

# REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 8711

pt. 4c.

Received at London Office

25 NOV 1934

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

No. in Survey held at... Date, First Survey... Last Survey 19... Number of Visits

82167 on the Single Screw vessel "NOTO MARU" 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, 455, 456 When made 1934

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/cm<sup>2</sup> 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 airer injection Kind of fuel used Heavy oil

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

Flywheel Shaft, diameter as per Rule 16 as fitted 16 Intermediate Shafts, diameter as per Rule 30 mm 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

Lubricating Oil Pumps, No. and size 1 single acting x bore 70 mm x stroke 45 mm R.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

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 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. Total cubic capacity 486 liter 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/cm<sup>2</sup>

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

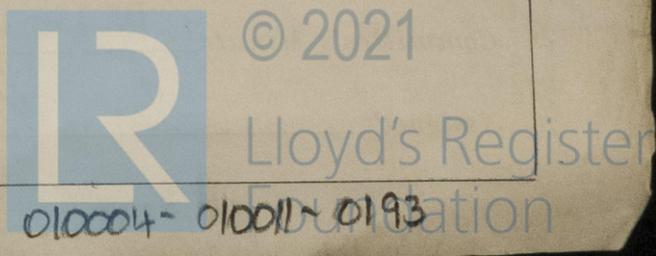
are they so spaced or shielded that they cannot be accidentally earthed, short circuited, or touched Are the lubricating arrangements of the generators as per Rule

PLANS. Are approved plans forwarded herewith for Shafting 13-11-33 Receivers 14-11-33 Separate Tanks

SHAFTING GEAR

The foregoing is a correct description,

T. Mase Manufacturer.



Dates of Survey while building  
 During progress of work in shops - 1933 Dec-12, 17, 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 Intermediate shaft

Crank and Flywheel shaft, Material Identification Mark R No. 3910 9-2-34 HAF No. 3947 28-2-34 No. 3904 5-2-34 Intermediate shafts, Material Identification Marks

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 was been efficiently <sup>installed on board</sup> tried under full load, overload, governor, & parallel running tests with satisfactory results.

*R. Chigami*  
 Surveyor to Lloyd's Register of Shipping.

The amount of Fee ... .. £ 975.-  
 Travelling Expenses (if any) £ : : 4.9.34

Committee's Minute TUE. 18 DEC 1934  
 Assigned See Nat. Rpt. 1999

Im. 7.20—Transfer. (The Surveyors are requested not to write on or below the space for Committee's Minute.)