating pump C.P. Is a separate Donkey Suction fitted in Engine room & size Yes, 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 none

Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks 6 valves & 3 cocks

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 Bilge suction pipes How are they protected efficiently with wood casings

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 3-5-13 of Stern Tube 9-5-13 Screw shaft and Propeller 15-5-13

Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Upper deck

BOILERS, &c. — (Letter for record (S)) Manufacturers of Steel Soc. An. de Tôleries de Louvroil - Thyssens & Co.

Total Heating Surface of Boilers 5384 Is Forced Draft fitted Yes No. and Description of Boilers 2 cylindrical Scotch boilers

Working Pressure 178 lb. Tested by hydraulic pressure to 320 Date of test 1914-13 No. of Certificate 32

Can each boiler be worked separately Yes Area of fire grate in each boiler 63 No. and Description of Safety Valves to each boiler 2 Lettmiller Pinel imp. Area of each valve 5.94 Pressure to which they are adjusted 183 lb. Are they fitted with easing gear Yes

Smallest distance between boilers or uptakes and bunkers or woodwork 10" Mean dia. of boilers 15.6" Length 11.5 1/2 Material of shell plates Steel

Thickness 20.8 Range of tensile strength 28.4 to 29.9 Are the shell plates welded or flanged no Descrip. of riveting: cir. seams double lap long. seams double lap

Diameter of rivet holes in long. seams 1.42" Pitch of rivets 9.24" up of plates or width of butt straps 19 1/16"

Per centages of strength of longitudinal joint 84.6 Working pressure of shell by rules 188 Size of manhole in shell 17 3/4 x 13 3/4

Size of compensating ring as approved No. and Description of Furnaces in each boiler 3 Morrison corrugated Material Steel Outside diameter 49 3/2

Length of plain part top 9.8 Thickness of plates bottom 16 Description of longitudinal joint No. of strengthening rings

Working pressure of furnace by the rules 199 lb. Combustion chamber plates: Material Steel Thickness: Sides 9.4 Back 9.4 Top 9.4 Bottom 12.6

Pitch of stays to ditto: Sides 7 1/8 x 7.6 Back 8.5 x 7.1 Top 7 1/8 x 8.27 If stays are fitted with nuts or riveted heads nuts in chamb. Working pressure by rules 183

Material of stays Steel Diameter at smallest part 1.4" Area supported by each stay 65.2 Working pressure by rules 189 End plates in steam space:

Material Steel Thickness 16.4 Pitch of stays 16.54 x 15.75 How are stays secured double nuts Working pressure by rules 180 lb. Material of stays Steel

Diameter at smallest part 2 1/2 Area supported by each stay 260.5 Working pressure by rules 195 Material of Front plates at bottom Steel

Thickness 15.1 Material of Lower back plate Steel Thickness 15.1 Greatest pitch of stays 13.4 x 7.1 Working pressure of plate by rules 198 lb.

Diameter of tubes 2 1/2 Pitch of tubes 3.64 x 3.66 Material of tube plates Steel Thickness: Front 15.1 Back 12.6 Mean pitch of stays 8.21"

Pitch across wide water spaces 13" Working pressures by rules 329 + 215 lb. Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 9 1/16 x (2 x 12.6) Length as per rule 31 1/16 Distance apart 8.27 Number and pitch of stays in each 3 7 1/8"

Working pressure by rules 217 lb. Superheater or Steam chest; how connected to boiler ✓ 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 ✓

