

Report No. 7323
REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS
 Received at London Office 27 MAY 1931

Date of writing Report 23-4-1931 When handed in at Local Office 27-4-1931 Port of *Jama*

No. in Survey held at *Jama* Date, First Survey 21-4-30. Last Survey 14-10-1930.
 Reg. Book. Number of Visits 21.

on the *Single* Screw vessel **"SHOHEI MARU"** Tons Gross 7256
 Triple *Quadruple* Net

Built at *Jama* By whom built *Mitsui Bussan Kaisha* Yard No. 180 When built 3-'31.

Owners *Shimatani Kisen Kabushiki Kaisha* Port belonging to *Kobe*.

Oil Engines made at *Jama* By whom made *Mitsui Bussan Kaisha* Contract No. *3040107* When made *Mar. '31*
 Generators made at *Shibaura, Tokio* By whom made *Shibaura Seisaku-Sho* Contract No. *3040108* When made *May '30*
3040109 When made *June '30*

No. of Sets 3 Engine Brake Horse Power 2@320 @105 Nom. Horse Power as per Rule 25.5 Total Capacity of Generators 266 Kilowatts.

ENGINES, &c.—Type of Engines *Mitsui-Burmeister 328-MTHK-45* 2 or 4 stroke cycle 4 Single or double acting *Single*
 Maximum pressure in cylinders 510 lbs/sq in Diameter of cylinders 280 mm Length of stroke 450 mm No. of cylinders 3 or 2 No. of cranks 3 or 2
 Distance of bearings, adjacent to the Cranks, measured from inner edge to inner edge 358 mm Is there a bearing between each crank *Yes*
 Revolutions per minute 400 Flywheel dia. 1540 mm Weight 5000 Kg. Means of ignition *Compression* Kind of fuel used *Heavy oil*
 Crank Shaft, dia. of journals as per Rule 165.9 as fitted 180 mm Crank pin dia. 180 mm Mid. length breadth 400 or 350 mm Thickness parallel to axis *✓*
 Crank Webs Mid. length thickness 95 mm Thickness around eye hole *✓*
 Flywheel Shaft, diameter as per Rule *✓* Intermediate Shafts, diameter as per Rule *✓* Thickness of cylinder liners *✓*
 as fitted *✓* as fitted *✓*

Is there 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 *✓*

Boiling Water Pumps, No. 3 (One per each set) Is the sea suction provided with an efficient strainer which can be cleared within the vessel *✓*

Lubricating Oil Pumps, No. and size 3 (one per each set) worm gear type.

Air Compressors, No. 3 No. of stages 2 Diameters HP. 280 mm LP. 320 mm Stroke 170 mm Driven by *Diesel Engine*

Exhausting Air Pumps, No. *✓* Diameter *✓* Stroke *✓* Driven by *✓*

RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule *Yes*

Are 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 *✓*

Working Air Receivers, No. 1 Total cubic capacity 250 litres Internal diameter 380 mm thickness 11 mm

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

ELECTRIC GENERATORS:—Type *Compound Wound, DC, 100 K.W. Generator* or *66 K.W.*

Pressure of supply 220 volts. Load 2@455 or 1@300 Amperes. Direct or Alternating Current *Direct current*

Is an 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*

Do the 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*

ANS. Are approved plans forwarded herewith for Shafting 9-5-30 Receivers Separate Tanks

SHAFTING AND GEAR as per the Rules, checked and found satisfactory.

The foregoing is a correct description,

S. Utas

Manufacturer.



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1930. April 21, 28, May 12, 14, 20, 22, 30, June 7, 12 July 10, 15, 21, 24
 Aug. 14, 19, 27. Sept. 2, 13. Oct. 3, 6, 14.

Dates of Examination of principal parts—Cylinders 13-9-30 and Covers 13-9-30
 Pistons 6-3-30 to 13-1-30 to 28-4-30
 Piston rods ✓
 Connecting rods 30-5-30 to 24-7-30 Crank and Flywheel shaft 10-5-30 (Murogan) (Kobe) Intermediate shaft ✓
 Crank and Flywheel shafts, Material Open hearth forged steel Identification Mark LR Nos 673 or 674 — LR No. 2493
 2.5 30 10-5-30 and ADM. 28-4-30.

Intermediate shafts, Material 181 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 and on completion the machinery has been efficiently installed in the vessel, coupled with the generators and tested under full working and parallel running conditions, and found to be efficient and eligible in my opinion to have record of L.M.C. 3-31.

Marks on Generators.

LLOYD'S
 No. 224
 26-5-30
 J.F.N. R

LLOYD'S
 No. 225
 26-5-30
 J.F.N. R

LLOYD'S
 No. 226
 4-6-30
 J.F.N. R

H. D. Buchanan & self.
 K. Kishigami
 Surveyor to Lloyd's Register of Shipping.

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

Committee's Minute FRI. 12 JUN 1931
 Assigned See J. G. Rpt.



Im. 9. 28—Transfer. (The Surveyors are requested not to write on or below the space for Committee's Minute.)