

Report on Steam Turbine Machinery. No. 106705

AUXILIARY

Received at London Office 10 NOV 1945
NEWCASTLE-ON-TYNE

Survey Report 19 When handed in at Local Office 19 Port of NEWCASTLE-ON-TYNE

Survey held at Date, First Survey Last Survey 19
(Number of Visits)

on the TURBO ELECTRIC 'ZIETOUN'
Mobile, Alabama By whom built Alabama D.D. & S.B. Co. Yard No. When built 1945
Boilers made at Schenectady By whom made G.E.C. Engine No. INBOARD 65960
made at New York By whom made Combustion Eng. Co. Boiler No. P 11595 OUTBOARD 65955
orse Power at Full Power 525 H.P. Owners Baltic Trading Co. Ltd. Port belonging to London
orse Power as per Rule Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
r which Vessel is intended Carrying Petroleum in Bulk.

TURBINE ENGINES, &c.—Description of Engines Two single reduction geared impulse turbines
Head One Direct coupled, single reduction geared } to Generator
Astern ✓ double reduction geared } propelling shafts. No. of primary pinions to each set of reduction gearing One.
pled to Alternating Current Generator 3 phase 60 periods per second } rated 400 Kilowatts 450 Volts at 1700 revolutions per minute;
ying power for driving Direct Current Generator }
Kilowatts ✓ Volts at ✓ revolutions per minute. Direct coupled, single or double reduction geared to ✓ propelling shafts.
Propelling Motors, Type For lighting & Power.

E	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.
Expansion	1 1/2"	25 9/16"	1									
"	1 5/8"	26 1/16"	1									
"	1 1/2"	25 5/8"	1									
"	1"	26 1/16"	1									
"	1 5/16"	25 1/2"	1									
"	2 1/4"	26 1/2"	1									

orse Power at each turbine H.P. 700 I.P. ✓ L.P. ✓
Revolutions per minute, at full power, of each Turbine Shaft H.P. 5645 1st reduction wheel ✓ I.P. ✓ L.P. 1200 main shaft ✓
aft diameter at journals H.P. 2 1/2" I.P. ✓ L.P. ✓ Pitch Circle Diameter { 1st pinion 5.43" 1st reduction wheel 25.56 2nd pinion ✓ main wheel ✓ Width of Face { 1st reduction wheel 8.25" main wheel ✓

Distance between centres of pinion and wheel faces and the centre of the adjacent bearings { 1st pinion 6.625 1st reduction wheel 6.625 2nd pinion ✓ main wheel ✓
Pinion diameter { 1st ✓ 2nd ✓ Pinion Shafts, diameter at bearings External 1st 4" 2nd ✓ diameter at bottom of pinion teeth Internal 1st 5.125" 2nd ✓
Shafts, diameter at bearings { 1st 4" diameter at wheel shroud, { 1st ✓ Generator Shaft, diameter at bearings 4" main ✓ Propelling Motor Shaft, diameter at bearings ✓
Shafts, diameter as per rule Thrust Shaft, diameter at collars as per rule as fitted

Shaft, diameter as per rule as fitted Screw Shaft, diameter as per rule as fitted Is the { tube } shaft fitted with a continuous liner { screw }
Liners, thickness in way of bushes as per rule Thickness between bushes as per rule as fitted Is the after end of the liner made watertight in the boss.
If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner.
er 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.
ers 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
If so, state type. Length of Bearing in Stern Bush next to and supporting propeller

er, diameter Pitch No. of Bades State whether Moveable Total Developed Surface square feet.
Screw, are arrangements made so that steam can be led direct to the L.P. Turbine Can the H.P. or L.P. Turbines exhaust direct to the
No. of Turbines fitted with astern wheels Feed Pumps { No. and size How driven }
connected to the Main Bilge Line { No. and size How driven }

Pumps, No. and size Lubricating Oil Pumps, including Spare Pump, No. and size
Independent means arranged for circulating water through the Oil Cooler Suctions, connected both to Main Bilge Pumps and Auxiliary
Pumps, No. and size:—In Engine and Boiler Room In Pump Room
&c.
Water Circulating Pump Direct Bilge Suctions, No. and size Independent Power Pump Direct Suctions to the Engine Room
o. and size Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes.
ilge 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.
ea Connections fitted direct on the skin of the ship Are they fitted with Valves or Cocks.
ipping fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the Overboard Discharges above or below the deep water
Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Are the Blow Off Cocks fitted with a spigot and brass
plate. What pipes pass through the bunkers. How are they protected.
es pass through the deep tanks. Have they been tested as per rule.
pes, Cocks, Valves and Pumps in connection with the machinery and all boiler mountings accessible at all times.
ngement 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
from one compartment to another. Is the Shaft Tunnel watertight Is it fitted with a watertight door worked from

