

Report on Oil Engine Electric Generator Sets. No. 8857

Received at London Office 21 JAN 1935

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

No. in Survey held at KOBE Date, First Survey 31.7.34. Last Survey 4.12.1934. Number of Visits 7.

on the ^{Single} ~~Twin~~ ^{Triple} ~~Quadruple~~ Screw vessel MOTOR VESSEL "KYOKUTO MARU" Tons { Gross 10052. Net 5821.

Built at KOBE By whom built KANASAKI DOCKYARD CO. Yard No. 584. When built 1934.

Owners IINO SHOJI KABUSHIKI KAISHA Port belonging to NAKAMAIZURU.

Oil Engines made at KOBE By whom made HANSHIN IRON WORKS LTD. Contract No. When made 1934.

Generators made at KOBE By whom made KANASAKI DOCKYARD CO. Contract No. 13445 When made 1934.

No. of Sets 1. Engine Brake Horse Power 40. Nom. Horse Power as per Rule 12. Total Capacity of Generators 20. Kilowatts.

IL ENGINES, &c.—Type of Engines SOLID INJECTION. 2 or 4 stroke cycle 2. Single or double acting SINGLE.

Maximum pressure in cylinders 63 kg/cm². Diameter of cylinders 150mm. Length of stroke 270mm. No. of cylinders 2. No. of cranks 2.

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 192mm. Is there a bearing between each crank YES.

Revolutions per minute 450. Flywheel dia. 1000mm. Weight 494 kg. Means of ignition COMPRESSION. Kind of fuel used HEAVY OIL.

Crank Shaft, dia. of journals as per Rule as fitted 100mm. Crank pin dia. 100mm. Crank Webs Mid. length breadth 140mm. Thickness parallel to axis shrunk. Mid. length thickness 55mm. Thickness around eyehole.

Flywheel Shaft, diameter as per Rule as fitted 110mm. Intermediate Shafts, diameter as per Rule as fitted. Thickness of cylinder liners 15mm.

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

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

Cooling Water Pumps, No. 1. Is the sea suction provided with an efficient strainer which can be cleared within the vessel YES.

Lubricating Oil Pumps, No. and size 1. ROTARY. ROTOR DIA 40MM. LENGTH 24MM. CASING DIA. 48MM.

Air Compressors, No. 1. No. of stages 2. Diameters 106. 120 mm. Stroke 180mm. Driven by OIL ENGINE.

Scavenging Air Pumps, No. 1. ROTARY. CASING 300MM. LENGTH 250mm. Diameter ROTOR 225mm. Stroke 250mm. Driven by CRANKSHAFT.

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, 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. Total cubic capacity. Internal diameter. thickness.

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

ELECTRIC GENERATORS:—Type DIRECT CURRENT COMPOUND.

Pressure of supply 225 volts. Load 89. 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. Receivers. Separate Tanks.

SPARE GEAR

1. CYLINDER COVER COMPLETE WITH VALVES. 1. SET. SPRINGS.

1. SET PISTON RINGS. 1. SET. NUTS & BOLTS ASSORTED.

1. SET CRANK PIN BRASSES COMPLETE. 1. FUEL PIPE (PUMP TO VALVE).

1. GUDGEON PIN BUSH.

2. SETS MAIN BEARING BRASSES COMPLETE.

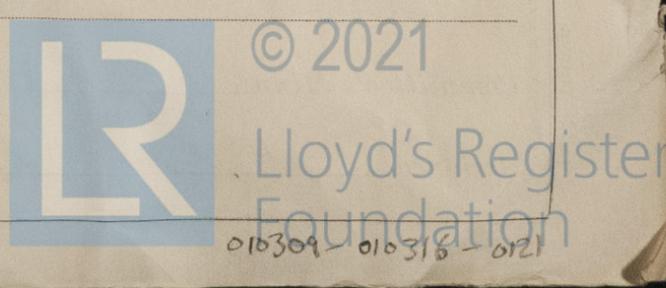
1. FUEL CAM COMPLETE.

1. SET SUCTION & DELIVERY FUEL PUMP VALVES.

1. SET. COOLING WATER PUMP VALVES.

The foregoing is a correct description,

Toshihiko Ono Kawasaki Manufacturer. Dockyard.



Dates of Survey while building

During progress of work in shops - -	31.7.34.	12.9.34.	1.10.34.	15.10.34.	21.11.34.

During erection on board vessel - - -	28.11.34.	4.12.34.	-----		

Total No. of visits	7				

Dates of Examination of principal parts—Cylinders ✓ Covers ✓ Pistons ✓ Piston rods ✓
 Connecting rods ✓ Crank and Flywheel shaft ✓ Intermediate shaft ✓
 Crank and Flywheel shaft, Material ✓ Identification Mark ✓ Intermediate shafts, Material ✓ Identification Marks ✓

Is this machinery duplicate of a previous case **YES.** If so, state name of vessel **"TOR MARU."**

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

This emergency generator has been examined under working conditions, and found satisfactory.

(NOTE: Compressor and generator only constructed under Special Survey; engine constructed under Japanese Government inspection as in the case of "TOR MARU".)

1m.7.24—Transfer. (The Surveyors are requested not to write on or below the space for Committee's Minute.)

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

A. C. Munro.
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute **FRI. 25 JAN 1935**
 Assigned *See Kob. J.C. 8857*



© 2021

Lloyd's Register Foundation