

# REPORT ON OIL ENGINE MACHINERY.

No. 2076

Received at London Office

19 MAY 1954

ist of pt. 4b.

ass. Date of writing Report 19 When handed in at Local Office 19 Port of

o. in Survey held at Tamashima, Japan Date, First Survey 27-4-53 Last Survey 17-10-1953  
g. Book. MAIZURU Number of Visits 22 7-2-1954  
TOTAL V. 42

Single on the Twin Triple Quadruple  
Screw vessel M. V. "NAGASHIMA MARU" Tons Gross 3,902.72  
MAIZURU MAIZURU DOCK YARD Net 2,105.92

uilt at MAIZURU By whom built LIND SHIPBUILDING ENGINEERING Co., LTD. Yard No. 5 When built 1954 2 Mo

Engines made at Tamashima, Japan By whom made Uraga-Tamashima Diesel Kagyo K.K. Engine No. 246 When made Oct. 53

onkey Boilers made at MAIZURU By whom made " " Boiler No. B-121 When made 1954 2 Mo

ake Horse Power Maximum 3,000 Service 2,550 Owners LIND KAIUN K. K. Port belonging to TO KYO

N. as per Rule 6.00 Is Refrigerating Machinery fitted for cargo purposes NO Is Electric Light fitted YES

rade for which vessel is intended OCEAN GOING

L ENGINES, &c. — Type of Engines Sulzer 6SD60 2 or 4 stroke cycle 2 Single or double acting Single

Maximum pressure in cylinders 52 kg/cm<sup>2</sup> Diameter of cylinders 600 mm Length of stroke 1,040 mm No. of cylinders 6 No. of cranks 6

ean Indicated Pressure 6.17 kg/cm<sup>2</sup> Span of bearings (i.e., distance between inner edges of bearings in

ay of a crank) 770 mm Is there a bearing between each crank yes Revolutions per minute { Maximum 150 Service 142

lywheel dia. 2,100 mm Weight 3,300 kgs Moment of inertia of flywheel (lbs. in<sup>2</sup> or Kg. cm<sup>2</sup>) 1,000 kg. cm<sup>2</sup> Means of ignition Compression Kind of fuel used Diesel oil

rank shaft, { Solid forged Semi built All built } dia. of journals as per Rule 3.73 mm as fitted 4.00 mm Crank pin dia. 400 mm Crank webs Mid. length breadth 670 mm Mid. length thickness 240 mm Thickness parallel to axis 25.0 mm Thickness around eye-hole 18.8 mm

lywheel Shaft, diameter as per Rule 285 mm as fitted 285 mm Thrust Shaft, diameter at collars as per Rule 293 mm as fitted 400 mm

ube Shaft, diameter as per Rule 3.26 mm as fitted 3.15 mm Is the { tube screw } shaft fitted with a continuous liner { YES }

ronze Liners, thickness in way of bushes as per Rule 16.92 as fitted 2.2 Thickness between bushes as per Rule 16.92 as fitted 2.2 Is the after end of the liner made watertight in the

ropeller boss YES If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner -

f 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-

orrosive - If two liners are fitted, is the shaft lapped or protected between the liners - Is an approved Oil Gland fitted at the after

nd of stern tube NO If so, state type - Length of bearing in Stern Bush next to and supporting propeller 1,450 mm

ropeller, dia. 3,900 mm Pitch 3,000 mm No. of blades 4 Material BRONZE whether moveable NO Total developed surface 52.6 sq. feet

oment of inertia of propeller including entrained water (lbs. in<sup>2</sup> or Kg. cm<sup>2</sup>) 12,700 kg. cm<sup>2</sup> Kind of damper, if fitted NONE FITTED

ethod of reversing Engines Direct Is a governor or other arrangement fitted to prevent racing of the engine yes Means of

lubrication Forced Thickness of cylinder liners 38 mm Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled

r 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

ack to the engine 2 SETS TANDEM TYPE FW & S.W.P. Cooling Water Pumps, No. and how driven 2 F.W.P. MOTOR DRIVEN EACH Working F.W. 2

.W. 1 Spare F.W. 2 S.W. 1 Is the sea suction provided with an efficient strainer which can be cleared within the vessel YES

ilge Pumps worked from the Main Engines, No. and capacity - Can one be overhauled while the other is at work YES

umps connected to the Main Bilge Line No. and capacity of each 1 x 45 HP x 150 M<sup>3</sup> x 35 M, 1 x 30 HP x 50 M<sup>3</sup> x 35 M, 1 x 25 HP x 15 M<sup>3</sup> x 35 M

How driven EACH MOTOR DRIVEN

s the cooling water led to the bilges NO If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping

rrangements -

ballast Pumps, No. and capacity 1 x 150 M<sup>3</sup> x 35 M Power Driven Lubricating Oil Pumps, including spare pump, No. and size 2 x 135 M<sup>3</sup> x 60 M

Are two independent means arranged for circulating water through the Oil Cooler YES Branch Bilge Suctions

No. and size: — In machinery spaces 3 x 70 mm 4 x 130 mm 2 x 130 mm In pump room

n holds, &c. 2 x 80 mm 2 x 80 mm 2 x 80 mm 2 x 80 mm FR 134 ~ 135: 50 mm x 1 FR 20 ~ 21: 50 mm x 1

Direct Bilge Suctions to the engine room bilges, No. and size 1 x 160 mm 2 @ 130 mm

Are all the bilge suction pipes in holds and tunnel well fitted with strum-boxes YES Are the bilge suction in the machinery spaces led from easily

ccessible 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

ufficiently 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 U.P. DECK

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. 1 No. of stages 3 diameters HP 95 mm, MP 310 ~ 260 mm stroke 200 mm driven by DYNAMO ENGINE

Auxiliary Air Compressors, No. 1 No. of stages 2 diameters HP 85 mm stroke 100 mm driven by MOTOR

Small Auxiliary Air Compressors, No. 1 No. of stages 2 diameters HP 40 mm stroke 70 mm driven by HAND

What provision is made for first charging the air receivers BY HAND COMPRESSOR

Scavenging Air Pumps or Blowers, No. 6 How driven By Main Engine

Have they been made under survey YES Engine Nos. 4115, 4116, 3H-2317

Auxiliary Engines Makers name I TO TEKKO K. K. SHIMIZU, HANSHIN DIESEL W. CO. LTD. KOBE Position of each in engine room STARBOARD IN E.R.

Report No. M-1251

© 2020 Lloyd's Register Foundation

008439-008445-0130

