

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 10577A.

Received at London Office

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

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

37122 on the Single Twin Triple Quadruple Screw vessel M.V. "ASAKA MARU" Tons { Gross 7398 Net 4328

Built at Nagasaki By whom built Mitsubishi Jukogyo K.K. Yard No. 687 When built 1937

Owners Nippon Yusen K.K. Port belonging to Tokyo

Oil Engines made at Kobe By whom made Mitsubishi Jukogyo K.K. Kobe Contract No. 7787 When made 1937

Generators made at Nagasaki By whom made Mitsubishi Denki K.K. Contract No. ... When made 1937

No. of Sets 1 Engine Brake Horse Power 45 Nom. Horse Power as per Rule 10 Total Capacity of Generators 30 Kilowatts.

OIL ENGINES, &c.—Type of Engines M.R.W. 3 V.T.P.D. 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 3 No. of cranks 3

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 567 kg Means of ignition Airless Kind of fuel used Heavy Oil

Crank Shaft, dia. of journals as per Rule 85 mm as fitted 92 mm Crank pin dia. 92 mm Crank Webs Mid. length breadth 136 mm shrunk Thickness parallel to axis... Mid. length thickness 48 mm Thickness around eyehole...

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

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. one Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes

Lubricating Oil Pumps, No. and size one gear type type

Air Compressors, No. None No. of stages... Diameters... Stroke... Driven by...

Scavenging Air Pumps, No. None Diameter... Stroke... Driven by...

AIR RECEIVERS:—Have they been made under Survey Yes State No. of Report or Certificate 5989-A

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 Hole at top

Is there a drain arrangement fitted at the lowest part of each receiver Internal drain pipe

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. one Total cubic capacity 35 Litres Internal diameter 190 mm thickness 7.5 mm

Seamless, lap welded or riveted longitudinal joint Seamless Material Steel Range of tensile strength 44-55 kg/cm² Working pressure by Rules 30 kg/cm²

ELECTRIC GENERATORS:—Type D.C. Compound wound

Pressure of supply... volts. Full Load Current... Amperes. Direct or Alternating Current

If alternating current system, state the periodicity... Has the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on and off...

Generators, are they compounded as per rule... 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

If the generators are under 100 kw. full load rating, have the Makers supplied certificates of test... and do the results comply with the requirements

If the generators are 100 kw. or over have they been built and tested under survey

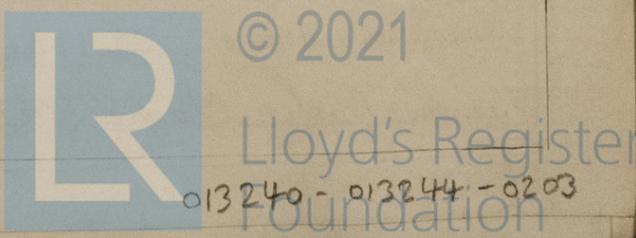
PLANS. Are approved plans forwarded herewith for Shafting 13/10/36 Receivers 13/10/36 Separate Tanks ✓

(If not, state date of approval)

SPARE GEAR

The foregoing is a correct description of the engine and generator sets described in this report.

M. Seki, Manufacturer, Superintendent Engineer.



Dates of Survey while building { During progress of work in shops - - } 1936 1937
 { During erection on board vessel - - - } Dec. 22, Jan. 20, March 1, 2, 5, 19, April 5, 7, 8, 10, 19, May 4, 11, 13, 21, 24 June 3, 12, 17
 Total No. of visits (see main engine report)

Dates of Examination of principal parts—Cylinders 29/3/37 Covers 29/3/37 Pistons 31/4/37 Piston rods

Connecting rods 21/5/37 Crank and Flywheel shafts 4/5/37 Intermediate shafts

Crank and Flywheel shafts, Material Forged mild steel Identification Marks LLOYD'S No. 6303 FI 4-5-37 R

Intermediate shafts, Material Identification Marks

Identification marks on Air Receivers MT149-1 LLOYD'S No. 5989A.S.S.R 30-1-37

Is this machinery duplicate of a previous case Yes If so, state name of vessel Akagi Arima Maru

General Remarks (State quality of workmanship, opinions as to class, &c.)

This engine has been constructed under special survey in accordance with the Rules and approved plans.

The materials and workmanship are good.

Stamped as follows :-

LLOYD'S
 No. 139
 Y.H.R.
 15-6-37

The spare gear is in accordance with the requirement of the Rules. ✓

This machinery has been efficiently installed on board & tried under full working & overload conditions with satisfactory results. Spare gear checked & found sufficient. This machine tried using one cylinder as an air compressor charging aux: starting air tank & found satisfactory. Hand compressor tried charging small air bottle & found satisfactory ✓

The amount of Fee ... £ 150 : : When applied for, a/c 7442
 Travelling Expenses (if any) £ : : When received, paid per a/c 4 19

J. Buchanan, Surveyor to Lloyd's Register of Shipping, Ylamada

Committee's Minute Fri. 11 FEB 1938

Assigned See Nag 2324



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