

REPORT ON MACHINERY.

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Date of writing Report 19 When handed in at Local Office 10 Port of Glasgow
 No. in Survey held at Date, First Survey 12-9-24 Last Survey 25-5-1925
 Reg. Book. (Number of Visits 43)
 on the new steel S/S "RAJPUT." Tons { Gross 5521
 Net 3391
 Master Built at Port Glasgow By whom built Lithgow & Co Ltd (SSN 773) When built 1925
 Engines made at Glasgow By whom made W. Rowan & Co Ltd (N 809) when made 1925
 Boilers made at Glasgow By whom made W. Rowan & Co Ltd (N 809) when made 1925
 Registered Horse Power Owners Asiatic Steam Navigation Co Ltd Port belonging to London
 Nom. Horse Power as per Section 28 441 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 25"-42"-70" Length of Stroke 48" Revs. per minute 78 Dia. of Screw shaft 14.5" Material of steel
 as fitted 10 1/16" 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 yes two
 liners are fitted, is the shaft lapped or protected between the liners ✓ Length of stern bush 5'-4"
 Dia. of Tunnel shaft 13.18" as per rule 13.05 Dia. of Crank shaft journals 13.84" as per rule 13.69 Dia. of Crank pin 14 1/8" Size of Crank webs 9'6" Dia. of thrust shaft under
 collars 14 1/8" Dia. of screw 18'-3" Pitch of Screw 17'-6" No. of Blades 4 State whether moveable yes Total surface 100 ft
 No. of Feed pumps 2 Diameter of ditto 4 1/2" Stroke 24" 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 5 Sizes of Pumps 2 @ 10 1/2 @ 8-22 @ 12 1/2 @ 4 @ 20 @ 12 1/2 @ 1 No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room 3 @ 3" & 1 @ 2 1/2" In Holds, &c. N 1 hold - 2 @ 3 1/2" N 2 hold - 2 @ 3 1/2"
N 3 hold - 2 @ 3 1/2" Dept tank 2 @ 3 1/2" N 4 hold - 4 @ 3 1/2" N 5 hold - 2 @ 3 1/2" Tunnel well - 1 @ 2 1/2"
 No. of Bilge Injections 1 sizes 9" Connected to condenser, or to circulating pump 6 P Is a separate Donkey Suction fitted in Engine room & size yes, 5"
 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 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 both
 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 Brk Rpt
 What pipes are carried through the bunkers forward hold suction How are they protected under wood casing
 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 yes Is it fitted with a watertight door yes worked from top platform

BOILERS, &c.—(Letter for record 5) Manufacturers of Steel David Bechtel & Sons Ltd. The Steel Company of Scotland & The Lanarkshire Steel Works
 Total Heating Surface of Boilers 5990 sq ft Is Forced Draft fitted yes No. and Description of Boilers Two single ended
 Working Pressure 200 Tested by hydraulic pressure to 350 Date of test 26-3-25 No. of Certificate 16764
 Can each boiler be worked separately yes Area of fire grate in each boiler 770 sq ft No. and Description of Safety Valves to
 each boiler 2 direct spring Area of each valve 9.62 sq in Pressure to which they are adjusted 205 Are they fitted with easing gear yes
 Smallest distance between boiler or uptakes and bunkers or woodwork 2'-3" Mean dia. of boilers 17'-1 1/2" Length 12'-6" Material of shell plates steel
 Thickness 1 1/16" Range of tensile strength 30-34 tons Are the shell plates welded or flanged no Descrip. of riveting: cir. seams DR
 long. seams DRS, TR Diameter of rivet holes in long. seams 1 1/2" Pitch of rivets 10 1/4" Lap of plates or width of butt straps 22"
 Per centages of strength of longitudinal joint rivets 86.2 Working pressure of shell by rules 201 Size of manhole in shell 19 1/2" x 15 1/2"
 plate 85.36 No. and Description of Furnaces in each boiler 4 Deighton Material steel Outside diameter 43 5/16"
 Length of plain part top Thickness of plates bottom } 2 1/2" Description of longitudinal joint welded No. of strengthening rings none
 Working pressure of furnace by the rules 222 Combustion chamber plates: Material steel Thickness: Sides 1 1/16" Back 2 1/32" Top 1 1/16" Bottom 1 3/16"
 Pitch of stays to ditto: Sides 9 3/4" x 8" Back 8 3/4" x 8 9/16" Top 9 3/4" x 8" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 200
 Material of stays steel Area at smallest part 1760" Area supported by each stay 760" Working pressure by rules 200 End plates in steam space:
 Material steel Thickness 1 1/32" Pitch of stays 25 1/2" x 18 3/4" How are stays secured W.N. Working pressure by rules 202 Material of stays steel
 Area at smallest part 8290" Area supported by each stay 4130" Working pressure by rules 224 Material of Front plates at bottom steel
 Thickness 7/8" Material of Lower back plate steel Thickness 5 1/64" Greatest pitch of stays 13 1/2" x 8 9/16" Working pressure of plate by rules 202
 Diameter of tubes 2 3/4" Pitch of tubes 4" x 3 1/8" Material of tube plates steel Thickness: Front 7/8" Back 3/4" Mean pitch of stays 9 7/8"
 Pitch across wide water spaces 13 3/4" x 7 3/4" Working pressures by rules F210 B206 Girders to Chamber tops: Material steel Depth and
 thickness of girder at centre 9 1/8" x 7 1/2" Length as per rule 40 13/32" Distance apart 8" Number and pitch of stays in each 3 @ 9 3/4"
 Working pressure by rules 203 Steam dome: description of joint to shell none % 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 _____
 Tested by Hydraulic Pressure to _____

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



