

REPORT ON STEAM TURBINE MACHINERY. No. 55344

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Date of writing Report

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26. 1. 35 Port of Glasgow

To in Survey held at

Date, First Survey 16 Apr 1934 Last Survey 23 Jan 1935

Reg. Book.

1463 on the

Still Twin Screw "Taroon"

(Number of Visits 80)

Tons Gross 4286

Net 1849

Built at Glasgow

By whom built McAlister & Sons Ltd.

Yard No. 543

When built 1935

Engines made at do.

By whom made do.

Engine No. 543

When made 1935

Boilers made at do.

By whom made do.

Boiler No. 543

When made 1935

Shaft Horse Power at Full Power 4000

Owners Tasmanian Steam Navigation Co. Ltd.

Port belonging to Melbourne

Nom. Horse Power as per Rule 1578

Is Refrigerating Machinery fitted for cargo purposes y/s

Is Electric Light fitted y/s

Trade for which Vessel is intended

STEAM TURBINE ENGINES, &c.—Description of Engines Parsons Re-action

No. of Turbines Ahead 6 Direct coupled single reduction geared to 2 propelling shafts. No. of primary pinions to each set of reduction gearing 3

Direct coupled to Alternating Current Generator phase periods per second Direct Current Generator 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.		
	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.	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.
1ST EXPANSION	Impulse wheel	14 1/2"	2	16 1/2"	17 1/2"	5	2 1/2"	29 1/2"	3	Impulse wheel	MP	2
2ND	3 1/2"	14 1/2"	9	1 1/2"	17 1/2"	5	2 1/2"	30 1/2"	3			
3RD	1 1/2"	14 1/2"	9	1 1/2"	18 1/2"	6	3 1/2"	31 1/2"	2			
4TH	1 1/2"	15"	9	1 1/2"	19 1/2"	5	4"	33"	2			
5TH				2 1/2"	20 1/2"	5	5"	35"	2	Impulse wheel	LP	2
6TH							6"	37"	1	2 1/2"	24 1/2"	2
7TH							6"	37"	1	3 1/2"	26 1/2"	1
8TH							6"	37"	1	3 1/2"	26 1/2"	1
9TH							6"	37"	1	3 1/2"	26 1/2"	1
10TH										3 1/2"	26 1/2"	1
11TH										3 1/2"	26 1/2"	1
12TH										3 1/2"	26 1/2"	1

Shaft Horse Power at each turbine { H.P. 1150. I.P. 1000. L.P. 1350. } Revolutions per minute, at full power, of each Turbine Shaft { H.P. 3956. I.P. 3956. L.P. 3250. } 1st reduction wheel — main shaft 2 1/2

Rotor Shaft diameter at journals { H.P. 4" I.P. 4" L.P. 5" } Pitch Circle Diameter { H.P. & L.P. 5.9988" 1st pinion 1st reduction wheel — 1st LP 7.2843" main wheel 112.049" } Width of Face { 1st reduction wheel — main wheel 15" }

Distance between centres of pinion and wheel faces and the centre of the adjacent bearings { 1st pinion 12 3/4" 1st reduction wheel — 2nd pinion — main wheel 16 1/2" + 19 1/2" }

Flexible Pinion Shafts, diameter { 1st — 2nd — } Pinion Shafts, diameter at bearings { External 1st 4 1/2" 2nd — Internal 1st — 2nd — } diameter at bottom of pinion teeth { H.P. & L.P. 5.853" 1st LP 7.1385" }

Wheel Shafts, diameter at bearings { 1st — 2nd — } diameter at wheel shroud, { main 11 1/2" } Propelling Motor Shaft, diameter at bearings —

Intermediate Shafts, diameter { as per rule 10.2" as fitted 10 3/8" } Thrust Shaft, diameter at collars { as per rule 10.70" as fitted 13 3/4" } Tube Shaft, diameter { as per rule — as fitted — }

Screw Shaft, diameter { as per rule 11.07" as fitted 11 1/2" } Is the { tube screw } shaft fitted with a continuous liner { y/s } Bronze Liners, thickness in way of bushes { as per rule .63" as fitted 2 1/2" }

Thickness between bushes { as per rule 1/2" as fitted 1/2" } Is the after end of the liner made watertight in the propeller boss { y/s } If the liner is in more than one length are the junctions

made by fusion through the whole thickness of the liner — 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 — Is an approved Oil Gland

or other appliance fitted at the after end of the tube shaft { No. } Length of Bearing in Stern Bush next to and supporting propeller 3'-10" Propeller, diameter 10'-6" Pitch 11'-3" No. of Blades 3 State whether Moveable Solid Total Developed Surface 33 square feet.

If Single Screw, are arrangements made so that steam can be led direct to the L.P. Turbine. Can the H.P. or I.P. Turbine exhaust direct to the Condenser. No. of Turbines fitted with astern wheels 4. Feed Pumps { No. and size 2 1/2" high pumps @ 66000 lb/hr. 1 @ 12 1/2" x 24" How driven Steam }

Pumps connected to the Main Bilge Line { No. and size 1 @ 120 2 @ 200 1 @ 60 1 @ 20 all 1000/hour How driven Electric motors }

Ballast Pumps, No. and size 1 @ 200 tons/hr Lubricating Oil Pumps, including Spare Pump, No. and size 2 @ 35 tons/hr Are two independent means arranged for circulating water through the Oil Cooler y/s

Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps, No. and size:—In Engine and Boiler Room 2 @ 2 1/2" x 12 3/4" in E.R. 2 @ 2 1/2" x 12 3/4" in B.R. In Holds, &c.

Main Water Circulating Pump Direct Bilge Suctions, No. and size 2 @ 10" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 2 @ 4" in E.R. + 2 @ 4" in B.R. Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes y/s

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 y/s Are all Sea Connections fitted direct on the skin of the ship y/s

Are they fitted with Valves or Cocks Both Are the Overboard Discharges above or below the deep water line Below Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates y/s

Are the Blow Off Cocks fitted with a spigot and brass covering plate y/s Are they each fitted with a Discharge Valve always accessible on the plating of the vessel y/s How are they protected —

What pipes pass through the bunkers None Have they been tested as per rule y/s What pipes pass through the deep tanks Forst hold suction pipes y/s

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times y/s 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 y/s

Is the Shaft Tunnel watertight Is hull report it fitted with a watertight door y/s worked from above C Deck

