

REPORT ON MACHINERY.

No. 19648.

19 JAN 1927

Received at London Office

Date of writing Report 28/9/26 When handed in at Local Office 11th January 1927 Port of Greenock
 No. in Survey held at Greenock Date, First Survey 2nd August, 1925. Last Survey 10th January 1927
 Reg. Book. T/Ss Rodneystar (Number of Visits 97)

Master Built at Glasgow By whom built Lithgow & Co. Ltd. (S/S Yps) When built 1926
 Engines made at Wallsend By whom made Parsons Marine Steam Turbine Co. Ltd. when made 1926
 Boilers made at Greenock By whom made John & Knechtel & Co. Ltd. (627) when made 1926
 Registered Horse Power Owners Blue Star Line (1925) Ltd. Port belonging to London
 Shaft Horse Power at Full Power 6600 Is Refrigerating Machinery fitted for cargo purposes Yes Is Electric Light fitted Yes
 NOM ASPER RULE 1585 1587

URBINE ENGINES, &c.—Description of Engines On/rake (Bailton SR Geared Turbines) No. of Turbines 2 H.P., 2 L.P.
 Diameter of Rotor Shaft Journals, H.P. L.P. Diameter of Pinion Shaft
 Diameter of Journals Distance between Centres of Bearings Diameter of Pitch Circle
 Diameter of Wheel Shaft Distance between Centres of Bearings Diameter of Pitch Circle of Wheel
 Width of Face Diameter of Thrust Shaft under Collars 12 3/4" as per rule 11 7/8" as fitted 11 7/8"
 No. of Screw Shafts 2 Diameter of same as per rule 13 3/4" as fitted 13 3/4" Diameter of Propeller 15.0 Pitch of Propeller 13-6"
 No. of Blades 4 State whether Moveable Yes Total Surface 46 ft Diameter of Rotor Drum, H.P. L.P. Astern
 Thickness at Bottom of Groove, H.P. L.P. Astern Revs. per Minute at Full Power, Turbine Propeller 125

PARTICULARS OF BLADING.

	H. P.			L. P.			ASTERN.		
	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.
1ST EXPANSION									
2ND									
3RD									
4TH									
5TH									
6TH									
7TH									
8TH									

No. and size of Feed pumps 2 Main Feeds (12" x 14" x 24") (one Aux Feed 8" x 10" x 22")
 No. and size of Bilge pumps 2 Bilge 4" x 8" x 8" (1 Ballast 10" x 12" x 24") (one General Service 10" x 8" x 18")
 No. and size of Bilge suction in Engine Room Eng Room 2.3" Stokehold 4.3" Tunnel Well 1.3"
 In Holds, &c. 2.3" in each 3 1/2 in No. 3

No. of Bilge Injections Two sizes 12" Connected to condenser or to circulating pump Pump Is a separate Donkey Suction fitted in Engine Room & size 5 1/2"
 Are all the bilge suction pipes fitted with roses Yes Are the roses in Engine room always accessible Yes
 Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Both Yes
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Yes Are the Discharge Pipes above 2" below the deep water line Yes
 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 Forward Bilge Pipes How are they protected 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 UER Platform

BOILERS, &c.—(Letter for record R.) Manufacturers of Steel Krupp, Solvay, Lawrence, Scottish Steel, etc.
 Total Heating Surface of Boilers 15064 Is Forced Draft fitted Yes No. and Description of Boilers 2 Double Ended
 Working Pressure 200 Tested by hydraulic pressure to 350 Date of test 21/4/26, 9/4/26 No. of Certificate 1722, 1720
 Can each boiler be worked separately Yes Area of fire grate in each boiler 140 ft No. and Description of Safety Valves to
 Each boiler 2 Cochran Improved High Lift Area of each valve 14 1/8" Pressure to which they are adjusted 205 Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 5-0" Mean dia. of boilers 17-6" Length 21-6" Material of shell plates S
 Thickness 19/32 Range of tensile strength 28/32 Are the shell plates welded or flanged Descrip. of riveting: cir. seams T.O.R.
 Rivets TR.O.B.S. Diameter of rivet holes in long. seams 19/32 Pitch of rivets 10 1/2" End of plates or width of butt straps 1-11 1/8"
 Percentages of strength of longitudinal joint rivets 91.4 plates 84.8 Working pressure of shell by rules 201 Size of manhole in shell 16 1/2 x 20 1/2"

No. and Description of Furnaces in each Boiler 8 Corrugated Material S Outside diameter 3-10 1/4"
 Length of plain part top Thickness of plates crown 5 1/8" Description of longitudinal joint weld No. of strengthening rings
 Working pressure of furnace by the rules 211 Combustion chamber plates: Material S Thickness: Sides 11/16" Back 11/16" Top 11/16" Bottom 13/16"
 Pitch of stays to ditto: Sides 7 1/8" x 10" Back 8 3/4" x 9" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 209
 Material of stays Iron Area at smallest part 203 Area supported by each stay 48.45 Working pressure by rules 203 End plates in steam space
 Material S Thickness 11/32 Pitch of stays 22 1/2 x 14 1/2 How are stays secured D.N.W. Working pressure by rules 208 Material of stays S
 Area at smallest part 48.5 Area supported by each stay 393.45 Working pressure by rules 221 Material of Front plates at bottom S
 Thickness 1" Material of Lower back plate Thickness Greatest pitch of stays 24 Working pressure of plate by rules 205
 Diameter of tubes 2 1/2 Pitch of tubes 3 1/16 x 11/16 Material of tube plates S Thickness: Front 1" Back 23/32 Mean pitch of stays 9.2
 Pitch across wide water spaces 13 1/2 Working pressures by rules 205 Girders to Chamber tops: Material S Depth and
 Thickness of girder at centre 10 1/2 x 3 1/4 (2) Length as per rule 64.56 Distance apart 8 3/4 Number and pitch of stays in each 6 x 9"
 Working pressure by rules 202 Steam dome: description of joint to shell % of strength of joint Diameter
 Thickness of shell plates Material Description of longitudinal joint Diameter of rivet holes Pitch of rivets
 Working pressure of shell by rules Crown plates: Thickness How stayed

