

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office MAY 29 1940

Date of writing Report 19 When handed in at Local Office 28.5.40 Port of Glasgow
 Date, First Survey Apr. 26th Last Survey 17th May 1940
 No. in Survey held at Glasgow
 Reg. Book. 899 on the S.S. Empire Penguin ex Tennesseean
 Built at Seattle Wash. By whom built Skinner & Eddy Corp. Yard No. ☒
 Engines made at Hamilton O. By whom made Hooven Owens Rentschler Engine No. ☒
 Boilers made at ☒ By whom made ☒ Boiler No. ☒ When made 1919
 Registered Horse Power Owners Port belonging to
 Net Horse Power as per Rule 479 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
 Made for which Vessel is intended

ENGINES, &c.—Description of Engines Triple expansion
 No. of Cylinders 24 3/4 - 4 1/2 - 72 Length of Stroke 48" No. of Cranks 3 Revs. per minute 3
 Crank shaft, dia. of journals as per Rule 13.9 as fitted 14" Crank pin dia. 14 3/8" Crank webs Mid. length breadth 27 1/2" Thickness parallel to axis 9 1/2" shrunk
 Intermediate Shafts, diameter as per Rule 13.24 as fitted 13 1/4" Thrust shaft, diameter at collars as per Rule 13.9 as fitted 14" Thickness around eye-hole 6 3/4"
 Main Shafts, diameter as per Rule 13.24 as fitted 15 1/2" Is the ^{tube} screw shaft fitted with a continuous liner Yes
 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 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
 If so, state type Length of Bearing in Stern Bush next to and supporting propeller
 Propeller, dia. Pitch No. of Blades Material whether Moveable Total Developed Surface sq. feet
 Main Pumps worked from the Main Engines, No. ☒ Diameter ☒ Stroke ☒ Can one be overhauled while the other is at work ☒
 Bilge Pumps worked from the Main Engines, No. ☒ Diameter ☒ Stroke ☒ Can one be overhauled while the other is at work ☒
 Pumps connected to the Main Bilge Line No. and size How driven
 Lubricating Oil Pumps, including Spare Pump, No. and size
 Two independent means arranged for circulating water through the Oil Cooler
 Suctions, connected to both Main Bilge Pumps and Auxiliary
 In Engine and Boiler Room 4 off 3 1/2" Ble room 4 off 3 1/2" Tunnel well 1 off 3 1/2"
 Pump Room In Holds, &c. Nos 1.2.3.4 & 5. Holds 10 off 3 1/2"

In Water Circulating Pump Direct Bilge Suctions, No. and size 1 off
 Independent Power Pump Direct Suctions to the Engine Room Bilges, and size
 Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes.
 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.
 all Sea Connections fitted direct on the skin of the ship Are they fitted with Valves or Cocks.
 they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates. Are the Blow Off Discharges above or below the deep water line.
 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.
 at Pipes pass through the bunkers. How are they protected
 at pipes pass through the deep tanks Have they been tested as per Rule
 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

IN BOILERS, &c.—(Letter for record) Total Heating Surface of Boilers
 Forced Draft fitted No. No. and Description of Boilers 3. S. B. Working Pressure 210 lbs.
 A REPORT ON MAIN BOILERS NOW FORWARDED? Yes (Approved See Memo 21/6/40)
 A DONKEY BOILER FITTED? No If so, is a report now forwarded? ☒
 Is the donkey boiler intended to be used for domestic purposes only ☒
 Are approved plans forwarded herewith for Shafting ☒ Main Boilers Yes Auxiliary Boilers ☒ Donkey Boilers ☒
 Are approved plans forwarded herewith for General Pumping Arrangements ☒ Oil fuel Burning Piping Arrangements ☒

SPARE GEAR.
 Is the spare gear required by the Rules been supplied Yes
 Is the principal additional spare gear supplied Yes

The foregoing is a correct description,

Manufacturer.



© 2019 Lloyd's Register Foundation

During progress of work in shops - -
 During erection on board vessel - - -
 Total No. of visits

See accompanying Report
See accompanying Machinery Report

Dates of Examination of principal parts—Cylinders _____ Slides _____ Covers _____
 Pistons _____ Piston Rods _____ Connecting rods _____
 Crank shaft _____ Thrust shaft _____ Intermediate shafts _____
 Tube shaft _____ Screw shaft _____ Propeller _____
 Stern tube _____ Engine and boiler seatings _____ Engines 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 _____
 Crank shaft material _____ Identification Mark _____ Thrust shaft material _____ Identification Mark _____
 Intermediate shafts, material _____ Identification Marks _____ Tube shaft, material _____ Identification Mark _____
 Screw shaft, material _____ Identification Mark _____ 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 duplicate of a previous case _____ If so, state name of vessel _____

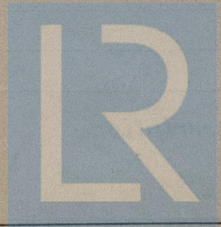
General Remarks (State quality of workmanship, opinions as to class, &c. _____)

The above is forwarded for the information of the Committee

The amount of Entry Fee ... £ : : When applied for, _____
 Special ... £ 13 : : _____
 Donkey Boiler Fee ... £ : : When received, _____
 Travelling Expenses (if any) £ : : 10/6/40

G. E. Murdoch
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minutes _____ GLASGOW 28 MAY 1940
 Assigned SEE ACCOMPANYING MACHINERY REPORT



© 2019
 Lloyd's Register
 Foundation

Glasgow
 The Surveyors are requested not to write on or below the space for Committee's Minutes.