

REPORT ON OIL ENGINE MACHINERY.

No. 26776^b

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. Number of Visits 44

on the ^{Single} Trip ^{Triple} Screw vessel motor tanker "OVULA" Tons ^{Gross} ^{Net}

Built at Schiedam By whom built N. V. Wilton-Typhoon Yard No. 662 When built 1938
Engines made at So By whom made So Engine No. 1061 When made 1938
Donkey Boilers made at R'dam By whom made Platt, George & Co. Boiler No. When made 1938
Brake Horse Power 2000 Owners Petroleum Maatschappij La Corone Port belonging to S. G. van Hooze
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 MAN 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. Crank pin dia. 460 mm Crank Webs Mid. length breadth 870 mm Thickness parallel to axis 238 mm
as fitted 460 mm Mid. length thickness 290 mm shrunk Thickness around eyehole 204 mm

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

Tube Shaft, diameter as per Rule ✓ Screw Shaft, diameter as per Rule app. Is the tube screw shaft fitted with a continuous liner Yes
as fitted ✓ as fitted 370 mm as fitted 15 mm

Bronze Liners, thickness in way of bushes as per Rule app. Thickness between bushes as per rule app. Is the after end of the liner made watertight in the
as fitted 20 mm - 19.5 mm as fitted 15 mm 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 3580 mm No. of blades 4 Material bronze whether Moveable solid Total Developed Surface 5.75 M² sq. 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 ^{main bilge pumps} Diameter 268 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 1290 mm} In Pump Room
In Holds, &c. 3 à 90 mm ✓ ^{in four holds above deck tank 50 mm} 1 à 50 mm, 2 ^{coffee dam 3 à 70 mm} 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

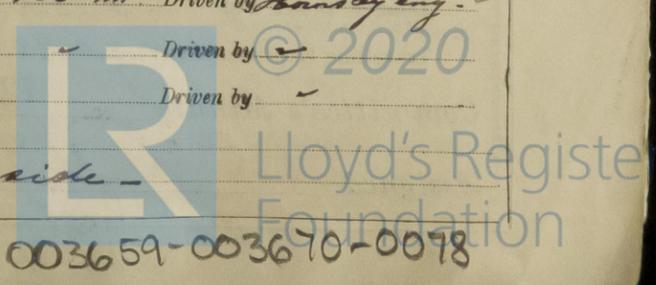
What pipes pass through the bunkers suctions to coffee dams How are they protected steel pipes and controlled valves
What pipes pass through the deep tanks ✓ Have they been tested as per Rule ✓

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
Shansby eng.

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 R'dam rep. No. 1
as fitted 110 mm Position Starboard



003659-003690-0098

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 D. built* Material *SM steel* Range of tensile strength *30-347* Working pressure by Rules *appx*
 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 Shuffling *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.

W. J. McNamee Manufacturer.

Dates of Survey while building	During progress of work in shops--	8-12/4-25/6	6-13-15-19-20/7	2-11-17-20-30/18	14-16-20-22-25-29/9	1-19-25/10
	During erection on board vessel---	22-25-29/11	24-30/12-37	5-17-10-24-28/1-38		
	Total No. of visits	44				

Dates of Examination of principal parts—Cylinders *25/6-18-15-19/7* Covers *19-20/7-37* Pistons *20/17-2-11-14/18-30* Rods *25/16-6-13-15/7* Connecting rods *13-15-19/17*
 Crank shaft *✓* Flywheel shaft *✓* Thrust shaft *✓* Intermediate shafts *✓* Tube shaft *✓*
 Screw shaft *17-1-30* Propeller *4-1-30* 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 *no 5301. H.J. 2-6-37* Flywheel shaft, Material *SM steel* Identification Mark *no 5302. H.J. 2-6-37*
 Thrust shaft, Material *SM steel* Identification Mark *no 4143. HPB 9-10-37* Intermediate shafts, Material *SM steel* Identification Marks *no 4204. H.P.B. 1-11-37*
 Tube shaft, Material *✓* Identification Mark *✓* Screw shaft, Material *SM steel* Identification Mark *no 4202. HPB. 1-11-37*
 Is the flash point of the oil to be used over 150° F. *Yes* *space 50* Identification Mark *no 4347. HPB 23-12-37*

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 *Clusa, Eulina, 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.*

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

The amount of Entry Fee	£ 100.00	When applied for,	15.4 19 38
Special	£ 978.60		
Donkey Boiler Fee	£ 100.00	When received,	14.6 19 38
Travelling Expenses (if any)	£ 22.50		

W. J. McNamee
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **FRI. 22 APR 1938**

Assigned *+ Lmb. 4.38 oil bil of D.B. -1800*

