

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 8711

Date of writing Report 19 When handed in at Local Office 19 Port of *Nagasaki* *Kobe*
 No. in Survey held at Reg. Book. Date, First Survey Last Survey 19
 Number of Visits

82167 on the *Single* *NOTO MARU* *Screw vessel* Tons *Gross 7184.51*
Net 4317.36

Built at *Nagasaki.* By whom built *Nagasaki Works, Mitsubishi Jukogyo Kaisha,* Ward No. *580* When built

Owners *Nippon Yusen Kabushiki Kaisha.* Port belonging to *Tokio.*

Oil Engines made at *Kobe Works.* By whom made *Mitsubishi Jukogyo Kaisha* Contract No. *454* When made *1934*
455
456

Generators made at *Nagasaki Works.* By whom made *Mitsubishi Denki Kaisha.* Contract No. When made

No. of Sets *3* Engine Brake Horse Power *390* Nom. Horse Power as per Rule Total Capacity of Generators *780* Kilowatts.

IL ENGINES, &c.—Type of Engines *M.R.C.B.- Vertical trunk piston* 2 or 4 stroke cycle *4* Single or double acting *Single*

Maximum pressure in cylinders *45 kg/cm²* Diameter of cylinders *300 mm* Length of stroke *450 mm* No. of cylinders *6* No. of cranks *6*

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge *355 mm* Is there a bearing between each crank *yes*

Revolutions per minute *340* Flywheel dia. *1700 mm* Weight *3660 Kg.* Means of ignition *airless injection* Kind of fuel used *Heavy oil*

Crank Shaft, dia. of journals *as per Rule 175* Crank pin dia. *185 mm* Crank Webs *270 mm* Thickness parallel to axis *30 mm*
as fitted 185 mm Mid. length breadth *30 mm* Thickness around eye-hole *30 mm*

Flywheel Shaft, diameter *as per Rule* Intermediate Shafts, diameter *as fitted* Thickness of cylinder liners *30 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* See Sec. 14/12/34

Lubricating Oil Pumps, No. and size *1 single acting x bore 70 mm x stroke 45 mm A.P.M 340.*

Air Compressors, No. *2.* No. of stages *3.* Diameters *80 x 310 x 360 mm* Stroke *180 mm* Driven by *diesel engine.*

Scavenging Air Pumps, No. Diameter Stroke Driven by

IR 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 *man hole.*

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. *1* Total cubic capacity *486 lit* Internal diameter *2'-5"* thickness *5/8"*

Seamless, lap welded or riveted longitudinal joint Material *steel* Range of tensile strength *28-35 5/8"* Working pressure by Rules *30 kg/cm²*

ELECTRIC GENERATORS:—Type *260 KW. Mitsubishi Compound wound, drip proof.*

Pressure of supply *225* volts. Load *1155* Amperes. Direct or Alternating Current *DC.*

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 *13-11-33* Receivers *14-11-33* Separate Tanks

(If not, state date of approval)

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The foregoing is a correct description,

T. Mase Manufacturer.



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Lloyd's Register

010004-010011-0193

Dates of Survey while building { During progress of work in shops - 1933 Dec-12.19.21.28, 1934 Jan-9.12.18.20.24.30.31. Feb-7.12.17.20.21.24. March-19.24.26.29.31. April-2.6.9.11.12.13.16.19.23.26.28. May-2.14.16.18.19.21.28.29.30. During erection on board vessel - - - Total No. of visits

Dates of Examination of principal parts—Cylinders 28.31-3-34 6-4-34 Covers 11.26.28-4-34 2.14-5-34 Pistons 13-2-34 20.21.29.30.31-4-34 25-4-34 Piston rods ✓ Connecting rods 20.31-1-34 17.12.17.21-2-34 2.16.23.28-4-34 Crank and Flywheel shaft 29.30-5-34 R No. 3910 9-2-34 HAG Identification Mark No. 3947 28-2-34 No. 3904 5-2-34 Intermediate shafts, Material Identification Marks Crank and Flywheel shaft, Material

Is this machinery duplicate of a previous case If so, state name of vessel

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 material and workmanship are good. The machinery has been tried under full load, overload and governor tests on the test bed when connected to their Generators: parallel running tests were also carried out and all found satisfactory and eligible in my opinion for classification.

The machines have been shipped to Nagasaki Works, Mitsubishi Jukogyo Kabushiki Kaisha, where it is intended to install them on board ship No. 580

Stamped as follows:-

Mach. No. 454	Mach. No. 455	Mach. No. 456
LLOYDS	LLOYDS	LLOYDS
NO. 63 R	NO. 64 R	NO. 65 R
KK 29-5-34	KK 29-5-34	KK 30-5-34

This machinery has been efficiently ^{installed on board} tried under full load, overload, governor, & parallel running tests with satisfactory results.

The amount of Fee £ 975.-

Travelling Expenses (if any) £ :

When applied for, 10th Aug. 1934 19
When received, 4.9.34 19

Committee's Minute

Assigned

TUE. 18 DEC 1934

See Nav. Rpt. 1999

R. Buchanan
R. Buchanan
Surveyor to Lloyd's Register of Shipping.



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Foundation