

# REPORT ON OIL ENGINE MACHINERY

No. 5360.

Received at London Office 28 AUG 1926

Date of writing Report 9-7-1926 When handed in at Local Office 19 Port of Kobe  
 No. in Survey held at Harima Date, First Survey 8-5-26 Last Survey 9/7/26  
 Reg. Book. on the Single Screw vessel "NODA MARU"  
 Built at Harima By whom built Kakei Steel Works, Harima Dockyard Yard No. 122 When built 1926  
 Engines made at Amsterdam By whom made N.V. Kromhout Hoken Fabriek Engine No. 3606 When made 1926  
 Donkey Boilers made at ✓ By whom made ✓ Boiler No. ✓ When made ✓  
 Brake Horse Power 80 Owners Empire Shipping Co. Port belonging to Kobe  
 Nom. Horse Power as per Rule 23 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

**ENGINES, &c.**—Type of Engines KROMHOUT HEAVY OIL 2 or 4 stroke cycle 2 Single or double acting Single  
 Maximum pressure in cylinders No. of cylinders Diameter of cylinders No. of cranks Length of stroke  
 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 Kind of fuel used  
 Crank Shaft, dia. of journals as per Rule as fitted Crank pin dia. Crank Webs Mid. length breadth Thickness parallel to axis  
 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  
 Main Shafts, diameter as per Rule as fitted Screw Shaft, diameter as per Rule as fitted 3.45" Is the screw shaft fitted with a continuous liner yes  
 Bronze Liners, thickness in way of bushes as per Rule as fitted 3/8" Thickness between bushes as per rule 9/32" 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  
 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  
 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 1-3 1/2"  
 Propeller, dia. 3-7 1/2" Pitch 2-11 3/4" No. of blades 4 Material Bronze whether Moveable no Total Developed Surface 5 sq. feet  
 Method of reversing Engines clutch 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 Both. If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine 40 maninast  
 Sinking Water Pumps, No. 1 Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes  
 Suction Pumps fitted to the Main Engines, No. 1 Diameter Stroke Can one be overhauled while the other is at work  
 Suctions connected to the Main Bilge Line { No. and Size 1-2" suction How driven main engine  
 Suction Pumps, No. and size Lubricating Oil Pumps, including Spare Pump, No. and size  
 two independent means arranged for circulating water through the Oil Cooler Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge  
 pumps, No. and size:—In Engine and Boiler Room 1-2" suction to main engine 1-2" suction to Portable Hand pump  
 Suctions, &c. { 1-2" hold 1-2" top tank 1-2" aft tank ... to main engine { 1-2" hold 1-2" top tank 1-2" aft tank ... to portable hand pump  
 Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size as above  
 All the Bilge Suction pipes in Holds and Turret 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 Level with floor  
 All Sea Connections fitted direct on the skin of the ship yes Are they fitted with Valves or Cocks valves  
 Key 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  
 Key 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  
 pipes pass through the bunkers How are they protected  
 pipes pass through the deep tanks Bilge suction to hold Have they been tested as per Rule yes  
 All Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times yes  
 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 Is it fitted with a watertight door none worked from  
 Good vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork  
 Air Compressors, No. No. of stages Diameters Stroke Driven by  
 Auxiliary Air Compressors, No. No. of stages Diameters Stroke Driven by  
 Auxiliary Air Compressors, No. No. of stages Diameters Stroke Driven by  
 Sinking Air Pumps, No. Diameter Stroke Driven by  
 Main Engines crank shafts, diameter as per Rule as fitted

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

internal surfaces of the receivers be examined What means are provided for cleaning their inner surfaces  
 See also Amsterdam Report + certificate dated 18-3-26 (Rpt no 10146)

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



IS A DONKEY BOILER FITTED?

no

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 .....					
"    INJECTION .....					
AIR PIPES .....					
FUEL PIPES .....					
FUEL PUMPS .....					
SILENCER .....					
"    WATER JACKET .....					
SEPARATE FUEL TANKS .....					

See also Amsterdam Report + Certificate dated 18.3.26

PLANS. Are approved plans forwarded herewith for Shafting <sup>See Kohn letter of 23.4.26</sup> Receivers <sup>✓</sup> Separate Tanks <sup>✓</sup>

Donkey Boilers ✓

General Pumping Arrangements <sup>See Kohn letter of 20.4.26</sup>

Oil Fuel Burning Arrangements ✓

SPARE GEAR 1 cylinder wheel (complete)

12 piston rings

1 gudgeon pin

1 set crank + main bearing brasses (each)

1 complete fuel pump.

4 fuel valves + 2 hoppers.

1 air valve.

2 Ignition plates.

2 Governor springs.

2 crank brass bolts

2 main bearing "

1 set each cooling + high pump valves + seats.

no of springs.

The foregoing is a correct description,

*J. McMillan*

JUL 1 1926

Manufacturer.

Dates of Survey while building	During progress of work in shops--	During erection on board vessel--	Total No. of visits
		7.8.9.12.18.21 May. 2.4.9.11.16.22.24.29 June. 1.5.6.9 July.	17.

Dates of Examination of principal parts—Cylinders	Covers	Pistons	Rods	Connecting rods
Crank shaft	Flywheel shaft	Thrust shaft	Intermediate shafts	Tube shaft
Screw shaft { 8.5.26 21.5.26	Propeller 21.5.26	Stern tube 18.5.26	Engine seatings 2.6.26	Engines holding down bolts 9.6.26
Completion of fitting sea connections 24.5.26	Completion of pumping arrangements 29.6.26	Engines tried under working conditions 29.6.26		
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	Steel	Identification Mark 40 876 21.5.26

Is the flash point of the oil to be used over 150° F. 75

Is this machinery duplicate of a previous case <sup>no</sup> If so, state name of vessel

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

The machinery of this ship has been efficiently installed on board in accordance with the requirements of the Rules, + Section 35 of the Rules, and the materials + workmanship are sound + good.

The machinery has been tried under working conditions at full power, + found satisfactory and is eligible in my opinion to have the notation + LMC 7/26.

It is submitted that  
this vessel is eligible for  
THE RECORD. + LMC 7. 26. CL.  
Oil Engines 25C.SA. 23 NHP.  
2 Cy. 11 13/16 - 12 3/16

The amount of Entry Fee ... £	When applied for,
Special <i>See Hull Report</i> ... £	19
Donkey Boiler Fee ... £	When received,
Travelling Expenses (if any) £	19

Committee's Minute **RII. 3 SEP 1926**

Assigned

+ June 7. 26

CERTIFICATE WRITTEN

Oil Eng CL



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