

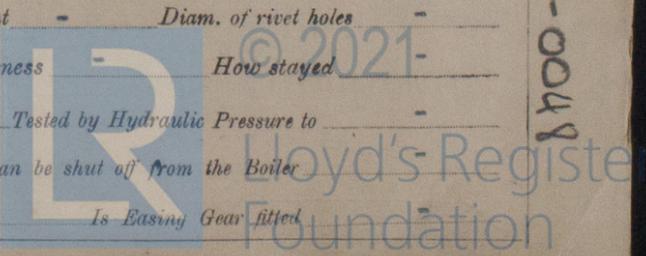
REPORT ON MACHINERY.

Date of writing Report Apr. 29th. 1922 When handed in at Local Office 19 Port of Hong Kong
 Received at London Office
 No. in Survey held at Hong Kong Date, First Survey Jan. 10th. 1921 Last Survey Apr. 28th. 1922
 Reg. Book. on the Steel Screw Steamer "PLANORBIS" (Number of Visits 128)
 Master Built at Hong Kong By whom built Hong Kong & Whampoa Dock Co. Ltd. Tons } Gross 5818.86
 } Net 3491.36
 Engines made at Hong Kong By whom made Hong Kong & Whampoa Dock Co. Ltd. when built 1922
 Boilers made at Hong Kong By whom made Hong Kong & Whampoa Dock Co. Ltd. when made 1922
 Registered Horse Power Owners Anglo-Saxon Petroleum Co. Ltd. Port belonging to Hong Kong
 Nom. Horse Power as per Section 28 517 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Triple Surface Condensing No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 27", 44", 73" Length of Stroke 48" Revs. per minute 78 Dia. of Screw shaft as per rule 14 1/2" Material of Steel
 as fitted 16" screw shaft
 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 - If two
 liners are fitted, is the shaft lapped or protected between the liners - Length of stern bush 5'-3"
 Dia. of Tunnel shaft as per rule None Dia. of Crank shaft journals as per rule 13.99" Dia. of Crank pin 14 1/2" Size of Crank webs 28"x9" Dia. of thrust shaft under
 collars 14 3/4" Dia. of screw 17'-9" Pitch of Screw 16'-9" No. of Blades 4 State whether moveable Fixed Total surface 96 sq. ft.
 No. of Feed pumps 2 Diameter of ditto 4" Stroke 24" Can one be overhauled while the other is at work Yes
 No. of Bilge pumps 2 Diameter of ditto 4" Stroke 24" Can one be overhauled while the other is at work Yes
 No. of Donkey Engines 15 Sizes of Pumps See Note No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room 2-3 1/2" in wall; 2-3 1/2" in Stokehold; 1-3 1/2" in Holds, &c. in Aft well (Aft Cofferdam two 3 1/2"; Main Pump Room
 Forward Pump room one 2"; Hold two 2"; Chain locker one 2" all connected to donkey. (two 2 1/2"; Forward cofferdam two 3 1/2";
 No. of Bilge Injections 1 sizes 10" Connected to condenser, or to circulating pump Cir. Pp 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 -
 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 below
 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 Aft cofferdam Bilge Suctions How are they protected Steel Plates
 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
 Is the Screw Shaft Tunnel watertight None Is it fitted with a watertight door - worked from -

BOILERS, &c.—(Letter for record) E25/8/30 Manufacturers of Steel Wm. Beardmore & Co.
 Total Heating Surface of Boilers 7662 Is Forced Draft fitted Yes No. and Description of Boilers Three Cylindrical Multitubular
 Working Pressure 180 lbs. Tested by hydraulic pressure to 320 lbs. Date of test 25-1-22 No. of Certificate 125,126,127
 Can each boiler be worked separately Yes Area of fire grate in each boiler 63.6 sq. ft. No. and Description of Safety Valves to
 each boiler Two double spring loaded 3 1/2" Area of each valve 9.6 sq. " Pressure to which they are adjusted 180 lbs. Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 1'-5" Mean dia. of boilers 15'-6" Length 11'-7" Material of shell plates Steel
 Thickness 1 1/4" Range of tensile strength 28-32 Tons Are the shell plates welded or flanged No Descrip. of riveting: cir. seams Double lap
 long. seams Triple Butt Diameter of rivet holes in long. seams 1, 5/16" Pitch of rivets 9 1/8" Lap of plates or width of butt straps 19 1/2"
 Per centages of strength of longitudinal joint rivets 88.3% Working pressure of shell by rules 182 lbs. Size of manhole in shell 16" x 12"
 plate 85.6% No. and Description of Furnaces in each boiler Three Deighton Material Steel Outside diameter 48 3/4"
 Size of compensating ring 34"x38"x1 1/4" Length of plain part top - Thickness of plates crown 9/16" Description of longitudinal joint Welded No. of strengthening rings -
 bottom - Working pressure of furnace by the rules 180.7 lbs. Combustion chamber plates: Material Steel Thickness: Sides 25/32" Cr. 3/4" Top 25/32" Bottom 25/32"
 Pitch of stays to ditto: Sides 9" x 9" Back 9x9 1/2" Top 9x9 1/2" If stays are fitted with nuts or riveted heads remainder Working pressure by rules 5,192 lbs.
 Material of stays Steel Area at smallest part 2.03 sq. " Area supported by each stay 81.0 sq. " Working pressure by rules 225 lbs. End plates in steam space: 246 "
 Material Steel Thickness 1, 11/32" Pitch of stays 20 1/2"x21 1/4" How are stays secured Nuts Working pressure by rules 181 lbs. Material of stays Steel
 Area at smallest part 8.29 sq. " Area supported by each stay 446.6 sq. " Working pressure by rules 193 lbs. Material of Front plates at bottom Steel
 Thickness 31/32" Material of Lower back plate Steel Thickness 7/8" Greatest pitch of stays 14 1/4" Working pressure of plate by rules 186 lbs.
 Diameter of tubes 3 1/4" Pitch of tubes 4 1/2" x 4 1/2" Material of tube plates Steel Thickness: Front 31/32" Back 13/16" Mean pitch of stays 13 1/2" x 9"
 Pitch across wide water spaces 14 1/4" Working pressures by rules 186 lbs. Space 189 Girders to Chamber tops: Material Steel Depth and
 thickness of girder at centre 10 1/2"x3 1/2" (20ff) Length as per rule 2'-9 1/2" Distance apart 9 1/2" Number and pitch of stays in each Three 9"
 Working pressure by rules 214 lbs. Steam dome: description of joint to shell - % of strength of joint -
 Diameter - Thickness of shell plates - Material - Description of longitudinal joint - Diam. of rivet holes -
 Pitch of rivets - Working pressure of shell by rules - Crown plates - Thickness - How stayed -

SUPERHEATER. Type - Date of Approval of Plan - Tested by Hydraulic Pressure to -
 Date of Test - Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler -
 Diameter of Safety Valve - Pressure to which each is adjusted - Is Easing Gear fitted -



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