

Report on Steam Turbine Machinery.

No. 133852

Date of writing Report 29-8-1951 When handed in at Local Office 5 Sept: 1951 Port of LIVERPOOL Received at London Office 3 OCT 1951
 No. in Survey held at Birkenhead Date, First Survey 16 June 1949 Last Survey 27 August 1951
 Reg. Book on the single screw tug "PRESIDENTE PERON" (Number of Visits 323)
 Tons (Gross 12741 Net 7395)
 Built at Birkenhead By whom built Cammell, Laird & Co. Ltd. Yard No. 1205 When built 1951
 Engines made at Birkenhead By whom made Cammell, Laird & Co. Ltd. Engine No. 1205 When made 1951
 Boilers made at Birkenhead By whom made Cammell, Laird & Co. Ltd. Boiler No. 1205 When made 1951
 Shaft Horse Power at Full Power MAX. 6800 SERVICE 6200 Owners Yacimientos Petroliferos Fiscales Port belonging to Buenos Aires
 Nom. Horse Power as per Rule 1580 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
 Trade for which Vessel is intended open sea

STEAM TURBINE ENGINES, &c.—Description of Engines Double Reduction Impulse-Reaction

of Turbines Ahead 2 Direct coupled, single reduction geared to one propelling shafts. No. of primary pinions to each set of reduction gearing 2
 Astern 1 double reduction geared
 Direct coupled to Alternating Current Generator phase periods per second rated Kilowatts Volts at revolutions per minute;
 or supplying power for driving Propelling Motors; Type
 rated Kilowatts Volts at revolutions per minute. Direct coupled, single or double reduction geared to propelling shafts.

TURBINE
LOADING.

	H. P.	I. P.	L. P.	ASTERN.
No. of rows	11		1	Two 3 row wheels
No. of stages			15	
No. of rows in each stage			2 rows in 1 stage 1 row in 14 stages	
MAX. SERVICE.				
Shaft Horse Power at each turbine	H.P. 3600, 3530 I.P. 3200, 2670 L.P. 3200, 2670	Revolutions per minute, at full power, of each Turbine Shaft H.P. 4 1/2 I.P. 857, 1478 L.P. 17-219		MAX. SERVICE H.P. 5800, 5618 I.P. 1903.875 L.P. 3363.3257 MAX. SERV. 111, 107.5
Motor Shaft diameter at journals	H.P. 4 1/2 I.P. 7 L.P. 7	Pitch Circle Diameter	1st pinion 8.57, 14.78 2nd pinion 17.219	1st reduction wheel 55.0608 main wheel 140.068 1st pinion 8 1/4 2nd pinion 14 3/4 main wheel 19 + 3 9/16 38 + 3 9/16 8 3/4 17 1/4 8 3/4 16 3/8
Distance between centres of pinion and wheel faces and the centre of the adjacent bearings				
Exible Pinion	1st 6 1/4 2nd 6 1/4	Pinion Shafts, diameter at bearings	External 1st 6 1/2 Internal 1st 2 2nd 7 5/8	1st 8 1/2 2nd 16 3/8
Wheel Shafts, diameter at bearings	1st 7 1/2 main 18	diameter at wheel shroud	1st 4 3/2 main 11 3/8	Generator Shaft, diameter at bearings
Intermediate Shafts, diameter	as per rule 15.85 as fitted 16	Screw Shaft, diameter	as per rule 17.085 as fitted 17 3/4	Thrust Shaft, diameter at collars
Tube Shaft, diameter	as per rule as fitted	as per rule as fitted	Is the tube screw shaft fitted with a continuous liner	Yes
Bronze Liners, thickness in way of bushes	as per rule as fitted 8.75	Thickness between bushes	as per rule 6.17 as fitted 7.18	Is the after end of the liner made watertight in the
Propeller boss	Yes	If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner	Yes	
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	Is an approved Oil Gland or other appliance fitted at the after end of the tube	Yes	
If two liners are fitted, is the shaft lapped or protected between the liners	Yes	Length of Bearing in Stern Bush next to and supporting propeller	6-4 1/2	
Propeller, diameter 18.75 Pitch 13.50 No. of Blades 4 State whether Moveable No Total Developed Surface 133 square feet.				
Single Screw, are arrangements made so that steam can be led direct to the L.P. Turbine	Yes	Can the H.P. or L.P. Turbines exhaust direct to the		
Condenser	Yes	No. of Turbines fitted with astern wheels one	Feed Pumps	No. and size 2-65000-84600 1 1/2 each How driven steam turbine
Pumps connected to the Main Bilge Line	No. and size 2 2 150 T/h, 1 2 300 T/h How driven Elec. Motor			
Ballast Pumps, No. and size 1 2 300 T/h		Lubricating Oil Pumps, including Spare Pump, No. and size 2 2 11500 gal/h each		
Are two independent means arranged for circulating water through the Oil Cooler	Yes	Suctions, connected both to Main Bilge Pumps and Auxiliary		
Bilge Pumps, No. and size:—In Engine and Boiler Room 1 2 6, 3 2 3 1/2		In Pump Room (water) 1 2 2		
Holds, &c. 2 2 2, 1 2 2 1/2 (low pump)				
Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 2 16		Independent Power Pump Direct Suctions to the Engine Room		
Bilges, No. and size 1 2 9, 1 2 6, 1 2 4		Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes	Yes	
Are the Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges	Yes			
Are all Sea Connections fitted direct on the skin of the ship	Yes	Are they fitted with Valves or Cocks	Yes	
Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates	Yes	Are the Overboard Discharges above or below the deep water	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	Yes	
What pipes pass through the bunkers	None	How are they protected	Yes	
What pipes pass through the deep tanks	None	Have they been tested as per rule	Yes	
Are all Pipes, Cocks, Valves and Pumps in connection with the machinery and all boiler mountings accessible at all times	Yes			
Is the arrangement of valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one compartment to another	Yes	Is the Shaft Tunnel watertight	Yes	
Is it fitted with a watertight door	Yes			
Boilers, &c.—(Letter for record S) Total Heating Surface of Boilers 10,938 sq. ft., Superheaters 1680 sq. ft.		Working Pressure 495 lb (design) 345 lb (actual) 345 lb (actual)		
Is Forced Draft fitted	Yes	No. and Description of Boilers 2 B+W Sectional Header		
Is a Report on Main Boilers now forwarded?	Yes			

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