

Report on Steam Turbine Machinery.

No. 2108

3-OCT 1949

Received at London Office

pt. 4a.

Date of writing Report 17. Sept. 1949 When handed in at Local Office 19 Port of GDYNIA
 No. in Survey held at Gdynia Date, First Survey 7. July 1948. Last Survey 22. Aug. 1949.
 Reg. Book 1195 on the S.S. "KILINSKI" (EX. "MEXICO VICTORY"). (Number of Visits 12) Tons {Gross 7612
 Net 4555
 Built at Los Angeles, Cal. By whom built Californian S.B. Corp. Yard No. V7 When built 1944
 Engines made at Pittsburg, Pa. By whom made Westinghouse Elect. Mfg. Co. Engine No. _____ When made _____
 Boilers made at _____ By whom made _____ Boiler No. _____ When made _____
 Shaft Horse Power at Full Power 8500 Owners Gdynia America Shipping Lines Port belonging to Gdansk
 Nom. Horse Power as per Rule 2012 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
 Trade for which Vessel is intended Foreign

TEAM TURBINE ENGINES, &c.—Description of Engines C 3 Gross Compound Impulse Reaction Turbines With Double Reduction Gearing.

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;
 for supplying power for driving — Propelling Motors, Type — SEE SPL. NOTE 5.R.L. 1048843

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

TURBINE STAGING.	H. P.			I.P. H. P.			L. P.			ASTERN, (ON L.P.)		
	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	1.3/16	16.4	1	13th 2 1/16	19.7	1	1 3/8	30.5	1	1 3/8	30.0	1
2nd "	1.9/32	16.5	1	14th 3 1/16	20.2	1	2 1/8	31.6	1	2 7/32	30.8	1
3rd "	1.11/32	16.7	1	H.P. Impulse Wheels			3 1/2	32.5	1	3 1/16	31.2	1
4th "	1.15/32	16.7	1				4 7/16	32.5	1			
5th "	1.19/32	17.2	1				5 1/2	35.0	1			
6th "	1.23/32	17.42	1				6 1/2	37.0	1			
7th "	1.13/16	17.7	1				8	39.0	1			
8th "	1.15/16	17.85	1				10	41.0	1			
9th "	2.3/32	18.18	1				Effective Height of Blades taken from top of Root to Underside of Shrouding. Diam. Taken at underside of Shrouding.					
10th "	2.5/16	18.5	1									
11th "	2.7/16	18.9	1									
12th "	2.21/32	19.3	1									

Shaft Horse Power at each turbine { H.P. 4250 I.P. — L.P. 4250 } H.P. 5358 1st reduction wheel
 I.P. — L.P. 4422 main shaft 85
 H.P. 9.462" H.P. 9.462"

Rotor-Shaft diameter at journals { H.P. 4" Forwd. 5" Aft. Pitch Circle Diameter { 1st pinion L.P. 11.398" 1st reduction wheel 83.37" Width of Face { 1st reduction wheel 22.25
 I.P. 6.0625" Diameter { 2nd pinion 20.067 main wheel 145.992" main wheel 2 x 20
 L.P. — Diameter { 2nd pinion 20" main wheel 44.5"

Distance between centres of pinion and wheel faces and the centre of the adjacent bearings { 1st pinion — 1st reduction wheel 40"
 2nd pinion 20" main wheel 44.5"

Flexible Pinion Shafts, diameter at bearings { 1st H.P. & L.P. 4.5" External { H.P. & L.P. 5" 16" diameter at bottom of pinion teeth
 2nd — Internal { 1st — 2nd — 2nd —

Wheel Shafts, diameter at bearings { 1st 16" diameter at wheel shroud, { 1st 20.5" Generator Shaft, diameter at bearings —
 main 21" main — Propelling Motor Shaft, diameter at bearings —

Intermediate Shafts, diameter as per rule 18.94 ins. Thrust Shaft, diameter at collars as per rule —
 as fitted 19.0 ins. as fitted —

Tube Shaft, diameter as per rule — Screw Shaft, diameter as per rule 20.75 Is the { tube } shaft fitted with a continuous liner { —
 as fitted — as fitted 21.0 screw } Yes

Bronze Liners, thickness in way of bushes as per rule 1.04 Thickness between bushes as per rule .75 Is the after end of the liner made watertight in the
 as fitted 1.09 as fitted .84 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 If so, state type — Length of Bearing in Stern Bush next to and supporting propeller 71.5 ins.

