

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 Harima Port of Kobe

No. in Survey held at Harima Date, First Survey 8-5-26 Last Survey 9/17/26

Reg. Book. Single on the File Screw vessel "NODA MARU" Number of Visits 1926

Built at Harima By whom built Kobe Steel Works, Harima Dockyard Yard No. 122 When built 1926

Engines made at Amsterdam By whom made N.V. Kromhout Krohn 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

L 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 _____ Mid. length thickness _____ shrunk _____ 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 _____

Propeller Shafts, diameter _____ as per Rule _____ as fitted _____ Screw Shaft, diameter _____ as per Rule 3.45" as fitted 3.75" Is the ✓ screw shaft fitted with a continuous liner Yes

Bronze Liners, thickness in way of bushes _____ as per Rule 3/8" as fitted 13/32" Thickness between bushes _____ as per rule 9/32" as fitted 11/32" 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 _____ ✓

Does 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 _____ ✓

When 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 Bronz 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 manometer

Boiling Water Pumps, No. 1 Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes

Boiler Pumps fitted to the Main Engines, No. 1 Diameter _____ Stroke _____ Can one be overhauled while the other is at work _____

Pumps connected to the Main Bilge Line { No. and Size 1-2" suction How driven main engine

Booster Pumps, No. and size _____ Lubricating Oil Pumps, including Spare Pump, No. and size _____

Are 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

Valves, &c. { 1-2" hold 1-2" aft peak tank to main engine { 1-2" hold 1-2" forepeak 1-2" aft peak tank to portable hand pump 1-2" aft tank

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size as above

Are all the Bilge Suction pipes in Holds and Turret Well fitted with strum-boxes _____ Yes Are the Bilge Suctions in the Machinery Space _____

Are they from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges Level with floor

Are all Sea Connections fitted direct on the skin of the ship _____ Yes Are they fitted with Valves or Cocks _____ Valves

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 _____ ✓

Do pipes pass through the bunkers _____ How are they protected _____

Do pipes pass through the deep tanks _____ Bilge suction to hold Have they been tested as per Rule _____ Yes

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 _____ ✓ Is it fitted with a watertight door _____ no worked from _____

On a wood 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 _____

Operating Air Pumps, No. _____ Diameter _____ Stroke _____ Driven by _____

Are any 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 _____

Are the internal surfaces of the receivers be examined _____ What means are provided for cleaning their inner surfaces _____

Is a double arrangement fitted _____ See also Amsterdam Report + certificate dated 18-3-26 (Rpt no 10146)

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 _____

Gas Air Receivers, No. _____ Total cubic capacity _____ Internal diameter _____ thickness _____

Are they lap welded or riveted longitudinal joint _____ Material _____ Range of tensile strength _____ Working pressure by Rules _____



IS A DONKEY BOILER FITTED? *ho*

If so, is a report now forwarded?

HYDRAULIC TESTS:—

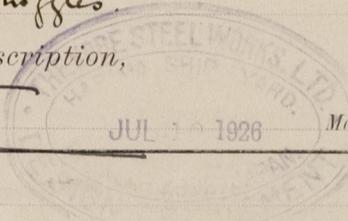
DESCRIPTION.	DATE OF TEST.	WORKING PRESSURE.	TEST PRESSURE.	STAMPED.	REMARKS.
ENGINE CYLINDERS					
" " COVERS					
" " JACKETS					
" " PISTON WATER PASSAGES					
MAIN COMPRESSORS—1st STAGE	<i>See also Amsterdam Report + Certificate dated 18.3.26</i>				
" 2nd "					
" 3rd "					
AIR RECEIVERS—STARTING					
" INJECTION					
AIR PIPES					
FUEL PIPES					
FUEL PUMPS					
SILENCER					
" WATER JACKET					
SEPARATE FUEL TANKS					

PLANS. Are approved plans forwarded herewith for Shafting *ho* *See Kalm letter of 22.4.26* Receivers Separate Tanks
 Donkey Boilers General Pumping Arrangements *ho* *See Kalm letter of 20.4.26* Oil Fuel Burning Arrangements

SPARE GEAR 1 cylinder cover (complete) 1 air valve.
 12 piston rings 2 Ignition plates.
 1 Gudgeon pin 2 Governor Springs.
 1 set crank + main bearing brasses (each) 2 crank brass Bolts
 1 complete fuel pump. 2 main bearing "
 4 fuel valves + 2 hoppers. 1 set each cooling + high pump valves + seats.
 No of springs.

The foregoing is a correct description,

J. McMillan



Dates of Survey while building { During progress of work in shops - - }
 { During erection on board vessel - - } 7.8.9.12.18.21 of May. 2.4.9.11.16.22.24.29 of June. 1.5.6.9 of July.
 Total No. of visits 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 *HO 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 *ho* 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 2 SC. SA. 23 NH.
 2 Cy. 11 13/16 - 12 3/16

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

J. McMillan
 Engineer Surveyor to Lloyd's Register of Shipping.
 31/8/26

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

Assigned

Home 7. 26

CERTIFICATE WRITTEN

Oil Eng CL



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