

REPORT ON STEAM TURBINE MACHINERY. No. 1928

Received at London Office 26 OCT 1942

Date of passing Report 4/9/42 When handed in at Local Office 4/9 1942 Port of Mobile ALA.
No. in Survey held at CHICKASAW, ALA. Date, First Survey OCT. 30/41 Last Survey JUNE 15 1942
Reg. Book. on the STEEL SCREW STEAMER "FAIRPORT" (Number of Voids 24.) Gross 6165.
Built at CHICKASAW, ALA. By whom built WOLF S. B. COY. Yard No. 1 When built 1942
Engines made at LYNN, MASS. By whom made GENERAL ELECT. COY. Engine No. 45787 When made 1941.
Boilers made at SARGENT, OHIO. By whom made BABCOCK & WILCOX CO. Boiler No. 191 When made 1941.
Shaft Horse Power at Full Power 6000. Owners WATKINSON S.S. CORP. Port belonging to MOBILE, ALA.
Nom. Horse Power as per Rule 446/220 Is Refrigerating Machinery fitted for cargo purposes No. Is Electric Light fitted Yes.
Trade for which Vessel is intended ALL OCEANS.

STEAM TURBINE ENGINES, &c.—Description of Engines (ROSS COMPOUND TURBINES D.P. GEARS.)

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 —
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												
2ND												
3RD												
4TH												
5TH												
6TH												
7TH												
8TH												
9TH												
10TH												
11TH												
12TH												

Shaft Horse Power at each turbine { H.P. — I.P. — L.P. — } Revolutions per minute, at full power, of each Turbine Shaft { H.P. — I.P. — L.P. — } 1st reduction wheel — main shaft —
Rotor Shaft diameter at journals { H.P. — I.P. — L.P. — } Pitch Circle Diameter { 1st pinion — 2nd pinion — } 1st reduction wheel — main wheel — Width of Face { 1st reduction wheel — main wheel — }
Distance between centres of pinion and wheel faces and the centre of the adjacent bearings { 1st pinion — 2nd pinion — } 1st reduction wheel — main wheel —
Flexible Pinion Shafts, diameter { 1st — 2nd — } Pinion Shafts, diameter at bearings { External — Internal — } 1st — 2nd — diameter at bottom of pinion teeth { 1st — 2nd — }
Wheel Shafts, diameter at bearings { 1st — main — } diameter at wheel shroud, { 1st — main — } Generator Shaft, diameter at bearings — Propelling Motor Shaft, diameter at bearings —
Intermediate Shafts, diameter as per rule 16.1" as fitted 16.5" Thrust Shaft, diameter at collars as per rule 11.749" as fitted 11.749" Tube Shaft, diameter as per rule — as fitted —
Screw Shaft, diameter as per rule 17.64" as fitted 16.5" Is the shaft fitted with a continuous liner YES. Bronze Liners, thickness in way of bushes as per rule 1.06" as fitted 1.06"
Thickness between bushes as per rule 18.78" as fitted 18.78" 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 6'-2 3/4" Dev. AREA RATIO.
Propeller, diameter 18'-6" Pitch 20'-0" No. of Blades FOUR State whether Moreable YES. Total Developed Surface 483 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 L.P. Turbine exhaust direct to the

Condenser YES. No. of Turbines fitted with astern wheels ONE. Feed Pumps { No. and size 2-TRIPLEX ALORICH - GROSS 4" STROKE, HOWAR (1AUX. 11" X 7" X 24" STEAM.) How driven

Pumps connected to the Main Bilge Line { No. and size (2) 1.45" X 9" X 12" — 1.10" X 15" X 12" How driven STEAM.

Ballast Pumps, No. and size 1.45" X 9" X 12" Lubricating Oil Pumps, including Spare Pump, No. and size 2. SCREW GEAR IN HEAD

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 3 @ 3" In Holds, &c. 2 @ 3" IN No. 1, 2, 3 & 4 HOLDS 2 @ 2 1/2" IN No. 5 HOLD.

