

REPORT ON MACHINERY.

No. 34386

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Date of writing Report 2 - 1 - 1915 When handed in at Local Office 10 Port of Glasgow
 No. in Survey held at Glasgow Date, First Survey 17th Nov. 1915 Last Survey 5-1-1914
 Reg. Book. on the Machinery for the Single Screw Steamer "PHLOTIS" (Number of Tonnage) 2460
 Master Built at Ardrossan By whom built Ardrossan S. B. Co. 269 When built 1915
 Engines made at Boatbridge By whom made W. Beardmore, Co. 441 when made 1915
 Boilers made at Glasgow By whom made A. W. Dalglisch 699/400. when made 1915.
 Registered Horse Power Owners J. P. Hutchison Port belonging to Glasgow
 Nom. Horse Power as per Section 28 143 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c. - Description of Engines Triple Expansion No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 16", 26", 44" Length of Stroke 33" Revs. per minute 92 Dia. of Screw shaft as per rule 9.6" Material of screw shaft Iron
 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 3'-6"
 Dia. of Tunnel shaft as per rule 9.6" Dia. of Crank shaft journals as per rule 8.83" Dia. of Crank pin 9" Size of Crank webs 16 1/2" x 6" Dia. of thrust shaft under
 collars 9 1/4" Dia. of screw 11-8" Pitch of Screw 14-9" No. of Blades 4 State whether moveable No Total surface 500 sq ft
 No. of Feed pumps 2 Diameter of ditto 3" Stroke 16 1/2" Can one be overhauled while the other is at work Yes
 No. of Bilge pumps 2 Diameter of ditto 3" Stroke 16 1/2" Can one be overhauled while the other is at work Yes
 No. of Donkey Engines 3 Sizes of Pumps 4 1/2" x 6" x 10" Duplex No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room 3 - 2 1/4" 6" Centrifugal Pumps, &c. 2 - 2 1/2"
 No. of Bilge Injections 1 sizes 4" Connected to condenser, or to circulating pump B. S. Is a separate Donkey Suction fitted in Engine room & size Yes 2 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 Valves + 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 None How are they protected -
 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 and of Stern Tube and Screw shaft and Propeller 28-9-14
 Is the Screw Shaft Tunnel watertight None Is it fitted with a watertight door - worked from -

BOILERS, &c. - (Letter for record S) Manufacturers of Steel
 Total Heating Surface of Boilers 2456 sq ft Is Forced Draft fitted No No. and Description of Boilers 2 Single ended marine
 Working Pressure 180 Tested by hydraulic pressure to 360 Date of test 9-11-14 No. of Certificate 13946
 Can each boiler be worked separately Yes Area of fire grate in each boiler 30 sq ft No. and Description of Safety Valves to
 each boiler 1 Pair Spring loaded Area of each valve 3.940 Pressure to which they are adjusted 185 Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 15" Mean dia. of boilers 18-0" Length 10-0" Material of shell plates
 Thickness Range of tensile strength Are the shell plates welded or flanged Descrip. of riveting: cir. seams
 long. seams Diameter of rivet holes in long. seams Pitch of rivets Lap of plates or width of butt straps
 Per centages of strength of longitudinal joint rivets Working pressure of shell by rules Size of manhole in shell
 Size of compensating ring No. and Description of Furnaces in each boiler Material Outside diameter
 Length of plate part top Thickness of plates crown Description of longitudinal joint No. of strengthening rings
 bottom Working pressure of furnace by the rules Combustion chamber plates: Material Thickness: Sides Back Top Bottom
 Pitch of stays to ditto: Sides Back Top If stays are fitted with nuts or riveted heads Working pressure by rules
 Material of stays Diameter at smallest part Are they supported by each stay Working pressure by rules End plates in steam space:
 Material Thickness Pitch of stays How are stays secured Working pressure by rules Material of stays
 Diameter at smallest part Are they supported by each stay Working pressure by rules Material of Front plates at bottom
 Thickness Material of lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules
 Diameter of tubes Pitch of tubes Material of tube plates Thickness: Front Back Mean pitch of stays
 Pitch across wide water spaces Working pressure by rules Girders to Chamber tops: Material Depth and
 thickness of girder at centre Length as per rule Distance apart Number and pitch of stays in each
 Working pressure by rules 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

