

# REPORT ON OIL ENGINE MACHINERY.

No. 13760

Received at London Office 14 AUG 1926

Date of writing Report 20 July 1926 When handed in at Local Office

Port of Amsterdam

No. in Survey held at Amsterdam & Hingelo. Reg. Book.

Date, First Survey 12 June 1925 Last Survey 17 July 1926

Number of Visits 60

on the <sup>Single</sup> ~~Triple~~ ~~Quadruple~~ Screw vessel Motor "MIRAZDA"

Tons Gross 8002.56 Net 4746.04

Built at Amsterdam By whom built N.V. Ned. Scheep M4 Yard No. 286 When built 1926

Engines made at Amsterdam By whom made N.V. Werkspoor Engine No. When made 1926

Donkey Boilers made at Amsterdam By whom made N.V. Werkspoor Boiler No. When made 1926

Brake Horse Power 2000 Owners N.V. Petroleum M4 de Corona Port belonging to 's Gravenhage

Nom. Horse Power as per Rule 502 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

Trade for which vessel is intended Ocean trade 25% 55 1/8"

OIL ENGINES, &c. Type of Engines Diesel <sup>charge</sup> ~~injection~~ super for 4 stroke cycle 4 Single or double acting single

Maximum pressure in cylinders 700 485 Diameter of cylinders 650 mm Length of stroke 1400 mm No. of cylinders 8 No. of cranks 2

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 844 mm Is there a bearing between each crank yes

Revolutions per minute 110 Flywheel dia. 2260 Weight 6000 kg Means of ignition ~~spark~~ <sup>injection</sup> Kind of fuel used Crude oil

Crank Shaft, dia. of journals as per Rule 444 as fitted 460 Crank pin dia. 460 Crank Webs Mid. length breadth 870 Mid. length thickness 290 Thickness parallel to axis shrunk Thickness around eye-hole

Flywheel Shaft, diameter as per Rule 444 as fitted 460 Intermediate Shafts, diameter as per Rule 313 as fitted 470 Thrust Shaft, diameter at collars as per Rule ~~approved~~ as fitted 460

Tube Shaft, diameter as per Rule ~~approved~~ as fitted ~~approved~~ Screw Shaft, diameter as per Rule ~~approved~~ as fitted 400 mm Is the tube screw shaft fitted with a continuous liner yes

Bronze Liners, thickness in way of bushes as per Rule ~~approved~~ as fitted 20.5 Thickness between bushes as per rule ~~approved~~ as fitted 15 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 C.T.

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 1440 mm

Propeller, dia. 15' Pitch 12' No. of blades 4 Material Bronze whether Moveable no Total Developed Surface 72 sq. feet

Method of reversing Engines by Air Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes Means of lubrication forced

Thickness of cylinder liners 55 mm Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material lagged

If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine funnel

Cooling Water Pumps, No. 3 Salt & 2 fresh water Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes

What special arrangements are made for dealing with cooling water if discharged into bilges overboard

Bilge Pumps worked from the Main Engines, No. 2 Rotary type 35 ton each Can one be overhauled while the other is at work yes

Pumps connected to the Main Bilge Line No. and Size 2 Rotary type 35 ton each 1 Steam pump 8" x 8" x 10" How driven gear driven main engine Steam driven

Ballast Pumps, No. and size 1- 8" x 8" x 10" Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 1 Steam driven 12 rotary 40 ton each 1 Steam driven 8" x 8" x 10"

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 Machinery Spaces 5- 3 1/2", 2- 2" fuel pumps suction from gutter way In Pump Room 1- 3" fore aft.

In Holds, &c. in cofferdams aft 1- 4" fore cofferdams 3- 2 3/4" in fore hold 3- 2"

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1- 6 1/2", and 1- 5"

Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes yes Are the Bilge Suctions in the Machinery Spaces 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 yes Are they fitted with Valves or Cocks Kalms & cork

Are they fixed sufficiently high on the ship's side to be seen without lifting the platform 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

That pipes pass through the bunkers none How are they protected

That 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 none Is it fitted with a watertight door worked from

If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork

Main Air Compressors, No. none No. of stages Diameters Stroke Driven by

Auxiliary Air Compressors, No. 2 No. of stages 2 Diameters 206, 206-104 Stroke 160 mm Driven by Steam engine Diesel engine

Small Auxiliary Air Compressors, No. none No. of stages Diameters Stroke Driven by

Super charge ~~overcharging~~ Air Pumps, No. Bottom end each cylinder Diameter 650 Stroke 1400 Driven by Main engine

Auxiliary Engines crank shafts, diameter as per Rule as fitted 110. <sup>12603</sup> ~~12603~~ Position

AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule yes

Can the internal surfaces of the receivers be examined and cleaned yes Is a drain fitted at the lowest part of each receiver yes

High Pressure Air Receivers, No. none Cubic capacity of each Internal diameter thickness

Seamless, lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure Actual

Starting Air Receivers, No. 2 Total cubic capacity 8000 cub feet Internal diameter 1495 mm thickness 27 mm

Seamless, lap welded or riveted longitudinal joint riveted Material SMS Range of tensile strength 24 1/4 - 34 1/2 Working pressure Actual 350 lbs

005429-005435-0216



IS A DONKEY BOILER FITTED?

Is the donkey boiler intended to be used for domestic purposes only

Yes

If so, is a report now forwarded?

No See Ans. letter 18/8/36

PLANS. Are approved plans forwarded herewith for Shafting

(If not, state date of approval)

Receivers

Separate Tanks

Donkey Boilers

General Pumping Arrangements

Oil Fuel Burning Arrangements

SPARE GEAR.

Has the spare gear required by the Rules been supplied

Yes

State the principal additional spare gear supplied

As per attached list.

The foregoing is a correct description,

WERKSPoor N.V.

[Signature]

Manufacturer.

Dates of Survey while building: During progress of work in shops... During erection on board vessel... Total No. of visits: 60

Dates of Examination of principal parts - Cylinders, Covers, Pistons, etc.

Crank shaft, Flywheel shaft, Thrust shaft, Intermediate shafts, etc.

Screw shaft, Propeller, Stern tube, Engine seatings, Engines holding down bolts, etc.

Completion of fitting sea connections, Completion of pumping arrangements, etc.

Crank shaft, Material SMS, Identification Mark BN.7.0.35, etc.

Thrust shaft, Material SMS, Identification Mark HPB 25.9.35, etc.

Tube shaft, Material, Identification Mark, Screw shaft, Material SMS, etc.

Is the flash point of the oil to be used over 150° F. Yes

Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with Yes

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo oil tanker

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 Yes If so, state name of vessel MV "MACOMA Amrup 13690"

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

The Machinery has been constructed under special survey to approved plans in accordance with the rules & Secretary's letters. Material & workmanship good. She is eligible in my opinion for the approval of the Committee to be recorded in L.M.C. 7-36 in the Society's Register book with Continuous Survey on request.

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

The amount of Entry Fee \$ 72.-, Special \$ 1200.-, Donkey Boiler Fee \$ 204.-, Travelling Expenses (if any) \$ 54.-

FRI, 7 AUG 1936

Assigned + L.M.C. 7.36 Oil Inf. Cl. 1800

[Signature] Engineer Surveyor to Lloyd's Register of Shipping.

