

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No.

Received at London Office

25 MAR 1915

Date of writing Report 19... When handed in at Local Office 19... Port of KOBE
No. in Survey held at Reg. Book. 90519 on the Single Triple Quadruple Screw vessel "NOJIMA MARU" Date, First Survey 30-1-34 Last Survey 19... Number of Visits

Built at Nagasaki By whom built Mitsubishi Jukogyo Kaisha, Nagasaki Card No. 582 When built
Owners Nippon Yusen Kabushiki Kaisha. Port belonging to Tokio.

Oil Engines made at Kobe Works By whom made Mitsubishi Jukogyo K. Contract No. 465 When made
Generators made at Nagasaki Works By whom made Mitsubishi Denki K. Contract No. When made
No. of Sets 1 Engine Brake Horse Power 32 Nom. Horse Power as per Rule Total Capacity of Generators 20 Kilowatts.

OIL ENGINES, &c.—Type of Engines M.B. Vertical trunk piston. MRW-2 2 or 4 stroke cycle 4 Single or double acting Single
Maximum pressure in cylinders 55 Kg/cm² Diameter of cylinders 150 mm Length of stroke 230 mm No. of cylinders 2 No. of cranks 2
Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 175 mm Is there a bearing between each crank Yes
Revolutions per minute 650 Flywheel dia. 840 mm Weight 490 Kgr. Means of ignition Air in inj. Kind of fuel used Heavy oil.
Crank Shaft, dia. of journals as per Rule... as fitted 92 mm Crank pin dia. 92 mm Crank Webs Mid. length breadth 136 mm Thickness parallel to axis... Mid. length thickness 48 mm shrunk Thickness around eye-hole
Flywheel Shaft, diameter as per Rule... as fitted... Intermediate Shafts, diameter as per Rule... as fitted... Thickness of cylinder liners 14 mm

Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication forced feed.
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. 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. Gearing pump
Air Compressors, No. 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 Hand hole
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. 1 Total cubic capacity 35 L. Internal diameter 190 mm thickness 7.5 mm
Seamless, lap welded or riveted longitudinal joint Seamless Material Steel Range of tensile strength 28-35 ton/1/2 Working pressure by Rules 30 Kg/cm²

ELECTRIC GENERATORS:—Type 20 KW.
Pressure of supply 225 volts. Load 89 Amperes. **Direct or Alternating Current** D.C.
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
Generators, do they comply with the requirements regarding rating are they compound wound
are they over compounded 5 per cent. if not compound wound state distance between each generator
is an adjustable regulating resistance fitted in series with each shunt field Are all terminals accessible, clearly marked, and furnished with sockets
are they so spaced or shielded that they cannot be accidentally earthed, short circuited, or touched Are the lubricating arrangements of the generators as per Rule

PLANS. Are approved plans forwarded herewith for Shafting 18-12-33. Receivers 30-11-33. Separate Tanks
(If not, state date of approval)

SPARE GEAR

The foregoing is a correct description,

Manufacturer.

KOBE WORKS, MITSUBISHI JUKOGYO KAISHA

P. Nishimura
Superintendent Engineer.

Dates of Survey while building
 During progress of work in shops - -
 During erection on board vessel - - -
 Total No. of visits

1934 Jan 30. Feb 21. 24. April 9. 12. 6. May 11. 15. June 26. Aug 2.
 Oct 27. 30. Nov. 5.

Dates of Examination of principal parts—Cylinders 2-8-34. 5-11-34. Covers 14-4-34. 5-11-34. Pistons 5-11-34. Piston rods
 Connecting rods 9.12-4-34. 5-11-34. Crank and Flywheel shaft 30-1-34. 15-5-34. 24-2-34. 5-11-34. Intermediate shaft

Crank and Flywheel shaft, Material Forged Steel Identification Mark R 4006 KK. 15-5-34. Intermediate shafts, Material Identification Marks

Is this machinery duplicate of a previous case yes If so, state name of vessel Nagasaki ship no. 581.

General Remarks (State quality of workmanship, opinions as to class, &c.)
 The Machinery herein described has been constructed under special survey in accordance with the Rules and approved plans. The materials and workmanship are good. The machinery has been tried on the test bed under full load, overload and governor tests, when connected to its generator, and all found satisfactory and eligible in my opinion for classification. The machinery have been shipped to their Nagasaki Works where it is intended to install them on board the ship no. 582.

Stamped as follows:
 Mach. NO. 465
 LLOYD'S
 NO. 78
 KK 3010-34.

This Machinery has been efficiently installed on board, and tried under full load, overload governor, and air compressing tests and found satisfactory.

Kokoro
 4749

The amount of Fee ... £ 150,-
 Travelling Expenses (if any) £
 When applied for, 19
 When received, 1934/35

H. S. Buchanan
 K. Kishigami
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 29 MAR 1935
 Assigned See Nav. Rpt. 2018



Im. 7.29—Transfer.
 Im. 7.29—Transfer.
 (The Surveyors are requested not to write on or below the space for Committee's Minute.)