

AUXILIARY
REPORT ON STEAM TURBINE MACHINERY. No. 9401

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Report made on the S.S. "SOVAC BRILLIANT" at Chester, Pa. on 10 Jan. 1949. When handed in at Local Office on 10 Jan. 1950. Port of PHILADELPHIA, PA.
 Survey held at Essington, Pa. Date, First Survey 28 Feb. Last Survey 15 Dec. 1949
 (Number of Visits 5)
 Tons { Gross 17597.94
 Net -
 By whom built Sun Shipbldg. & D.D. Co. Yard No. 573 When built 1949
 By whom made Westinghouse Electric Corp. Engine No. 5A-1124-50 When made 1949
 By whom made Babcock & Wilcox Co. Boiler No. MB-4341-57 When made 1949
 Owners Tankers Navigation Corporation Port belonging to Panama
 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
 For which Vessel is intended Foreign

STEAM TURBINE ENGINES, &c. — Description of Engines 2-Turbo driven 300 KW generating sets.

Turbines Ahead 1 ~~XXXXXXXXXX~~ single reduction geared } to 1 ~~XXXXXXXXXX~~ shafts. No. of primary pinions to each set of reduction gearing 1
 Astern DC ~~XXXXXXXXXX~~
 Coupled to { Alternating Current Generator - phase - periods per second } rated 300 Kilowatts 240 Volts at 1200 revolutions per minute;
 Direct Current Generator
 Supplying power for driving ~~XXXXXXXXXX~~ type Ships Electric gear
 Kilowatts Volts at revolutions per minute. Direct coupled, single or double reduction geared to propelling shafts.

EXPANSION	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	.933	25.496										
L-5	1.400	25.745										
949	1.820	25.939										
ug												
1												

Horse Power at each turbine { H.P. 300 KW
 I.P.
 L.P.
 Revolutions per minute, at full power, of each Turbine Shaft { H.P. 5930 1st reduction wheel 1200
 I.P.
 L.P. main shaft

Shaft diameter at journals { H.P. 2-1/2" Pitch Circle { 1st pinion 5.063" 1st reduction wheel 26.009" Width of { 1st reduction wheel 6.000"
 I.P. Diameter { 2nd pinion main wheel Face { main wheel
 L.P.

Distance between centres of pinion and wheel faces and the centre of the adjacent bearings { 1st pinion 5.594" 1st reduction wheel
 2nd pinion main wheel 5.594"

Pinion Shafts, diameter at bearings { External 1st { 2.495" 2nd { diameter at bottom of pinion teeth { 1st 4.833"
 Internal 1st { 2nd { 2nd
 Pinion Shafts, diameter at bearings { 1st 3.990" diameter at wheel shroud, { 1st 25.209" Generator Shaft, diameter at bearings 3.990"
 main main Propelling Motor Shaft, diameter at bearings

Intermediate Shafts, diameter as per rule Thrust Shaft, diameter at collars as per rule Tube Shaft, diameter as per rule
 as fitted as fitted as fitted as fitted

Low Shaft, diameter as per rule Is the { tube } shaft fitted with a continuous liner { Bronze Liners, thickness in way of bushes as per rule
 as fitted as fitted as fitted as fitted
 Thickness between bushes as per rule Is the after end of the liner made watertight in the propeller boss If the liner is in more than one length are the junctions

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
 other appliance fitted at the after end of the tube shaft Length of Bearing in Stern Bush next to and supporting propeller

Propeller, diameter Pitch No. of Blades State whether Moveable Total Developed Surface square feet.
 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 Feed Pumps { No. and size
 How driven

Pumps connected to the Main Bilge Line { No. and size
 How driven
 Lubricating Oil Pumps, including Spare Pump, No. and size

Two independent means arranged for circulating water through the Oil Cooler Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge
 pumps, No. and size:—In Engine and Boiler Room

Independent Power Pump Direct Suctions to the Engine Room
 Main Water Circulating Pump Direct Bilge Suctions, No. and size
 Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes

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
 Are they fitted with Valves or Cocks

Are all Sea Connections fitted direct on the skin of the ship Are the Overboard Discharges above or below the deep water line
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the Blow Off Cocks fitted with a spigot and brass covering plate
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel How are they protected

How are they protected Have they been tested as per rule
 How are they protected Have they been tested as per rule

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times
 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 Is the Shaft Tunnel watertight Is it fitted with a watertight door worked from



