

GENERATORS

Report on Steam Turbine Machinery.

No. 128939

t. 4a.

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ate of writing Report 19 When handed in at Local Office 19 Port of 12/4/49
 o. in Survey held at Burkehead Date, First Survey 12/4/49 Last Survey 5/6/1949
 g. Book (Number of Visits) 5761
 on the SS THAUMASTUS Tons (Gross) 1945
 (Net) 1945
 ilt at Portland Or By whom built Kaiser Co Yard No. When built 1945
 gines made at Lynn Man By whom made GEC Engine No. When made 1945
 oilers made at By whom made Boiler No. When made
 shaft Horse Power at Full Power Owners Port belonging to
 om. Horse Power as per Rule Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted
 ade for which Vessel is intended

GENERATOR

TEAM TURBINE ENGINES, &c.—Description of Engines Two single reduction geared impulse turbines
 (ad) Ahead One Direct coupled, single reduction geared to generators No. of primary pinions to each set of reduction gearing One
 o. of Turbines Astern One double reduction geared also 2 exciters 1-75 kw. 1-50 kw
 Direct coupled to Alternating Current Generator 3 phase 60 periods per second Direct Current Generator rated 450 Kilowatts 450 Volts at 1200 revolutions per minute;
 or supplying power for driving Propelling Motors, Type
 ated Kilowatts Volts at revolutions per minute. Direct coupled, single or double reduction geared to propelling shafts.

TURBINE	H.P.	I.P.	L.P.	ASTERN.
LADING.				
No. of rows	6			
No. of stages	—			
No. of rows in each stage	—			

shaft Horse Power at each turbine H.P. 700 L.P. 5645 1st reduction wheel 1200
 Revolutions per minute, at full power, of each Turbine Shaft 1200 main shaft 1200
 Motor Shaft diameter at journals H.P. 2 1/2" Pitch Circle Diameter 1st pinion 5.43" 1st reduction wheel 25.56 Width of Face 1st reduction wheel 8 1/4"
 2nd pinion — main wheel — main wheel 6 5/8

Distance between centres of pinion and wheel faces and the centre of the adjacent bearings 1st pinion 6 5/8 1st reduction wheel 6 5/8
 2nd pinion — main wheel —
 Flexible Pinion 1st Pinion Shafts, diameter at bearings External 1st 4" 2nd — diameter at bottom of pinion teeth 1st 5.125
 Shafts, diameter 2nd — Internal 1st — 2nd —

Wheel Shafts, diameter at bearings 1st 4" diameter at wheel shroud, 1st — Generator Shaft, diameter at bearings 4"
 main — main — Propelling Motor Shaft, diameter at bearings —
 Intermediate Shafts, diameter as per rule Thrust Shaft, diameter at collars as per rule
 as fitted

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

Bronze Liners, thickness in way of bushes as per rule Thickness between bushes as per rule Is the after end of the liner made watertight in the
 as fitted as fitted
 Propeller boss. If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner.
 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.
 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 Bades 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. Turbines 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
 Ballast Pumps, No. and size Are two independent means arranged for circulating water through the Oil Cooler Suctions, connected both to Main Bilge Pumps and Auxiliary
 Bilge Pumps, No. and size: In Engine and Boiler Room In Pump Room

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
 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
 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

Boilers, &c.—(Letter for record) Total Heating Surface of Boilers
 Forced Draft fitted No. and Description of Boilers Working Pressure
 a Report on Main Boilers now forwarded?

GENERAL

Is ☐ a Donkey Boiler fitted? ☐ If so, is a report now forwarded?

Is the donkey boiler intended to be used for domestic purposes only?

Plans. Are approved plans forwarded herewith for Shafting. Main Boilers. Auxiliary Boilers. Donkey Boilers.
(If not, state date of approval)

Superheaters. General Pumping Arrangements. Oil Fuel Burning Arrangements.

Gear turbines situated aft. Have torsional vibration characteristics of system been approved. Date of approval.

SPARE GEAR.

Has the spare gear required by the Rules been supplied.

State the principal additional spare gear supplied.

The foregoing is a correct description,

Manufacturer

Dates of Survey while building
During progress of work in shops - -
During erection on board vessel - - -
Total No. of visits.

Dates of Examination of principal parts—Casings. Rotors. Blading. Gearing.

Wheel shaft. Thrust shaft. Intermediate shafts. Tube shaft. Screw shaft.

Propeller. Stern tube. Engine and boiler seatings. Engine holding down bolts.

Completion of fitting sea connections. Completion of pumping arrangements. Boilers fixed. Engines tried under steam.

Main boiler safety valves adjusted. Thickness of adjusting washers.

Rotor shaft, Material and tensile strength. Identification Mark.

Flexible Pinion Shaft, Material and tensile strength. Identification Mark.

Pinion shaft, Material and tensile strength. Identification Mark.

; Chemical analysis.

If Pinion Shafts are made of special steel state date of approval of chemical analysis, physical properties and heat treatment.

1st Reduction Wheel Shaft, Material and tensile strength. Identification Mark.

Wheel shaft, Material. Identification Mark. Thrust shaft, Material. Identification Mark.

Intermediate shafts, Material. Identification Marks. Tube shaft, Material. Identification Marks.

Screw shaft, Material. Identification Marks. Steam Pipes, Material. Test pressure.

Date of test. Is an installation fitted for burning oil fuel.

Is the flash point of the oil to be used over 150°F. Have the requirements of the Rules for the use of oil as fuel been complied with.

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo. If so, have the requirements of the Rules been complied with.

If the notation for ice strengthening is desired, state whether the requirements in this respect have been complied with.

Is this machinery a duplicate of a previous case. If so, state name of vessel.

General Remarks. (State quality of workmanship, opinions as to class, &c.)

These machines have been constructed under the supervision of the U.S. Coast Guard & Amer. Bureau of Shipping.
The workmanship & material appear good.
Examined opened up & under working conditions & found satisfactory.

The amount of Entry Fee ... £ : : When applied for.
Special ... £ : : 19.
Donkey Boiler Fee ... £ : : When received.
Travelling Expenses (if any) £ : : 19.

LIVERPOOL

21 JUN 1949

Committee's Minute

Assigned

See Machinery Report Minute

C. Reed

Engineer Surveyor to Lloyd's Register of Shipping.



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