

REPORT ON OIL ENGINE MACHINERY.

No. 267766

Received at London Office APR 19 1938

Date of writing Report 2-4-1938 When handed in at Local Office 10 Port of Rotterdam

No. in Survey held at Schiedam Date, First Survey 8-4-37 Last Survey 5-4-1938

Reg. Book. Single on the Tonnage Triple Screw vessel motor tanker "OVULA" Tons Gross Net

Built at Schiedam By whom built N. V. Wilton-Fynbos Yard No. 662 When built 1938

Engines made at So. By whom made So. Engine No. 1061 When made 1938

Donkey Boilers made at Rotterdam By whom made Stott, George & Co. Boiler No. When made 1938

Brake Horse Power 2000 Owners Petroleum Maatschappij La Corone Port belonging to S. Groenhouze

Nom. Horse Power as per Rule 377 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted Yes

Trade for which vessel is intended 2576 538

OIL ENGINES, &c.—Type of Engines M.A.N. Heavy oil engine with super charging 2004 stroke cycle Yes Single or double acting Yes

Maximum pressure in cylinders 45 kg Diameter of cylinders 650 mm Length of stroke 1400 mm No. of cylinders 6 No. of cranks 6

Mean Indicated Pressure

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 1200 mm Is there a bearing between each crank Yes

Revolutions per minute 120 Flywheel dia. 2300 mm Weight 8640 kg Means of ignition Compression Kind of fuel used diesel oil

Crank Shaft, dia. of journals as per Rule app. as fitted 460 mm Crank pin dia. 460 mm Crank Webs Mid. length breadth 870 mm Thickness parallel to axis 238 mm Mid. length thickness 290 mm Thickness around eyehole 204 mm

Flywheel Shaft, diameter as per Rule app. as fitted 340 mm Intermediate Shafts, diameter as per Rule app. as fitted 350 mm Thrust Shaft, diameter at collars as per Rule app. as fitted 340 mm

Tube Shaft, diameter as per Rule app. as fitted Screw Shaft, diameter as per Rule app. as fitted 370 mm Is the tube screw shaft fitted with a continuous liner Yes

Bronze Liners, thickness in way of bushes as per Rule app. as fitted 20 mm-19.5 mm Thickness between bushes as per rule app. as fitted 15 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

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 1500 mm

Propeller, dia. 4270 mm Pitch 3500 mm No. of blades 4 Material bronze whether Moveable solid Total Developed Surface 5.75 m² feet

Method of reversing Engines direct Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication forged Thickness of cylinder liners 45 mm Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material both 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. 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 267 mm Stroke Can one be overhauled while the other is at work Yes

Pumps connected to the Main Bilge Line No. and Size one à 8" x 8" x 10" How driven 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 à 8" x 8" x 10" Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 1 à 40 tons - 8" x 8" x 10" 1 à 50 tons - 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 25-26 12 90 mm In Pump Room 3 à 90 mm 1 à 50 mm 2 in four holds above deck 50 mm 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 152 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 valves, cocks

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 plate Yes

What pipes pass through the bunkers suction to cofferdams How are they protected steel pipes and controlled valves

What pipes pass through the deep tanks 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 steel tanker.

Main Air Compressors, No. none 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 Please see Rotterdam ref. as fitted 110 mm No. 1 Position Starboard side

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 *✓*
Starting Air Receivers, No. *2* Total cubic capacity *2 x 11.3 M³* Internal diameter *1493 mm* thickness *21 mm*
Seamless, lap welded or riveted longitudinal joint *3 x 2 1/2 inch* Material *SM steel* Range of tensile strength *30-34 T* Working pressure by Rules *44 psi*
Actual *24.6 kg.*

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

PLANS. Are approved plans forwarded herewith for Shafting *6-7-37* Receivers *6-7-37* Separate Fuel Tanks *✓*
(If not, state date of approval)
Donkey Boilers *8-4-35* General Pumping Arrangements *6-7-37* Pumping Arrangements in Machinery Space *6-7-37*
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. covers, liners complete, 2 pistons complete, one set of coupling bolts, main bearing brasses, bolts, one set of crosshead brasses, bolts, crank pin brasses, bolts, 2 fuel pumps complete, one set chain wheels with chains for camshaft drive, also for pump drive, one connecting rod, crosshead complete with guide, one piston rod etc.*

The foregoing is a correct description.

Dates of Survey while building
During progress of work in shops: 8-12-37, 11-25-37, 6-13-15-19-20-37, 2-11-17-20-30-37, 14-16-20-22-25-37, 1-19-25-37
During erection on board vessel: 22-25-29-37, 24-30-37, 5-17-10-24-28-37, 1-9-37, 10-37
Total No. of visits *44*

Dates of Examination of principal parts—Cylinders *25-37*, Covers *19-20-37*, Pistons *20-37*, Rods *25-37*, Connecting rods *13-15-19-37*
Crank shaft *✓*, Flywheel shaft *✓*, Thrust shaft *✓*, Intermediate shafts *✓*, Tube shaft *✓*
Screw shaft *17-1-30*, Propeller *14-1-30*, Stern tube *17-1-30*, Engine seatings *17-1-30*, Engines holding down bolts *4-3-30*
Completion of fitting sea connections *20-1-30*, Completion of pumping arrangements *5-4-30*, Engines tried under working conditions *5-4-30*
Crank shaft, Material *SM steel*, Identification Mark *HJ. 2-6-37*, Flywheel shaft, Material *SM steel*, Identification Mark *HJ. 2-6-37*
Thrust shaft, Material *SM steel*, Identification Mark *HPB 9-10-37*, Intermediate shafts, Material *SM steel*, Identification Marks *H.P.B. 1-11-37*
Tube shaft, Material *✓*, Identification Mark *✓*, Screw shaft, Material *SM steel*, Identification Mark *HPB. 1-11-37*
Is the flash point of the oil to be used over 150° F. *Yes* spare *50*
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 *Elusa, Eulima, Eulota, Olena*

General Remarks (State quality of workmanship, opinions as to class, &c.) *The machinery has been made and fitted in accordance with the Society's Rules, approved plans and Secretary's letters, material tested as required and workmanship good. The whole was found in a good working condition and manoeuvring satisfactorily 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 4-30. Oil engines. C.I.*

The amount of Entry Fee .. £ *100.00* : When applied for, *15.4 1938*
Special ... £ *978.60* :
Donkey Boiler Fee ... £ *100.00* : When received, *14.6 1938*
Travelling Expenses (if any) £ *22.50* : *27.5*

Committee's Minute

Assigned

+ Lmb. 4.38
oil line
D.B. -180

CH Bounce
Engineer Surveyor to Lloyd's Register of Shipping.



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