Propeller, diameter 20.5 ft. Pitch 22.9 ft. 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. Turbines exhaust direct to the
 Condenser Yes No. of Turbines fitted with astern wheels one Feed Pumps { No. and size Two 11" x 7" x 24" Stroke, Steam
 How driven one Cent. Turbo Unit, 185 G.P.Min.

Pumps connected to the Main Bilge Line { No. and size Three 10" x 11" x 12" Stroke (Bilge, Ballast G.S. & Stand by G.S.)
 How driven one 7 1/2" x 9" x 12" Stroke Steam.
 G.S. & O.F. Trans. Two 10" x 11" x 12" Stroke Lubricating Oil Pumps, including Spare Pump, No. and size Elect. Cent. 325 G.P.M.

Are two independent means arranged for circulating water through the Oil Cooler Yes Suctions, connected both to Main Bilge Pumps and Auxiliary
 Bilge Pumps, No. and size:—In Engine and Boiler Room 2-3", 4-2.5" In G.D., 1-2" in sludge Tk., 1-3" Tunnel In Pump Room —
 In Holds, &c. 1-3" in Nos. 1 & 5, 2-3" in Nos. 2, 3 and 4, to 5" Range in E.R., and 1-3" in F & A Peaks.

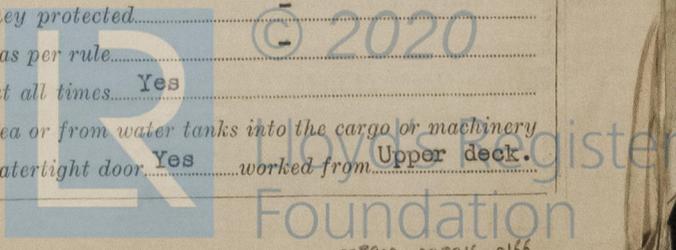
Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 - 16" Diam. Independent Power Pump Direct Suctions to the Engine Room
 Bilges, No. and size 1 - 5" Diam. Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Yes

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 Boxes or Stools 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 no What pipes pass through the bunkers none How are they protected —

What pipes pass through the deep tanks none 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 Upper deck.



BOILERS, &c.—(Letter for record.....) Total Heating Surface of Boilers..... 17304 sq.ft.
 Is Forced Draft fitted..... yes No. and Description of Boilers Two S.M.Type W.T. Working Pressure Spt.475 lb. Sat.525 lb.

Is a Report on Main Boilers now forwarded? No. see Gdy.Report No.2108 .
 Is { a Donkey } Boiler fitted? No If so, is a report now forwarded? -
 { an Auxiliary }

Is the donkey boiler intended to be used for domestic purposes only..... -
 Plans. Are approved plans forwarded herewith for Shafting No Main Boilers No Auxiliary Boilers No Donkey Boilers No
 (If not, state date of approval)
 Superheaters No General Pumping Arrangements No Oil Fuel Burning Arrangements No

SPARE GEAR.

Has the spare gear required by the Rules been supplied..... Yes
 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 - - } Constructed and installed under the Supervision of the American Bureau
 { During erection on board vessel - - } Surveyors.
 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.....
 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 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 -
 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 Yes If so, state name of vessel "Victory" Class.

General Remarks. (State quality of workmanship, opinions as to class, &c.) The Machinery of this vessel was built and installed in accordance with American Bureau Requirements.
 The Main and Auxiliary Machinery has been opened up, examined and found, or placed in good condition.
 The Workmanship is good.
 The Machinery of this vessel is eligible in our opinion to be classed with the Society with Record of T.S.(CL) 8,49, and MS (with date).

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

J.A. Bosta,
 Engineer Surveyor to Lloyd's Register of Shipping.
 For self and Mr. S.V. Hauser.

NOV 25 1948

Committee's Minute.....
 Assigned.....



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