

REPORT ON STEAM TURBINE MACHINERY. No. 47778

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Date of writing Report 11th MAY 1947 When handed in at Local Office 15th MAY 1947 Port of NEW YORK

No. in Survey held at NEW YORK Date, First Survey 24th MARCH 47 Last Survey 23rd APRIL 1947

Reg. Book 9339 on the SINGLE SCREW STEAMER "TANQUEBAR" ex "KINGS POINT VICTORY" (Number of Visits 6)

Tons Gross 7604 Net 4549

Built at BALTIMORE MD. By whom built BETHLEHEM-FAIRFIELD SHYDS INC Yard No. 2480 When built 6-1945

Engines made at PITTSBURG, PA By whom made WESTINGHOUSE MANEG CORP Engine No. LP4A 2217 When made 6-1945

Boilers made at EDGE MOOR, DEL. By whom made EDGE MOOR IRON WORKS Boiler No. S 3715 When made 6-1945

Shaft Horse Power at Full Power 6000 Owners EAST ASIATIC CO LTD. Port belonging to COPENHAGEN

Nom. Horse Power as per Rule 1296 135 Is Refrigerating Machinery fitted for cargo purposes YES Is Electric Light fitted YES

Trade for which Vessel is intended MN-1520

STEAM TURBINE ENGINES, &c.—Description of Engines. CROSS COMPOUND DOUBLE REDUCTION GEARED TURBINES.

No. of Turbines Ahead TWO Direct coupled, single reduction geared } to ONE propelling shafts. No. of primary pinions to each set of reduction gearing TWO

Astern ONE double reduction geared }
direct coupled to Alternating Current Generator ✓ phase ✓ periods per second } rated ✓ Kilowatts ✓ Volts at ✓ revolutions per minute;
Direct Current Generator

supplying power for driving ✓ Propelling Motors, Type ✓

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

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	1 7/8	1										
2ND "	1 1/2	1										
3RD "	1 1/4 tapering	19										
4TH "	to 2 1/16											
5TH "												
6TH "												
7TH "												
8TH "												
9TH "												
10TH "												
11TH "												
12TH "												

Shaft Horse Power at each turbine { H.P. 3000 I.P. 5410 L.P. 3000 } Revolutions per minute, at full power, of each Turbine Shaft { 1st reduction wheel 629 main shaft 100 ✓

Rotor Shaft diameter at journals { H.P. 4" I.P. 6 3/4" L.P. 6 1/4" } Pitch Circle Diameter { 1st pinion HP 9.480 1st reduction wheel 58.635 2nd pinion 17.696 main wheel 111.444 } Width of Face { 1st reduction wheel TWO x 8 1/2" main wheel 34 1/4"

Distance between centres of pinion and wheel faces and the centre of the adjacent bearings { 1st pinion 29 3/8" 1st reduction wheel 32 3/4" 2nd pinion 32 3/4" main wheel 25 1/4"

Flexible Pinion Shafts, diameter { 1st 4" 2nd - } Pinion Shafts, diameter at bearings External 1st 6" 2nd 14" Internal 1st SOLID 2nd SOLID diameter at bottom of pinion teeth { 1st ✓ 2nd ✓

Wheel Shafts, diameter at bearings { 1st 14" main 18" } diameter at wheel shroud, { 1st 15 3/4" main 20 1/2" } Generator Shaft, diameter at bearings ✓ Propelling Motor Shaft, diameter at bearings ✓

Intermediate Shafts, diameter as per rule as fitted 16" ✓ Thrust Shaft, diameter at collars as per rule as fitted 10" ✓ Tube Shaft, diameter as per rule as fitted ✓

Screw Shaft, diameter as per rule as fitted NOT DRAWN. Is the tube screw } shaft fitted with a continuous liner } YES Bronze Liners, thickness in way of bushes as per rule as fitted 1"

Thickness between bushes as per rule as fitted 1" 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 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. NO ✓ Length of Bearing in Stern Bush next to and supporting propeller 5-11 1/2" ✓

Propeller, diameter 18.25 ✓ Pitch 17.5 @ 6R No. of Blades 4 State whether Moveable NO Total Developed Surface square feet. If Single Screw, are arrangements made so that steam can be led direct to the L.P. Turbine YES ✓ Can the H.P. or I.P. Turbine exhaust direct to the Condenser YES ✓ No. of Turbines fitted with astern wheels ONE ✓ Feed Pumps { No. and size TWO (11x) x 24 VERT SIMPLEX ONE TURBO 185 GPM CENTR ONE TURBO 200 GPM. " BOTH STEAM. How driven STEAM

Pumps connected to the Main Bilge Line { No. and size THREE 10x11 1/2 VERT DUPLX (BILGE + BALLAST, GSP + STEY GSP) How driven STEAM

Ballast Pumps, No. and size TWO 10x11 1/2 (GSP + OF TRANSFER) Lubricating Oil Pumps, including Spare Pump, No. and size ONE 7 1/2 x 9 x 12 VERT DUPLX

Are two independent means arranged for circulating water through the Oil Cooler YES ✓ Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps, No. and size:—In Engine and Boiler Room TWO 3" DIA, FOUR 2 1/2" DIA IN COFFERDAMS, ONE 2" DIA SLUDGE TANK, ONE 3" DIA TUNNEL.

