

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

Received at London Office

25 MAR '95

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

No. in Survey held at Kobe Date, First Survey 31-1-34 Last Survey 19
Reg. Book. Number of Visits

90519 on the NOJIMA MARU Single Screw vessel Tons { Gross 7184 Net 4318

Built at Nagasaki By whom built Mitsubishi Jukogyo Kaisha, Nagasaki Yard No. 582 When built 1935

Owners Nippon Yusen Kabushiki Kaisha, Port belonging to Tokio.

Oil Engines made at Kobe Works By whom made Mitsubishi Jukogyo K.K. Contract No. 460/482 When made

Generators made at Nagasaki Works By whom made Mitsubishi Denki K. 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.

OIL ENGINES, &c.—Type of Engines Mitsubishi Vert. trunk piston HRC-6 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 inj. Kind of fuel used Heavy oil

Crank Shaft, dia. of journals as per Rule as fitted 185 mm Crank pin dia. 185 mm Crank Webs Mid. length breadth 270 mm Thickness parallel to axis Mid. length thickness 98 mm Thickness around eyehole

Flywheel Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule 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

Lubricating Oil Pumps, No. and size 1 Single acting Bore 70 mm x stroke 45 mm RPM 340

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

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 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 486 L. Internal diameter 2'-5" thickness 5/8"

Seamless, lap welded or riveted longitudinal joint Butt. T.R. Material Steel Range of tensile strength 28-35 ton/in² Working pressure by Rules 30 Kg/cm²

ELECTRIC GENERATORS:—Type Mitsubishi Multiple Comp. Wound. drip proof. 260 K.W.

Pressure of supply 225 volts. Load 1155 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 13-11-33 Receivers 14-11-33 Separate Tanks

SPARE GEAR

The foregoing is a correct description,

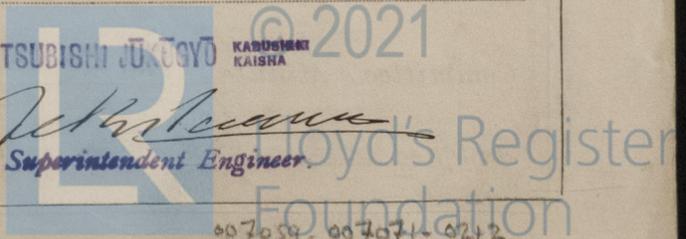
Manufacturer.

KOBE WORKS, MITSUBISHI JUKOGYO

KABUSHIKI KAISHA

S. Nishikawa
Superintendent Engineer.

Superintendent Engineer.



Dates of Survey while building
 During progress of work in shops - - - 1934. Jan. 31. Feb. 12. March 18, 22, 26, 28, 29, 31. May 2, 8, 25. June 9, 25, 27. July 11, 18. Aug. 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 27, 29. Oct 6, 5, 10, 15, 19, 22, 23, 24, 27, 29, 30. Nov. 1, 15.
 During erection on board vessel - - -
 Total No. of visits

Dates of Examination of principal parts—Cylinders 27, 22, 19-9-34 Covers 29-9-34
 5-11-34 6, 19, 24-10-34
 Pistons 5-11-34 Piston rods
 Connecting rods 14-3-34 9, 16, 24-4-34 Crank and Flywheel shaft 20-13-6-34
 9-6-34 5-10-34 Intermediate shaft
 5-11-34
 Crank and Flywheel shaft, Material Forged Steel Identification Mark R 4105 5-10-34
 R 4132 20-6-34
 R 4143 23-6-34 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 material and workmanship are good. The machinery has been tried on the test bed under full load overload, and governor tests when connected to their generators: parallel running tests were also carried out and all found satisfactory and eligible in my opinion for classification.
 The machineries 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. 460 Mach. no. 461 Mach. no. 462
 LLOYD'S LLOYD'S LLOYD'S
 No. 75 No. 76 No. 77
 KK 5-11-34 KK 5-11-34 KK 5-11-34

This Machinery has been efficiently installed on board, and tried under full load, overload governor and parallel running tests with satisfactory results.

A. D. Buchanan
K. Kishigami
 Surveyor to Lloyd's Register of Shipping.

The amount of Fee ... £ 975.- :
 Travelling Expenses (if any) £ :
 When applied for, 19
 When received, See 27 1934

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



Im. 7, 28—Transfer. (The Surveyors are requested not to write on or below the space for Committee's Minute.)