

REPORT ON OIL ENGINE MACHINERY.

No. 5343.

Received at London Office

17 SEP 1934

Date of writing Report ¹² August 1934 When handed in at Local Office 13/8/34 Port of Yokohama

No. in Survey held at Uraga Date, First Survey 1st July 1933 Last Survey 9th August 1934
Reg. Book. Number of Visits 55

40264 on the ^{Single} ~~Triple~~ ~~Compound~~ Screw vessel M.V. "KANO MARU" Tons { Gross 6940 Net 3785

Built at Uraga By whom built Uraga Dock Co Yard No. 386 When built 1934-8

Engines made at Nagasaki By whom made Mitsubishi Tuhogyo K. Engine No. 555 When made 1934

Donkey Boilers made at Uraga By whom made Uraga Dock Co Boiler No. - When made 1934

Brake Horse Power 7600 ²¹⁸⁷ Owners Kokusai Kisen Kabushiki Kaisha Port belonging to Tokio

Nom. Horse Power as per Rule 2195 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

Trade for which vessel is intended All Seas. 29 15/16" 47 1/2"

L ENGINES, &c. Type of Engines Mitsubishi - Sulzer 2 or 4 stroke cycle 2 Single or double acting Double

Maximum pressure in cylinders 49 Kg/cm² Diameter of cylinders 760 mm Length of stroke 1200 mm No. of cylinders 7 No. of cranks -

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge - Is there a bearing between each crank -

Revolutions per minute 113 Flywheel dia. 2072 mm Weight 7450 Kg Means of ignition airless Kind of fuel used Heavy oil

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 - shrunk Thickness around eye-hole -

Flywheel Shaft, diameter as per Rule - as fitted - Intermediate Shafts, diameter as per Rule 417 mm as fitted 424 mm Thrust Shaft, diameter at collars as per Rule - as fitted -

Tube Shaft, diameter as per Rule - as fitted - Screw Shaft, diameter as per Rule 455 mm as fitted 465 mm Is the { tube screw } shaft fitted with a continuous liner { Yes

Bronze Liners, thickness in way of bushes as per Rule 21.5 mm as fitted 23.75 + 25 mm Thickness between bushes as per rule 16.15 mm as fitted 20 mm 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 If so, state type - Length of Bearing in Stern Bush next to and supporting propeller 2115 mm

Propeller, dia. 18'-0" Pitch 4654.88 mm No. of blades 4 Material brass whether Moveable No Total Developed Surface 9.41 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

non-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. 2 Cent. Sea water for cooling Fresh water 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. - Diameter - Stroke - Can one be overhauled while the other is at work -

Pumps connected to the Main Bilge Line { No. and Size 1 Cent 30 tons/hour, G.S.P. 1-2 x 210 x 210 mm x 100 mm per Ballant pp. Centrifugal 250T/hw How driven electric motor

Ballast Pumps, No. and size 1 Cent. 250 tons/hour Lubricating Oil Pumps, including Spare Pump, No. and size 2 x 70 tons/hour Rotary

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 4-90 mm Tunnel Well 1-2 1/2" In Pump Room -

In Holds, &c. No. 1, 2, 3 & 6 Holds 2-3 1/2" each, No. 5 Hold 4-3 1/2", Port and Starboard A+B Deep Tanks 1-4" each.

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 2-125 mm 2-90 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. 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. Yes Are the Blow Off Cocks fitted with a spigot and brass covering plate. Yes

What pipes pass through the bunkers - How are they protected -

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. Yes Is it fitted with a watertight door. Yes. worked from Engine Room Top Grating.

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. - No. of stages - Diameters - Stroke - Driven by -

Auxiliary Air Compressors, No. Two No. of stages Three Diameters H.P. 70 mm M.P. 310-270 mm LP 310-70 mm Stroke 180 mm Driven by one by aux Diesel engine one by electric motor

Small Auxiliary Air Compressors, No. One No. of stages two Diameters H.P. 48 mm LP 140 mm Stroke 130 mm Driven by emergency dynamo

