

REPORT ON OIL ENGINE MACHINERY.

No. 25333
13 MAR 7

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Date of writing Report 8-3-1937 When handed in at Local Office Amsterdam Port of Rotterdam

No. in Survey held at Amsterdam Date, First Survey 17-11-36 Last Survey 3-3-1937
Reg. Book. Number of Visits 10

on the Single Screw vessel "ERODONA" Tons Gross
Twinn
Triple
Quadruple Net

Built at Amsterdam By whom built C. v. d. Giessen & Co. Yard No. 640 When built 36-37
Engines made at Amsterdam By whom made Werkspoor Engine No. ? When made 36-37
Donkey Boilers made at do By whom made do Boiler No. ? When made 36-37
Brake Horse Power 2000 Owners Anglo Saxon Pet. Co. Ltd. Port belonging to London
Nom. Horse Power as per Rule 374 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted Yes
Trade for which vessel is intended _____

OIL ENGINES, &c. Type of Engines Diesel, Solid Injection Supercharged 2 or 4 stroke cycle Single or double acting
Please see Amsterdam rep. 13905.

Maximum pressure in cylinders Diameter of cylinders Length of stroke No. of cylinders No. of cranks
Mean Indicated Pressure

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge Is there a bearing between each crank
Revolutions per minute Flywheel dia. Weight Means of ignition Compression Kind of fuel used Diesel oil

Crank Shaft, dia. of journals as per Rule as fitted Crank pin dia. Crank Webs Mid. length breadth Thickness parallel to axis
shrink Thickness around eyehole Mid. length thickness

Flywheel Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule as fitted Thrust Shaft, diameter at collars as per Rule as fitted

Tube Shaft, diameter as per Rule as fitted Screw Shaft, diameter as per Rule as fitted Is the tube shaft fitted with a continuous liner

Bronze Liners, thickness in way of bushes as per Rule as fitted Thickness between bushes as per rule as fitted 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 If so, state type Length of Bearing in Stern Bush next to and supporting propeller 1400 mm

Propeller, dia. 4270 Pitch 3500 No. of blades 4 Material bronze whether Moveable solid Total Developed Surface 82 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 Forged
Thickness of cylinder liners 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 above
Cooling Water Pumps, No. 4 Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes

Bilge Pumps worked from the Main Engines, No. 2 Diameter 3 1/2 inch Stroke 1 1/2 inch Can one be overhauled while the other is at work Yes

Pumps connected to the Main Bilge Line No. and Size 2 worm wheel pumps 1 duplex pump 8" x 8" x 10"
 How driven main engine steam

Is the cooling water led to the bilges no If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping arrangements

Ballast Pumps, No. and size one 8" x 8" x 10" Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size one rotary 407 p.h. steam 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 3 à 90 mm. 1 à 160 mm. 1 à 125 mm. Cofferdam 25-26 3/4 à 90 mm. In Pump Room -

In Holds, &c. 3 à 90 mm. pumps from fore. 1 à 50 mm. 2 in fore hold above deep tank 50 mm. Cofferdam 3 à 70 mm. above f.p. 1 à 50 mm.

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 à 160 mm. 1 à 125 mm.

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 both

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 above

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 plates Yes
What pipes pass through the bunkers suction to cofferdam How are they protected controlled valves each in from deck steel pipes

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 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. No. of stages Diameters Stroke Driven by
Auxiliary Air Compressors, No. 2 No. of stages 2 Diameters 206-184 mm Stroke 160 mm Driven by Steam

Small Auxiliary Air Compressors, No. No. of stages Diameters Stroke Driven by
Scavenging Air Pumps, No. Diameter Stroke Driven by
Auxiliary Engines crank shafts, diameter as per Rule see Amsterdam report No. one
 as fitted Position starboard



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. ✓ Cubic capacity of each ✓ Internal diameter ✓ thickness ✓
 Seamless, lap welded or riveted longitudinal joint ✓ Material ✓ Range of tensile strength ✓ Working pressure by Rules ✓ Actual ✓
Starting Air Receivers, No. ✓ Total cubic capacity ✓ Internal diameter ✓ thickness ✓
 Seamless, lap welded or riveted longitudinal joint ✓ Material ✓ Range of tensile strength ✓ Working pressure by Rules ✓ Actual ✓

IS A DONKEY BOILER FITTED? *Yes* ✓ If so, is a report now forwarded? *Yes. Amc. rep. 13891.*
 Is the donkey boiler intended to be used for domestic purposes only *no* ✓

PLANS. Are approved plans forwarded herewith for Shafting (If not, state date of approval) ✓ Receivers ✓ Separate Fuel Tanks ✓
 Donkey Boilers ✓ General Pumping Arrangements *30-9-35.* Pumping Arrangements in Machinery Space *23-8-35.*
 Oil Fuel Burning Arrangements ✓

SPARE GEAR.

Has the spare gear required by the Rules been supplied *Yes* ✓
 State the principal additional spare gear supplied *one screw shaft, c.i. propeller, 2 cyl cores, lines complete, 2 pistons complete, one set of coupling bolts, main bearing bushes, bolts, complete, one set chain wheels with chains for camshaft drive, also for pumps drive, one connecting rod, crosshead complete with guide, one piston rod etc.*

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building
 During progress of work in shops - -
 During erection on board vessel - - *17-11-36, 5-20-20/1, 10-22-25-27/2, 5/3-37.*
 Total No. of visits *10*

Dates of Examination of principal parts—Cylinders ✓ Covers ✓ Pistons ✓ Rods ✓ Connecting rods ✓
 Crank shaft ✓ Flywheel shaft ✓ Thrust shaft ✓ Intermediate shafts ✓ Tube shaft ✓
 Screw shaft *17-11-36* Propeller *17-11-36* Stern tube *17-11-36* Engine seatings ✓ Engines holding down bolts *20-1-37*
 Completion of fitting sea connections *17-11-36* Completion of pumping arrangements *10-2-37* Engines tried under working conditions *25-2-37*
 Crank shaft, Material ✓ Identification Mark ✓ Flywheel shaft, Material ✓ Identification Mark ✓
 Thrust shaft, Material ✓ Identification Mark ✓ Intermediate shafts, Material ✓ Identification Marks ✓
 Tube shaft, Material ✓ Identification Mark ✓ Screw shaft, Material ✓ Identification Mark ✓

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 ✓ 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 *no*

Is this machinery duplicate of a previous case *Yes* If so, state name of vessel *"Crisis - Oteema"*

General Remarks (State quality of workmanship, opinions as to class, &c. *The machinery has been made and fitted in accordance with the approved plans, Society's Rules and Secretary's letters, material tested as required and workmanship good. The whole was found in a good working and manoeuvring condition during a trial trip and I am of opinion that this vessel is eligible to be recorded in the Society's Register Book with * LMC 3-37. oil engines C.I.*

The amount of Entry Fee .. £ : : When applied for,
 Special *196.00* : *12.3.1937*
 Donkey Boiler Fee ... £ : : When received,
 Travelling Expenses (if any) *15.50* : *2.4.37* *3/4*

W. Brown
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **TUE 16 MAR 1937**

Assigned + LMC 3.37
A.B. 180 lb



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