Main Water Circulating Pump Direct Bilge Suctions, No. and size ONE - 14" Independent Power Pump Direct Suctions to the Engine Room

Bilges, No. and size ONE - 8" 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 fall pipes to the bilges YES.

Are all Sea Connections fitted direct on the skin of the ship YES. 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 YES.

What pipes pass through the bunkers SUCTIONS. SLOOT BALLAST. How are they protected PIPE TUNNEL.

What pipes pass through the deep tanks Have they been tested as per rule YES.

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

BOILERS, &c. (Letter for record)

Total Heating Surface of Boilers

9401 sq 8144

Working Pressure

500 LBS

Is Forced Draft fitted

Yes

No. and Description of Boilers

TWO WATER TUBE

Is a Report on Main Boilers now forwarded?

Yes

If so, is a report now forwarded?

Is a Donkey Boiler fitted?

No

Main Boilers

No

Auxiliary Boilers

Donkey Boilers

Plans. Are approved plans forwarded herewith for Shafting

(If not state date of approval)

General Pumping Arrangements

No

Oil Fuel Burning Arrangements

No

Superheaters

No

Spare Gear. State the articles supplied:

TWO BLADES WITH STUDS AND NUTS, SETS OF COUPLING BOLTS, ONE COMPLETE BEARING MAIN GEAR WHEEL SHAFT, ONE COMPLETE BEARING ROTOR SHAFTS, ONE COMPLETE BEARING FOR PINION SHAFTS, PACKING FOR ROTOR SHAFT, GLANDS WITH SPRINGS, PAD FOR KING'S BURY THRUST, TURBINE THRUST, BUSHES AND RINGS, SET LINERS, ONE SET VALVES OF EACH SIZE LIQUID END EACH PUMP VALVE LIO FOR MAIN BOILER CHECK VALVE, IMPELLER SHAFT FOR CIRCULATING PUMP, SET OIL FUEL BURNER NOZZLES COMPLETE WITH ATOMIZERS FOR ONE BURNER, ASSORTED STUDS, BOLTS, NUTS, BARS AND MATES. PROPELLER SHAFT.

The foregoing is a correct description,

Self Shipbuilding Corp by [Signature]

Manufacturer

Dates of Survey while building

During progress of work in shops -- OCT. 3 NOV. 12. 14. 15. 21 DEC. 2. 5. 1941. JAN. 1942. 6. 12. During erection on board vessel -- FEB. 2. 5. 10. 26 MARCH 2. 7. 11. 16. 30 APRIL 13. 15. 21 MAY 2. 3. JUNE 5. 24. 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

15. 11. 41

Stern tube

15. 11. 41

Engine and boiler seatings

2. 3. 42

Engine holding down bolts

30. 3. 42

Completion of pumping arrangements

15. 6. 42

Boilers fixed

2. 3. 42

Engines tried under steam

15. 6. 42

Main boiler safety valves adjusted

3. 5. 42

Thickness of adjusting washers

Identification Mark

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

FORGED STEEL

Identification Marks

SEE FORGING

Tube shaft, Material

Identification Marks

Screw shaft, Material

FORGED STEEL

Identification Marks

101029. 10. 44

Steam Pipes, Material

5 7/8"

Test pressure

15. 00 LBS

Date of test

2. 3. 42

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

Yes

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 of this vessel has been built under special survey and according to the plans appeared. The main and auxiliary machinery has been properly installed and tested out under full working conditions and found to be satisfactory. The right doors to the gears were opened up after the trial runs and found in order; in my opinion the machinery of this vessel is eligible to be classed + L. M. C. with this Society.

The amount of Entry Fee

£ 30.00

When applied for,

Special

£ 435.00

19.

Donkey Boiler Fee

£

When received,

Travelling Expenses (if any)

£

19.

Committee's Minute

NEW YORK SEP. 23 1942

Assigned

LMC-6, 42

NOTE-CL

2 WT. B. (Sht) 501 lbs

J. G. Woodd.

Engineer Surveyor to Lloyd's Register of Shipping.



© 2020

Lloyd's Register Foundation