

## REPORT ON OIL ENGINE MACHINERY.

No. 5460

Received at London Office.

Date of writing Report 5/10/10. 26 When handed in at Local Office

Port of Kobe.

No. in Survey held at Tama, Okayama-Ken.  
Reg. Book.

Date, First Survey 12th July

Last Survey 15/9/ 19 26.

Number of Visits 12.

on the ~~Triple~~ <sup>Single</sup> Screw vessel "NANIWA MARU"Tons { Gross 49.15  
Net 45.75

Built at Tama. By whom built Mitsui Bussan Kaisha. Yard No. 136 When built 1926.  
Engines made at Amsterdam. By whom made N.V. Kromhout Myc. Engine No. 3605 When made 1926.  
Donkey Boilers made at -- By whom made -- Boiler No. -- When made --  
Brake Horse Power 80 BHP Owners Rising Sun Petroleum Co. Kobe. Port belonging to Kobe.  
Nom. Horse Power as per Rule 23 Is Refrigerating Machinery fitted for cargo purposes -- Is Electric Light fitted Yes.

OIL ENGINES, &c. Type of Engines Kromhout Heavy Oil Engine. 2 ~~rock~~stroke cycle Single ~~double~~ acting  
Maximum pressure in cylinders No. of cylinders Diameter of cylinders No. of cranks Length of stroke  
Span of bearings, adjacent to the Crank ~~from inner edge to inner edge~~ Is there a bearing between each crank  
Revolutions per minute ~~SEE AMSTERDAM REPORT DATED 17th March 1926.~~ Means of ignition Kind of fuel used  
Crank Shaft, dia. of journals ~~SEE AMSTERDAM REPORT DATED 17th March 1926.~~ Crank pin dia. ~~2.67~~ 2.95 Thickness parallel to axis  
Flywheel Shafts, diameter as per Rule 2.95 Thrust Shaft, diameter at collars as per Rule  
Tube Shafts, diameter as fitted 3.25 Is the ~~the~~ screw shaft fitted with a continuous liner Yes  
Bronze Liners, thickness in way of bushes as per Rule 12.7" 32 Thickness between bushes as per rule 9.5" 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 --  
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 No Length of Bearing in Stern Bush next to and supporting propeller 14 1/2"  
Propeller, dia. 3'-6 1/2" Pitch 3'-0" No. of blades Four Material Mang. Bronze. whether Moveable No Total Developed Surface 5 sq. feet  
Method of reversing Engines Gearing Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication  
Mech. sight feed. Thickness of cylinder liners -- Are the cylinders fitted with safety valves No Are the exhaust pipes and silencers water cooled or lagged with  
non-conducting material Yes If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine mast.  
Cooling Water Pumps, No. One 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. One Diameter 80 m/m Stroke 40 m/m Can one be overhauled while the other is at work --  
Pumps connected to the Main Bilge Line { No. and Size One 80 m/m x 40 m/m How driven Engine driven  
Ballast Pumps, No. and size One 5" dia. x 6" stroke. 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 Two @ 2" in Engine Room  
In Holds, &c. One 2" bilge suction in Aft Peak. One 2" Hand Pump suction to fore peak.  
Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size --  
Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Yes Are the Bilge Suctions in the Machinery Space  
ad from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges No - strum boxes.  
Are all Sea Connections fitted direct on the skin of the ship Yes Are they fitted with Valves or Cocks Yes  
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 No Are the Blow Off Cocks fitted with a spigot and brass covering plate --  
That pipes pass through the bunkers -- How are they protected --  
That 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 ~~in 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 -- 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 --

Main Air Compressors, No. None No. of stages -- Diameters -- Stroke -- Driven by --  
Auxiliary Air Compressors, No. -- No. of stages -- Diameters -- Stroke -- Driven by --  
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 -- as fitted --

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

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

Is there a drain arrangement fitted at the lowest part of each receiver

High Pressure Air Receivers ~~SEE AMSTERDAM REPORT DATED 17th March 1926.~~ 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. Total cubic capacity Internal diameter thickness

Seamless, lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules

008049-008060-0185



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 .....					

FOR ENGINE  
SEE AMSTERDAM  
REPORT  
NO. 10148.

PLANS. Are approved plans forwarded herewith for Shafting  
(If not, state date of approval)

Receivers

Separate Tanks

Donkey Boilers

General Pumping Arrangements

April 15th 1926

Oil Fuel Burning Arrangements

SPARE GEAR

See Amsterdam report

and May 3rd 1926.

The foregoing is a correct description,

Manufacturer.

MITSUBI BHSSAN KAISHA, LTD.

SHIPBUILDING DEPARTMENT.

Dates of Survey while building { During progress of work in shops --  
During erection on board vessel --  
Total No. of visits 12.  
July 12, 20, 22, 24, 27, Aug. 3, 11, 28, Sept. 2, 7, 11, 15.

Dates of Examination of principal parts—Cylinders -- Cores -- Pistons -- Rods -- Connecting rods --  
Crank shaft -- Flywheel shaft -- Thrust shaft -- Intermediate shafts 12.7.26 Tube shaft --  
Screw shaft 12.7.26 Propeller 24.7.26 Stern tube 22.7.26 Engine seatings 20.7.26 Engines holding down bolts 11.8.26  
Completion of fitting sea connections 24.7.26 Completion of pumping arrangements 7.9.26 Engines tried under working conditions 7.9.26.  
Crank shaft, Material -- Identification Mark -- Flywheel shaft, Material -- Identification Mark --  
Thrust shaft, Material -- Identification Mark -- Intermediate shafts, Material Forged Steel Identification Mark LLOYD'S NO.923  
Tube shaft, Material -- Identification Mark -- Screw shaft, Material Forged Steel Identification Mark LLOYD'S NO.923  
Is the flash point of the oil to be used over 150° F. Yes

Is this machinery duplicate of a previous case No If so, state name of vessel --

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

The machinery referred to herein has been securely fitted aboard the vessel in accordance the requirements of the Rules and section 35 of the Rules. The workmanship and materials are good and the machinery has been tested under working conditions.

Copies of the following certificate attached.

Propeller Shaft. }  
Intermediate Shaft. } No.923  
Oil Engine Certificate. No.3605.  
Oil Engine Certificate. No.3616.

The amount of Entry Fee ... £ INCLUDED : When applied for, 19.  
Special ... £ IN FULL :  
Donkey Boiler Fee ... £ FEES. : When received, 19.  
Travelling Expenses (if any) £ : 19.

Committee's Minute

TUES. 14 DEC 1926

Assigned

+ LAC 9.26 CL  
Oil Engines

Awat + Kimber  
Engineer Surveyor to Lloyd's Register of Shipping.



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Lloyd's Register  
Foundation

CERTIFICATE WRITTEN.