

# REPORT ON OIL ENGINE MACHINERY.

No. 16809 <sup>6</sup>

Received at London Office  
 Date of writing Report 24.9.1927 When handed in at Local Office in Port of Rotterdam  
 No. in Survey held at Rotterdam Date, First Survey 8.4.26 Last Survey 14.9.1925  
 eg. Book. Number of Visits 37  
 on the <sup>Single</sup> Motor <sup>Triple</sup> Screw vessels "SPONDILUS"  
 built at Rotterdam By whom built My. P. van Noord Yard No. 303 When built 1924  
 Engines made at Amsterdam By whom made Werkspoor Engine No. When made 1924  
 Donkey Boilers made at Rotterdam By whom made My. P. van Noord Boiler No. 1520/24 When made 1926  
 Brake Horse Power 3500 Owners Anglo Saxon Petroleum Co Port belonging to London  
 Nom. Horse Power as per Rule 1200 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

**ENGINES, &c.**—Type of Engines See Amsterdam report N° 10680<sup>a</sup> 2 or 4 stroke cycle Single or double acting  
 Maximum pressure in cylinders No. of cylinders Diameter of cylinders No. of cranks Length of stroke  
 Mean 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 Kind of fuel used  
 Crank Shaft, dia. of journals as per Rule as fitted Crank pin dia. Crank Webs Mid. length breadth Mid. length thickness Thickness parallel to axis Thickness around eye-hole  
 Flywheel Shafts, 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 Shafts, diameter as per Rule as fitted Screw Shaft, diameter as per Rule as fitted Is the tube shaft fitted with a continuous liner Yes  
 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 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  
 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 Yes Length of Bearing in Stern Bush next to and supporting propeller 1.48 etc.  
 Propeller, dia. 16.6" Pitch 17'6" No. of blades 4 Material Bronze whether Moveable No Total Developed Surface 95 sq. feet  
 Method of reversing Engines Is a governor or other arrangement fitted to prevent racing of the engine when declutched Means of lubrication  
 Thickness of cylinder liners Are the cylinders fitted with safety valves Are the exhaust pipes and silencers water cooled or lagged with conducting material If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine  
 Cooling Water Pumps, No. Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes  
 Bilge Pumps fitted to the Main Engines, No. Diameter Stroke Can one be overhauled while the other is at work  
 Pumps connected to the Main Bilge Line No. and Size 1 à 8" x 10 1/2" x 10" How driven Steam  
 Bilge Pumps, No. and size 1 à 6" x 6" 1 à 8" x 10 1/2" x 10" 1 à 8" x 9" x 10" Lubricating Oil Pumps, including Spare Pump, No. and size 3 { 1 à 200 x 500 mill 1 rotary 2 6"  
 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 Engine and Boiler Room 6 à 3 1/2" from copperdam 4 à 3"  
 Suctions, &c. Pump room aft 1 à 3" and 2 à 2 1/2" Pump room forward 1 à 2 1/2" Despatch tank 1 à 2"  
 Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 à 6 1/2" 1 à 4 1/2"  
 Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Yes Are the Bilge Suctions in the Machinery Space 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 plate Yes  
 Do all pipes pass through the bunkers How are they protected  
 Do all 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 No tunnel Is it fitted with a watertight door worked from  
 For good vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork  
 Auxiliary Air Compressors, No. No. of stages Diameters Stroke Driven by  
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 Auxiliary Air Pumps, No. Diameter Stroke Driven by  
 Auxiliary Engines crank shafts, diameter as per Rule as fitted See separate reports

**RECEIVERS:**—Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes  
 Are the internal surfaces of the receivers be examined Yes What means are provided for cleaning their inner surfaces Manhole fitted  
 Are there a drain arrangement fitted at the lowest part of each receiver Yes  
 Pressure Air Receivers, No. Cubic capacity of each Internal diameter thickness  
 Are they lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules  
 Pressure Air Receivers, No. 4 Total cubic capacity 52.4 etc Internal diameter 1600 mill thickness 27 mill  
 Are they lap welded or riveted longitudinal joint Riveted Material S.M. Steel Range of tensile strength 47.7-52.1 etc Working pressure by Rules 51 1/2 etc



