

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 9607

Date of writing Report 15-6-36 When handed in at Local Office 25-6-36 Port of KOBE Received at London Office 20 JUL 1936

No. in Survey held at TAMA Date, First Survey 28-9-35 Last Survey 30-5-1936

Reg. Book. Single on the Triple Screw vessel MOTOR SHIP "CANBERRA MARU" Number of Visits 24

Tons Gross 6477 Net 3858

Built at TAMA By whom built MITSUI BUSSAN KAISHA Yard No. 216 When built 1936

Owners OSAKA SHOSEN KABUSHIKI KAISHA Port belonging to OSAKA

Oil Engines made at TAMA By whom made MITSUI BUSSAN KAISHA Contract No. When made 1936

Generators made at TOKIO By whom made SHIBAURA ENGINEERING WORKS Contract No. 4934B 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 No. of cranks 6

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. 1,250 mm Weight 1050 mm 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 (90 mm HOLLOW) Crank Webs Mid. length breadth 230 mm Thickness parallel to axis Thickness around eyehole

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 declutched 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. Diameter Stroke Driven by

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. 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 500 LITERS 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/□ Working pressure by Rules 30.4 kg/cm²

ELECTRIC GENERATORS:—Type DIRECT CURRENT COMPOUND

Pressure of supply 225 volts Load 1067 Amperes Direct or Alternating Current DIRECT

alternating current system, state frequency of periods per second

Is 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

Can 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

ANS. Are approved plans forwarded herewith for Shafting 10-10-35 Receivers 28-6-35 Separate Tanks 29-1-36

ARE GEAR IN ACCORDANCE WITH OR IN EXCESS OF THE RULE REQUIREMENT AND THE FOLLOWING IMPORTANT ADDITIONAL ITEMS:—

- TWO CYLINDER LINERS WITH PACKING RINGS.
- TWO CYLINDER COVERS WITH STUDS.
- ONE CONNECTING ROD COMPLETE.
- TWO PISTONS COMPLETE WITH RINGS AND GUDGEON PIN.
- ONE SET OF GEAR WHEEL FOR DRIVING CAM SHAFT.
- TWO SETS OF GOVERNOR SPRINGS.

The foregoing is a correct description.

PER PRO MITSUI BUSSAN KAISHA, LTD.

Signature

SUB-MANAGER SHIPBUILDING DEPT.

Manufacturer.



© 2020

Lloyd's Register Foundation

Dates of Survey while building { During progress of work in shops - - 1935: SEP. 28. OCT. 25. DEC. 27. 1936: JAN 7. 8. 14. 20. 31. FEB. 3. 5. 7. 12. 14. 20. 21. 22. 29. MAR. 23. 25.
During erection on board vessel - - - 1936: APR. 10. 25. MAY 22. 26. 30.
Total No. of visits 24.

Dates of Examination of principal parts - Cylinders 8-1-36 21-1-36 7-2-36 Covers 8-1-36 21-1-36 7-2-36 Pistons 14-29-2-36 Piston rods ✓

Connecting rods 14-1-36 Crank and Flywheel shaft 31-1-36 Intermediate shaft ✓

Crank and Flywheel shafts, Material STEEL Identification Mark { No 4989
" " 4990
" " 4991

Intermediate shafts, Material NONE Identification Marks ✓

Is this machinery duplicate of a previous case YES. If so, state name of vessel "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 trial under full working condition with satisfactory results.

The amount of Fee ... £ : : When applied for, 19...
Travelling Expenses (if any) £ : : When received, 19...

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

Committee's Minute
Assigned

FRI. 24 JUL 1936

See Kob. J.E. 9607



© 2020

Lloyd's Register
Foundation