

REPORT ON STEAM TURBINE MACHINERY.

Received at London Office 1 FEB 1926

Date of writing Report 7th Nov 1925 When handed in at Local Office 19 Port of KOBÉ
No. in Survey held at OSAKA Date, First Survey 14th MAY 1923 Last Survey Nov. 2 1925
Reg. Book. S.S. ITIYO MARU (Number of Visits 67)
on the Tons } Gross 4273.5
Net 2658.8
Built at OSAKA By whom built OSAKA IRON WORKS Yard No. 1056 When built 1925
Engines made at FINSPONG By whom made SVENSKA TURBINFABRIKS A.B. LUNGSTAD Engine No. When made 1918
Boilers made at OSAKA By whom made OSAKA IRON WORKS LTD Boiler No. 1056 When made 1920 & 1925
Shaft Horse Power at Full Power 2930 Owners DO DO Port belonging to TAKASAGO
Nom. Horse Power as per Rule 562 ✓ Is Refrigerating Machinery fitted for cargo purposes No ✓ Is Electric Light fitted YES ✓

STEAM TURBINE ENGINES, &c.—Description of Engines

No. of Turbines Ahead
Astern

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

PARTICULARS OF TURBINE BLADING.

	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												
2ND												
3RD												
4TH												
5TH												
6TH												
7TH												
8TH												

Shaft Horse Power at each turbine. Revolutions per minute, at full power, of each Turbine Shaft 1st reduction wheel
main shaft Pitch Circle Diameter, 1st pinion 2nd pinion 1st reduction wheel main wheel
Width of Face, 1st reduction wheel main wheel Distance between centres of pinion and wheel faces and the centre of the adjacent bearings,
1st pinion 2nd pinion 1st reduction wheel main wheel Flexible Pinion Shafts, diameter 1st 2nd
Pinion Shafts, diameter at bearings External 1st 2nd diameter at bottom of teeth of pinion 1st 2nd
Internal
Wheel Shafts, diameter at bearings, 1st main diameter at wheel shroud, 1st main
Generator Shafts, diameter at bearings Propelling Motor Shafts, diameter at bearings

Main Shafting, diameter of Tunnel Shafting as per rule 13.12 ✓ as fitted 13.2 ✓ diameter of Thrust Shafting as per rule 13.78 ✓ as fitted 14.37 ✓
diameter of Screw Shaft as per rule 14.53 ✓ as fitted 14.39 ✓ 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 watertight 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 ✓ If two liners are fitted, is the
shaft lapped or protected between the liners ✓ Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently
lubricated NO Length of Stern Bush 5' 1 3/4" ✓ Diameter of Propeller 17' 0" ✓

Pitch of Propeller 16' 2" ✓ No. of Blades 4 ✓ State whether Moveable NO ✓ Total Surface 90 ✓ square feet. If Single Screw, are
arrangements made so that steam can be led direct to the L.P. Turbine, and either the H.P. or L.P. Turbine can exhaust direct to the Condenser EQUIVALENT ARRANGEMENTS
No. of Turbines fitted with astern wheels ✓ Total number of power driven Main and Auxiliary Pumps = 5 MOTOR DRIVEN = 8
No. and size of Feed Pumps 2 ROTARY ✓ How driven MOTOR SEE RPTN 1779 No. and size of Pumps connected to the Main Bilge Line 10 7 1/2 x 5 1/2 x 6
10 9 x 12 x 10
10 7 x 8 x 8

How driven STEAM ✓ No. and size of Ballast Pumps ONE 9 1/2 x 12" x 10" ✓ No. and size of Lubricating Oil Pumps, including
1 GEARED TO EACH GENERATOR 68 1/2 HP ✓ No. and size of suction
Spare Pump 1 " GEARING 200 HP ✓ Are two independent means arranged for circulating water through the Oil Cooler YES ✓
connected to both Main Bilge Pumps and Auxiliary Bilge Pumps; — In Engine and Boiler Room 3 OFF 3 1/2" DIA: ✓ and in Holds, &c. 10 3 1/2" IN N° 1, 2 & 3 HOLDS
10 2 1/2" IN TUNNEL WELL.

No. and size of Main Water Circulating Pump Bilge Suctions 2 @ 7" DIA: ✓ No. and size of Donkey Pump Direct Suctions
to the Engine Room Bilges ONE @ 4 1/2" DIA: ✓ 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 connections with the sea direct on the skin of the ship YES EXCEPT MAIN CIRC INLET ✓ 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 ✓

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 Screw Shaft Tunnel watertight YES ✓ Is it fitted with a watertight door YES ✓ worked from BR. DK. LEVEL ✓

BOILERS, &c.—(Letter for record 8 ✓) Total Heating Surface of Boilers 6479 ✓

Is Forced Draft fitted YES ✓ No. and Description of Boilers 3 S.E. MULTITUBULAR

Working Pressure 230 LBS/✓

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