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 -

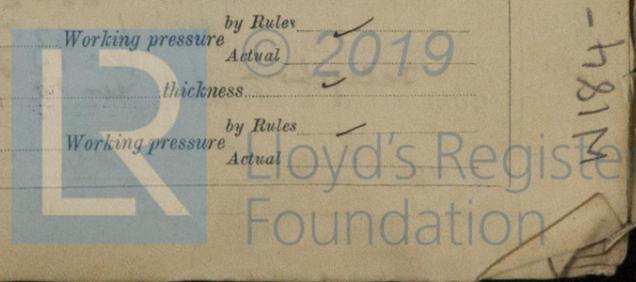
Can the internal surfaces of the receivers be examined and cleaned. Yes Is a drain fitted at the lowest part of each receiver. Yes

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 Actual 2019

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 Actual



18184-0135

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 yes

PLANS. Are approved plans forwarded herewith for Shafting 7/2/34 Receivers Separate Tanks 12/2/34
(If not, state date of approval)
Donkey Boilers 15/3/33 General Pumping Arrangements 18/4/34, 6/5/33 Oil Fuel Burning Arrangements 18/4/34

SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes, also see Nagasaki rpt dated 26/6/34. Spare Gears as per Spare Gear list received from Nagasaki surveyors, checked on board and found in order.
State the principal additional spare gear supplied

Spare Yail Shaft marked

LLOYD'S
N^o 764
G.H.M. 29/6/34

One propeller complete.

The foregoing is a correct description,

[Signature]

Manufacturer. Uraga Dock Co. Ltd.

Dates of Survey while building
During progress of work in shops - 1, 2, 15, 28/9, 9, 11, 16/9, 4, 6, 20, 24, 28, 10/10, 13/12/1933, 10, 23, 26/1, 1, 12, 14/2, 7, 20/3, 2, 10, 13, 19, 24, 28, 30/4, 7, 16, 19, 21, 24, 28, 31/5
During erection on board vessel - 5, 8, 13, 15, 19, 22, 27, 29/6, 2, 5, 11, 13, 17, 23, 28/7, 3, 4, 7, 9/8/1934
Total No. of visits 55

Dates of Examination of principal parts - Cylinders Covers Pistons Rods Connecting rods
Crank shaft Flywheel shaft Thrust shaft Intermediate shafts Tube shaft
Screw shaft 28/10/33, 24/5, 5/6, 11/7/34 Propeller 24/5, 22/6, 11/7/34 Stern tube 2, 28/8, 9/9/33 Engine seatings 24/4/34 Engines holding down bolts 22, 27/6, 25/11/7/34
Completion of fitting sea connections 16/9/33 Completion of pumping arrangements 7/8/34 Engines tried under working conditions 28/7/34

Crank shaft, Material Identification Mark Flywheel shaft, Material Identification Mark
Thrust shaft, Material Identification Mark Intermediate shafts, Material Steel Identification Marks G.H.M. 15/6/34
Tube shaft, Material Identification Mark Screw shaft, Material Steel Identification Mark G.H.M. 5/6/34

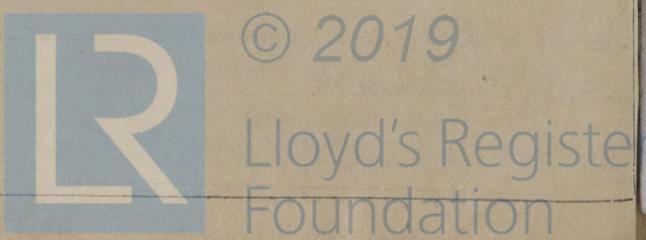
Is the flash point of the oil to be used over 150° F. yes
Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with yes
Is the vessel (not being an oil tanker) fitted for carrying oil as cargo yes If so, have the requirements of the Rules been complied with yes
If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with
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. also see Nagasaki rpt. N^o 1976 dated 26th June 1934)
The machinery has been fitted on board this Vessel at Uraga in accordance with the Rules and approved plans. Materials and Workmanship good. On completion of fitting out, all tried under full working conditions with satisfactory results.
The machinery of this Vessel is eligible in my opinion to have the record of +L.M.C. 8.34

The amount of Entry Fee .. £ : : When applied for, 22-8-1934
Special 1/5 ... £ 38-14-4
Donkey Boiler Fee ... £ 26-2-0 When received, 5-11-1934
Travelling Expenses (if any) Yen 93⁰⁰
Telephone Yen 15⁰⁰
Committee's Minute JUNE 21 OCT 1934

G. H. Macdonald
Engineer Surveyor to Lloyd's Register of Shipping.

Assigned + L.M.C. 8.34
Oil Eng
DB-100



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

CERTIFICATE WRITTEN