4B

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

HYDRAULIC TESTS:-

DESCRIPTION.	DATE OF TEST.	WORKING PRESSURE.	TEST PRESSURE.	STAMPED.	REMARKS.
ENGINE CYLINDERS	✓	✓	✓	✓	
COVERS	✓	✓	✓	✓	
JACKETS	✓	✓	✓	✓	
PISTON WATER PASSAGES	✓	✓	✓	✓	
MAIN COMPRESSORS—1st STAGE	✓	✓	✓	✓	
2nd	✓	✓	✓	✓	
3rd	✓	✓	✓	✓	
AIR RECEIVERS—STARTING	7-10-26	31.6 kg	63.2 kg	LLOYD'S TEST 63.2 kg W.P. 31.6 kg J.S. 7-10-26	
INJECTION					
AIR PIPES	9-8-27	100 & 60 ATM	60 & 25 ATM	LLOYD'S TEST 100 & 60 ATM J.S. 9-8-27	
FUEL PIPES	9-8-27	160 ATM	60 & 25 ATM	J.S. 9-8-27	
FUEL PUMPS	✓	✓	✓	✓	
SILENCER	✓	✓	✓	✓	
WATER JACKET	✓	✓	✓	✓	
SEPARATE FUEL TANKS	✓	✓	✓	✓	

PLANS. Are approved plans forwarded herewith for Shafting Yes Receivers 2-2-25 Separate Tanks ✓  
 Donkey Boilers 2-4-25 General Pumping Arrangements 26-2-26 Oil Fuel Burning Arrangements 21-10-26

SPARE GEAR As per lists per Amsterdam reports ✓

The foregoing is a correct description,

Manufactured by H. P. P. P. P.

Dates of Survey while building	During progress of work in shops - -	1926 8/15 7/16 8/17 29/17 21/19 7/10 15/11 1927 20/2 3/3 25/3 4/5
	During erection on board vessel - -	1927 19/4 6/15 14/15 4/16 22/16 29/16 4/17 21/17 25/17 29/17 4/18 6/18 9/18 11/18 12/18 14/18 18/18 18/18 18/18 19/18 19/19 19/19
	Total No. of visits	34

Dates of Examination of principal parts—Cylinders ✓ Covers ✓ Pistons ✓ Rods ✓ Connecting rods ✓  
 Crank shaft ✓ Flywheel shaft ✓ Thrust shaft 28-2-27 Intermediate shafts 28-2-27 Tube shaft ✓  
 Screw shaft 2-3-27 Propeller 2-3-27 Stern tube 25/3 27 Engine sealings ✓ Engines holding down bolts 7-7-27  
 Completion of fitting sea connections 2-3-27 Completion of pumping arrangements 7-9-27 Engines tried under working conditions 12-13/19

Crank shaft, Material ✓ Identification Mark ✓ Flywheel shaft, Material ✓ Identification Mark ✓  
 Thrust shaft, Material SM Steel Identification Mark LLOYD'S EX 1550 24-26-26 Intermediate shafts, Material SM Steel Identification Marks ✓  
 Tube shaft, Material ✓ Identification Mark ✓ Screw shaft, Material SM Steel Identification Mark ✓

Is the flash point of the oil to be used over 150° F. Yes  
 Is this machinery duplicate of a previous case Yes If so, state name of vessel MV. GOLDMOUTH

General Remarks (State quality of workmanship, opinion as to class, &c. The machinery having been made and fitted in accordance with the Society's Rules, Secretary's letters and approved plans, material tested as per and workmanship good, the whole having been found in a good working and manoeuvring condition, I am of opinion that this vessel is eligible to be recorded in the Society's Register Book with ✕ LMC 9-27 OIL ENGINE 09 & CL

The amount of Entry Fee ... £ : : When applied for,  
 Special ... 520.00 21/9 1927  
 Donkey Boiler Fee ... 200.00 When received,  
 Travelling Expenses (if any) ... 54.00 15-10-27  
 Committee's Minute FRI. 7 OCT 1927

J. J. Schro  
 Engineer Supervisor to Lloyd's Register of Shipping

Assigned Thms 9-27 CL  
Oil Engines 2DB 18016

Certificate (if required) to be sent to Amsterdam Surveyors

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

