

Rpt. 4a.

REPORT ON STEAM TURBINE MACHINERY.

No. 9270

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No. in Survey held at Chester, Pa. Date, First Survey 19th March, Last Survey 28th March, 1949

Reg. Book. on the S.S. "KUWAIT" (Number of Visits two)

Built at Chester, Pa. By whom built Sun S.B. & D.D. Co. Yard No. 567 When built 1949

Engines made at Fitchburg, Mass. By whom made General Elec. Co. Turb. No. 71567 When made "

Boilers made at - By whom made - Gear No. 86347

Shaft Horse Power at Full Power - Owners Gulf Oil Co. Boiler No. - When made - Generator No. 6806334

Nom. Horse Power as per Rule - Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

Trade for which Vessel is intended Foreign

STEAM TURBINE ENGINES, &c.—Description of Engines Geared Turbine Generator Set

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

Alternating Current Generator 3 phase 60 periods per second Direct Current Generator rated 400 Kilowatts 440 Volts at 1200 revolutions per minute;

for supplying power for driving ~~Propelling Motors, Turb.~~ Auxiliary Machinery and Lighting

rated Kilowatts Volts at revolutions per minute. Direct coupled, single or double reduction geared to propelling shafts.

TURBINE BLADING.

Table with columns for H.P., I.P., L.P., and ASTERN. Rows include Height of Blades, Diameter at Tip, and No. of Rows for 1st through 12th expansion stages.

Shaft Horse Power at each turbine { H.P. I.P. L.P. } Revolutions per minute, at full power, of each Turbine Shaft { H.P. 10,059 I.P. L.P. } 1st reduction wheel main shaft 1200

Rotor Shaft diameter at journals { H.P. 2.50" I.P. L.P. } Pitch Circle Diameter { 1st pinion 3.4" 2nd pinion } main wheel 28.5" Width of Face { 1st reduction wheel 8-1/4" main wheel 8-1/4" }

Distance between centres of pinion and wheel faces and the centre of the adjacent bearings { 1st pinion 6" 2nd pinion } 1st reduction wheel main wheel 6"

Flexible Pinion Shafts, diameter { 1st 2nd } Pinion Shafts, diameter at bearings External Internal { 1st 3" 2nd } diameter at bottom of pinion teeth { 1st 3.1686" 2nd }

Wheel Shafts, diameter at bearings { 1st 2nd } main 4" diameter at wheel shroud, { 1st 2nd } main 4-1/8" Generator Shaft, diameter at bearings 3" Propelling Motor Shaft, diameter at bearings

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

Tube Shaft, diameter as per rule as fitted Screw Shaft, diameter as per rule as fitted Is the { tube screw } shaft fitted with a continuous liner { }

Bronze Liners, thickness in way of bushes as per rule as fitted Thickness between bushes as per rule as fitted 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 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 If so, state type 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. 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 Feed Pumps { No. and size How driven }

Pumps connected to the Main Bilge Line { No. and size How driven }

Ballast Pumps, No. and size Lubricating Oil Pumps, including Spare Pump, No. and size Are 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 In Pump Room

In Holds, &c. Main Water Circulating Pump Direct Bilge Suctions, No. and size Independent Power Pump Direct Suctions to the Engine Room Bilges, 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 all Sea Connections fitted direct on the skin of the ship Are they fitted with Valves or Cocks

Are they 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 line

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 covering plate

What pipes pass through the bunkers How are they protected

What pipes pass through the deep tanks 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



