

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS

No. 9952

Received at London Office

8 MAR 1937

Date of writing Report 8/2/1937 When handed in at Local Office 16-2-1937 Port of KOBE

No. in Survey held at TAMA Date, First Survey 21/4/36 Last Survey 15/1/1937

Reg. Book. Number of Visits 27

on the ^{Single}~~Triple~~ Screw vessel MOTORSHIP "OMROSAN MARU" Tons { Gross 9205 Net 5288

Built at TAMA By whom built MITSUI BUSSAN KAISHA Yard No. 212 When built 1937

Owners MITSUI BUSSAN KAISHA Port belonging to KOBE

Oil Engines made at TAMA By whom made MITSUI BUSSAN KAISHA Contract No. 212 When made 1937

Generators made at TOKIO By whom made SHIBAURA ENGINEERING WORKS Contract No. 2738 When made 1936

No. of Sets 3 Engine Brake Horse Power 360 EACH Nom. Horse Power as per Rule 90 EACH Total Capacity of Generators 720 Kilowatts.

IL ENGINES, &c. Type of Engines BURMEISTER AND WAIN 2 or 4 stroke cycle 4 Single or double acting SINGLE

Maximum pressure in cylinders 45 Kg/cm² Diameter of cylinders 310 mm Length of stroke 350 mm No. of cylinders 6 EACH No. of cranks 6 EACH

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 364 mm Is there a bearing between each crank YES

Revolutions per minute 450 Flywheel dia. 1250 mm Weight 1050 Kg Means of ignition COMPRESSION Kind of fuel used HEAVY OIL

Crank Shaft, dia. of journals as per Rule 169 mm as fitted 180 mm Crank pin dia. 180 mm Crank Webs Mid. length breadth 230 mm Thickness parallel to axis

Flywheel Shaft, diameter as per Rule as fitted NONE Intermediate Shafts, diameter as per Rule as fitted Thickness of cylinder liners 24 mm

Is a governor or other arrangement fitted to prevent racing of the engine when detached YES Means of lubrication FORCED LUBRICATION

Are the cylinders fitted with safety valves YES Are the exhaust pipes and silencers water cooled or lagged with non conducting material YES

Cooling Water Pumps, No. ONE (DEPENDENT) Is the sea suction provided with an efficient strainer which can be cleared within the vessel YES

Lubricating Oil Pumps, No. and size ONE SET. GEAR PUMP TYPE COUPLED DIRECT EACH ENGINE. CAPACITY: 6.5 M³ PER HOUR.

Air Compressors, No. NONE No. of stages Diameters Stroke Driven by

Scavenging Air Pumps, No. NONE Diameter Stroke Driven by

3-3 AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule YES

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

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

High Pressure Air Receivers, No. NONE 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. ONE Total cubic capacity 400 LITER Internal diameter 550 mm thickness SHELL 12 mm TOP 16 mm BOTTOM 21 mm

Seamless, lap welded or riveted longitudinal joint RIVETED Material STEEL Range of tensile strength 26~30 T/2" Working pressure by Rules 30.4 Kg/cm²

ELECTRIC GENERATORS:—Type DIRECT CURRENT COMPOUND.

Pressure of supply 220 volts. Load 1090 Amperes. Direct or Alternating Current DIRECT

If alternating current system, state frequency of periods per second

Has the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on or off YES

Generators, do they comply with the requirements regarding rating YES are they compound wound YES

are they over compounded 5 per cent. YES, if not compound wound state distance between each generator

is an adjustable regulating resistance fitted in series with each shunt field YES Are all terminals accessible, clearly marked, and furnished with sockets YES

are they so spaced or shielded that they cannot be accidentally earthed, short circuited, or touched YES Are the lubricating arrangements of the generators as per Rule YES

PLANS. Are approved plans forwarded herewith for Shafting 10-10-35 Receivers 28-6-35 Separate Tanks 5-12-35

SPARE GEAR In accordance with the Rules' requirements, in addition, the following

important spare gear has been placed on board:—

1- Cylinder liner with Packing gland.

2- Cylinder cover with studs.

2- Pistons Complete with rings & gudgeon pin.

3 sets of Governor Spring.

The foregoing is a correct description

PER MITSUI BUSSAN KAISHA, LTD.,

Saito

Manufacturer.

SUB-MANAGER SHIPBUILDING DEPT.



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Dates of Survey while building { During progress of work in shops - - } 1936. { APR. 21. JUNE 16. JULY 22, 30. AUG 1, 19, 22, 24, 31. SEP. 25, 28. OCT. 1, 9, 22, 26, 31 }
 { During erection on board vessel - - } 1936 NOV. 26. DEC. 7, 16, 26. 1937 JAN 7, 15.
 Total No. of visits 27.

Dates of Examination of principal parts—Cylinders 28/9/36 Covers ✓ Pistons 28/9/36 Piston rods ✓
 Connecting rods 9/10/36 Crank and Flywheel shaft 22/7 & 10/11/36 Intermediate shaft ✓
 Crank and Flywheel shafts, Material STEEL Identification Mark R NOS. 4918, 5197 & 1012.
 Intermediate shafts, Material ✓ Identification Marks ✓
 Is this machinery duplicate of a previous case YES If so, state name of vessel M.S. "OTOWASAN MARU".

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

Each engine was constructed under Special Survey in accordance with the Rules and approved plans

The workmanship and materials are good.

On completion the engines and generators were efficiently installed in the vessel and tried under full working condition with satisfactory results.

The amount of Fee ... £ 13-2-6: When applied for, Jan 18th 1937
 Travelling Expenses (if any) £ : : When received, Feb 15th 1937

M. Kamakura. C. Macpherson
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

FRI 12 MAR 1937

See Kob. J.E. 9952



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