

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

7 JUN 1928

Date of writing Report 29-5-1928 When handed in at Local Office 19 Port of Rotterdam  
 No. in Survey held at Rotterdam Date, First Survey 23-12-27 Last Survey 5-5-1928  
 Reg. Book. on the Engine No. 167-168 (Number of Visits 29)  
 Built at Monfalcone By whom built meurs Cantiere Navale Trieste Yard No. 203 Tons { Gross  
 Engines made at Rotterdam By whom made Pidamule Droogdok My Engine No. 167-168 when made 1920 Net  
 Boilers made at Rotterdam By whom made Pidamule Droogdok My Boiler No. 468-69 when made 1920 When built  
 Registered Horse Power Owners Curacaouche Scheepv. My Port belonging to Willemstad.  
 Nom. Horse Power as per Rule 236 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted yes  
 Trade for which Vessel is intended

**ENGINES, &c.**—Description of Engines Two sets of triple expansion engines Revs. per minute 160  
 Dia. of Cylinders 12 3/4" x 20 1/2" x 33 7/8" Length of Stroke 24 7/16" No. of Cylinders 2 x 3 = 6 No. of Cranks 2 x 3  
 Crank shaft, dia. of journals as per Rule 160.4 mm as fitted 170 mm Crank pin dia. 170 mm Crank webs Mid. length breadth 320 mm Thickness parallel to axis 156 mm  
 as fitted 170 mm Mid. length thickness 112 mm shrunk Thickness around eye-hole 79 mm  
 Intermediate Shafts, diameter as per Rule 164.4 mm as fitted 170 mm Thrust shaft, diameter at collars as per Rule 160.4 mm as fitted 170 mm  
 Tube Shafts, diameter as per Rule 76 mm as fitted 84 mm Screw Shaft, diameter as per Rule 76 mm as fitted 84 mm Is the tube screw shaft fitted with a continuous liner yes  
 Bronze Liners, thickness in way of bushes as per Rule 15 mm as fitted 15 mm Thickness between bushes as per Rule 14 mm as fitted 14 mm 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 one length  
 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 yes  
 If two liners are fitted, is the shaft lapped or protected between the liners yes Is an approved Oil Gland or other appliance fitted at the after end of the tube shaft yes U.S. patent O. G. Length of Bearing in Stern Bush next to and supporting propeller 868 mm  
 Propeller, dia. 8'0" Pitch 4' No. of Blades 4 Material Bronze whether Moveable No Total Developed Surface 32 sq. feet  
 Feed Pumps worked from the Main Engines, No. 2 x 1 Diameter 130 mm Stroke 100 mm Can one be overhauled while the other is at work yes  
 Bilge Pumps worked from the Main Engines, No. 2 x 1 Diameter 130 mm Stroke 100 mm Can one be overhauled while the other is at work yes  
 Feed Pumps { No. and size 2 Weir pumps 6 x 8 1/2 x 18" Pumps connected to the Main Bilge Line { No. and size 2. 6 x 7 1/2 x 6" 4 1/2" x 5" x 16"  
 How driven Steam How driven Steam  
 Ballast Pumps, No. and size One 6 x 7 1/2 x 6" Lubricating Oil Pumps, including Spare Pump, No. and size yes  
 Are two independent means arranged for circulating water through the Oil Cooler yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room yes  
 In Holds, &c. yes

**Main Water Circulating Pump Direct Bilge Suctions, No. and size** yes **Independent Power Pump Direct Suctions to the Engine Room Bilges,**  
 No. and size yes 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  
 Are all Sea Connections fitted direct on the skin of the ship yes Are they fitted with Valves or Cocks yes  
 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 yes  
 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 yes How are they protected yes  
 What pipes pass through the deep tanks yes 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 yes

**MAIN BOILERS, &c.**—(Letter for record S) Total Heating Surface of Boilers 4160 sq. feet.  
 Is Forced Draft fitted yes No. and Description of Boilers Single ended marine Working Pressure 100 lbs  
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? yes  
 IS A DONKEY BOILER FITTED? yes If so, is a report now forwarded? yes

**PLANS.** Are approved plans forwarded herewith for Shafting No Main Boilers No Auxiliary Boilers yes Donkey Boilers yes  
 (If not state date of approval) All plans retained in London office for sister vessels.  
 Superheaters yes General Pumping Arrangements No Oil fuel Burning Piping Arrangements No

**SPARE GEAR.** State the articles supplied:— One set of top end bolts and nuts, one set of bottom end bolts and nuts, one set of main bearing bolts and nuts, one set of piston rings, one set of feed and bilge pump valves, a quantity of assorted bolts and nuts and iron of various sizes, one cast iron propeller, one screw shaft and one crankshaft.

The foregoing is a correct description,  
 ROTTERDAMSCHЕ DROOGDOCK MAATSCHAPPIJ  
 DIRECTOR  
 Manufacturer.

Dates of Survey while building

During progress of work in shops -- 13.07.29 31/12 '27. 5-10-14/11 '28. 3-4-8-13-16-21-24-28-29/2 '28. 8-14-15-16-19-24/2 '28.  
 3-5-13-20-25-27/4 '28 5/5 '28

During erection on board vessel --

Total No. of visits 29.

Dates of Examination of principal parts—Cylinders 13-21-24/2, 8.14.16/13, 13/14. Slides 29/2. Covers 29/2, 14/5, 16/5.

Pistons Piston Rods 29/11, 5-10/11, 14/5. Connecting rods 14/11, 14/12, 16/12, 14/5, 3/4.

Crank shaft 29.3/11, 5-10-14/11, 5-0/2, 8-19/5. Thrust shaft 27/11, 10/1, 3-0/2, 19/5. Intermediate shafts 20/2, 15/5, 5/4.

Tube shaft ✓ Screw shaft 24-28/2, 15/5, 5/4. Propeller 20/4.

Stern tube 19/5. 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 S.M. steel Identification Mark J.S. 5-4-20 Thrust shaft material S.M. steel Identification Mark J.S. 5-4-20

Intermediate shafts, material S.M. steel Identification Marks J.S. 5-4-20 Tube shaft, material ✓ Identification Mark ✓

Screw shaft, material S.M. steel Identification Mark J.S. 5-4-20 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? Yes If so, have the requirements of the Rules been complied with? Yes

Is this machinery duplicate of a previous case? Yes If so, state name of vessel, Maximina and others

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

*This machinery has been made in accordance with the approved plans, Secretary's letters and society's Rules material tested as required, and workmanship good, and the vessel will in my opinion be eligible to be recorded in the Society's Register Book with \*L.M.C. with date when the machinery has been satisfactory fitted.*

*The machinery has been forwarded to Monfalcone*

*A copy of this report has been forwarded to the Chief Surveyors.*

The amount of Entry Fee ... £ 48.00 : When applied for, 16 19 25

Special ... £ 205.20 : 16 19 25

Free for spare shipping Donkey Boiler Fee ... £ 50.00 : When received, 15.6.28

Travelling Expenses (if any) £ 144.50 : 15.6.28

*Y. Y. Jelton*  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned



Certificate to be sent to Rotterdam Surveyors

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