In Holds, &c. ONE 3" DIA IN HOLDS NOS 1 + 5, TWO 3" DIA IN HOLDS NOS 2, 3 + 4 (P+S) JOINING 5" RANGE, ONE 3" DIA FORE + AFT PEAK TANKS.

Main Water Circulating Pump Direct Bilge Suctions, No. and size ONE 14" DIA ✓ Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size ONE 5" 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 Sea Connections fitted direct on the skin of the ship ON BOXES OR SPOOLS Are they fitted with Valves or Cocks VALVES

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates YES ✓ Are the Overboard Discharges above or below the deep water line BELOW ✓ 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 ✓

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 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 Shaft Tunnel watertight YES ✓ Is it fitted with a watertight door YES ✓ worked from DECK FLOOR LEVEL



BOILERS, &c.— (Letter for record) Total Heating Surface of Boilers 12622 SQ FEET
 Is Forced Draft fitted YES No. and Description of Boilers TWO SM. TYPE WATER TUBE BOILERS Working Pressure 525 LBS.
 Is a Report on Main Boilers now forwarded? YES
 Is a Donkey Boiler fitted? No If so, is a report now forwarded? ✓
 Plans. Are ~~approved~~ plans forwarded herewith for Shafting YES Main Boilers next mail Auxiliary Boilers ✓ Donkey Boilers ✓
 (If not state date of approval)
 Superheaters next mail General Pumping Arrangements YES Oil Fuel Burning Arrangements YES
 Spare Gear. State the articles supplied:— COMPLETE TO RULE REQUIREMENTS.

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 HP 31. MAR 47 Rotors HP 31. 3. 47 Blading HP 31. 3. 47 Gearing 31. 3. 47
 Wheel shaft 7. 4. 47 Thrust shaft 7. 4. 47 Intermediate shafts 7. 4. 47 Tube shaft ✓ Screw shaft ✓
 Propeller ✓ Stern tube ✓ Engine and boiler seatings 24th MARCH 47 Engine holding down bolts 29th MARCH 47
 Completion of pumping arrangements ✓ Boilers fixed ✓ Engines tried under steam 18th APRIL 47
 Main boiler safety valves adjusted 18th APRIL 47 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 ✓
 1st Reduction Wheel Shaft, Material and tensile strength ✓ Identification Mark ✓
 Wheel shaft, Material DH STEEL Identification Mark ✓ Thrust shaft, Material DH STEEL Identification Mark ✓
 Intermediate shafts, Material DH STEEL Identification Marks AB2 B. SET45-244 Tube shaft, Material ✓ Identification Marks ✓
 Screw shaft, Material DH STEEL Identification Marks ✓ Steam Pipes, Material DH STEEL Test pressure 780 LBS.
 Date of test 29th MARCH 1947 Is an installation fitted for burning oil fuel YES
 Is the flash point of the oil to be used over 150°F. YES Have the requirements of the Rules for the use of oil as fuel been complied with YES
 Is the vessel (not being an oil tanker) fitted for carrying oil as cargo No If so, have the requirements of the Rules been complied with ✓
 Is this machinery a duplicate of a previous case No If so, state name of vessel ✓

General Remarks (State quality of workmanship, opinions as to class, &c.) The machinery + boilers of this vessel were constructed under the Special Supervision of American Bureau of Shipping Surveyors, the condition + standard of workmanship are considered to be good + satisfactory
The main + auxiliary machinery as opened for survey (see Rpt 9) are in good condition were all examined under working conditions + found satisfactory
The machinery + boilers of this vessel are eligible, in my opinion, to be classed with this Society, with a record of HMC 4. 47 when the survey has been completed, is recommended for the favourable consideration of the Committee

The amount of Entry Fee	£	✓	When applied for,
Special	£	\$ 600	19
Donkey Boiler Fee	£	✓	When received,
Travelling Expenses (if any)	£	\$ 5	19

W. Bloomfield
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute NEW YORK JUN 11 1947 J. G. Y.

Assigned Class Interim



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Lloyd's Register Foundation

Rpt. 5c.

Date of writing Report
 No. in Survey
 Reg. Bk. 6955 on the
 Built at BAN
 Engines made at
 Boilers made at
 Nominal Horse Power

WATER TUBE
 Date of Approval of
 Boilers Two
 No. of Certificate
 forced draught
 No. and type of bu
 ONE
 Each boiler ONE

re adjusted 575
 the donkey boiler
 Width and Length
 thickness of plates
 or flanged FUSION
 or Class I vessels

Diameter of rivet
 ong. joint:—Plate
 Percentage strength
 thickness of plates
 in each boiler
 welded or flanged
 or Class I vessels

Diameter of rivet
 Percentage strength
 Percentage strength
 thickness of plate
 Leaders or Sect
 Tubes:—Diameter
 joint to Shell
 strength
 arm

Pitch of rivets
 Crown or End
 SUPERHE
 thickness
 or flanged
 or Class I vessels

Diameter of rivet
 ong. joint:—Plat
 drum shell in way
 radius or how stay
 tested by Hydraul
 NOT
 can be shut off fr
 of valves
 Spare Gear.

this boiler a du
 GENERAL
 under Spe
 throughout
 to be class
 Survey Fee
 Travelling E

Committee's
 Assigned 2

Certificate (if required) to be sent to
 (The Surveyors are requested not to write on or below the space for Committee's Minute.)