

REPORT ON MACHINERY.

No. 44501

18 MAR 1925

Date of writing Report *13th March 25* When handed in at Local Office *14.3.25* Port of *Glasgow*
 No. in Survey held at *Glydebank* Date, First Survey *26.2.25* Last Survey *13th March 1925*
 Reg. Book. *Twin screw turbine "Princess Marguerite"* (Number of Visits *81*)
 on the *Twin screw turbine "Princess Marguerite"* Tons {Gross *5875*
 Net *2719*
 Master *Blydebank* Built at *Blydebank* By whom built *John Brown & Co. Ltd.* When built *1925*
 Engines made at *Blydebank* By whom made *John Brown & Co. Ltd.* when made *1925*
 Boilers made at *Blydebank* By whom made *John Brown & Co. Ltd.* when made *1925*
 NOMINAL Horse Power *2462* Owners *Canadian Pacific Ry Co.* Port belonging to *Victoria B.C.*
 Shaft Horse Power at Full Power *3500* Is Refrigerating Machinery fitted for cargo purposes *no* Is Electric Light fitted *yes*

TURBINE ENGINES, &c.—Description of Engines *Single reduction* No. of Turbines *2 each eng.*
 Diameter of Rotor Shaft Journals, H.P. *5 1/2"* L.P. *9"* Diameter of Pinion Shaft *H.P. 5 1/2" L.P. 9"*
 Diameter of Journals *H.P. 6 1/2" L.P. 7 1/4"* Distance between Centres of Bearings *30 7/8"* Diameter of Pitch Circle *H.P. 7.927" L.P. 11.569"*
 Diameter of Wheel Shaft *14 1/2"* Distance between Centres of Bearings *72 3/4"* Diameter of Pitch Circle of Wheel *102.622"*
 Width of Face *37"* Diameter of Thrust Shaft under Collars *13 1/2"* Diameter of Tunnel Shaft *as per rule 12 13/16"*
 No. of Screw Shafts *2* Diameter of same *as per rule 13.5"* Diameter of Propeller *12'-0"* Pitch of Propeller *10'9", 15 12'-9"*
 No. of Blades *4* State whether Moveable *yes* Total Surface *50 sq. ft.* Diameter of Rotor Drum, H.P. *as per rule* L.P. *as per rule*
 Thickness at Bottom of Groove, H.P. *as per rule* L.P. *as per rule* Astern *as per rule* Revs. per Minute at Full Power, Turbine *H.P. 2462 L.P. 1835* Propeller *220*

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 *Four Hirs 13 1/2" x 10" x 24"*
 No. and size of Bilge pumps *One Ballast 7" x 8" x 8" One Bilge 7" x 8" x 8" One S.S. 10" x 9 1/2" x 12"*
 No. and size of Bilge suction in Engine Room *Stokehold, 8-2 1/2", oil gutterways 4-2 1/2", independent bilge 2-3"*
 In Holds, &c. *Nº 1 hold 1-2 1/2", Nº 2 hold 2-2 1/2"*
 No. of Bilge Injections *2* sizes *9 1/2"* Connected to condenser, or to circulating pump *yes* Is a separate Donkey Suction fitted in Engine Room & size *yes 4 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*
 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 *yes*
 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 *main deck*

ft. BOILERS, &c.—(Letter for record *S.*) Manufacturers of Steel *D. Colville & Sons Ltd.*
 Total Heating Surface of Boilers *29166 sq. ft.* Forced Draft fitted *yes* No. and Description of Boilers *6- multitubular, 2- water tube*
 Working Pressure *200* Tested by hydraulic pressure to *350* Date of test *16.9.24* No. of Certificate *16588*
 Can each boiler be worked separately *yes* Area of fire grate in each boiler *26-9-24* No. and Description of Safety Valves to *16588*
 Are they fitted with easing gear *yes*
 Are the shell plates welded or flanged *no* Length *12'-0"* Material of shell plates *8*
 Thickness *1 3/8"* Range of tensile strength *29-32* Are the shell plates welded or flanged *no* Descrip. of riveting: cir. seams *T.R.B.S.*
 Pitch of rivets *9 13/16"* Length of plate or width of butt straps *20 13/16"*
 Percentage of strength of longitudinal joint *85.84* Working pressure of shell by rules *202* Size of manhole in shell *16" x 12"*
 Size of compensating ring *40x38x1 3/8"* No. and Description of Furnaces in each Boiler *3- Doughton* Material *S* Outside diameter *49 9/32"*
 Length of plain part *top 41 1/4"* Thickness of plates *bottom 1 1/4"* Description of longitudinal joint *weld* No. of strengthening rings *none*
 Working pressure of furnace by the rules *202* Combustion chamber plates: Material *S* Thickness: Sides *1 1/16"* Back *2 1/32"* Top *1 1/16"* Bottom *5 3/64"*
 Pitch of stays to ditto: Sides *9" x 8 3/4"* Back *8 3/8" x 8 3/8"* Top *9" x 8 3/4"* If stays are fitted with nuts or riveted heads *yes* Working pressure by rules *212*
 Material of stays *S* Diameter at smallest part *1 3/8"* Area supported by each stay *78.5"* Working pressure by rules *200* End plates in steam space *S*
 Thickness *1 3/32"* Pitch of stays *18 1/4" x 17"* How are stays secured *T.N.* Working pressure by rules *202* Material of stays *S*
 Diameter at smallest part *3"* Area supported by each stay *310"* Working pressure by rules *224* Material of Front plates at bottom *S*
 Thickness *27/32"* Material of Lower back plate *S* Thickness *1 3/16"* Greatest pitch of stays *11" x 8 7/8"* Working pressure of plate by rules *232*
 Diameter of tubes *2 1/2"* Pitch of tubes *3 3/4" x 3 3/4"* Material of tube plates *S* Thickness: Front *27/32"* Back *27/32"* Mean pitch of stays *9 3/8"*
 Pitch across wide water spaces *13 1/2"* Working pressures by rules *282* Girders to Chamber tops: Material *S* Depth and *3-8 3/4"*
 Thickness of girder at centre *10 1/4" x 1 1/2"* Length as per rule *37'-3"* Distance apart *9"* Number and pitch of stays in each *3-8 3/4"*
 Working pressure by rules *200* Steam dome: description of joint to shell *none* Diameter of rivet holes *1"* Pitch of rivets *2"*
 Thickness of shell plates *Material* Description of longitudinal joint *How stayed*

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