

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 10556A.

FEB 14 1938

Received at London Office

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
Reg. Book. Number of Visits

37125 on the Single }
Twin } Screw vessel M.V. "AWATA MARU" Tons { Gross 7398
Triple }
Quadruple }

Built at Nagasaki By whom built Mitsubishi Jukogyo K.K. Yard No. 682 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. 780, 781, 782 When made 1937

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

No. of Sets 3 / Engine Brake Horse Power Each 330 Nom. Horse Power as per Rule Each 60 Total Capacity of Generators 660 Kilowatts.

OIL ENGINES, &c.—Type of Engines 6 G 275/42 Vertical Trunk Piston 2 or 4 stroke cycle 4 Single or double acting Single

Maximum pressure in cylinders 46 kg/cm² Diameter of cylinders 275 mm Length of stroke 420 mm No. of cylinders 6 No. of cranks 6

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 324 mm Is there a bearing between each crank Yes

Revolutions per minute 360 Flywheel dia. 1600 mm Weight 3180 kg Means of ignition Compression Kind of fuel used Heavy Oil

Crank Shaft, dia. of journals as per Rule 162.5 mm Crank pin dia. 170 mm Crank Webs Mid. length breadth 240 mm Thickness parallel to axis
as fitted 170 mm Mid. length thickness 93 mm Thickness around eye-hole

Flywheel Shaft, diameter as per Rule Intermediate Shafts, diameter as fitted Thickness of cylinder liners 26 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 Watercooled and lagged

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, single acting 80 mm X 45 mm driven by engine

Air Compressors, No. Two No. of stages 3 Diameters 80 mm 360/310 mm 360/80 mm Stroke 180 mm Driven by Two of these engines

Scavenging Air Pumps, No. Diameter Stroke Driven by

AIR RECEIVERS:—Have they been made under Survey Yes State No. of Report or Certificate 6320

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. One Total cubic capacity 400 Litres Internal diameter 522 mm thickness 1/2 ins

Seamless, lap welded or riveted longitudinal joint R.R.D.B. Material Steel Range of tensile strength 4450 kg/cm² Working pressure by Rules 30 kg/cm²

ELECTRIC GENERATORS:—Type

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

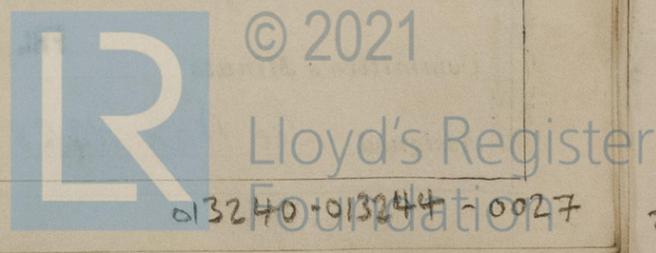
If the generators are under 100 kw. full load rating, have the Makers supplied certificates of test and do the results comply with the requirements

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

PLANS. Are approved plans forwarded herewith for Shafting 29/9/36 Receivers 29/9/36 Separate Tanks
(If not, state date of approval)

SPARE GEAR

The foregoing is a correct description,
KOBE WORKS, MITSUBISHI JUKOGYO KABUSHIKI KAISHA
M. Seki Manufacturer.
Superintendent Engineer.



Handwritten signature and date: M. Seki 6/2/38

Dates of Survey while building { During progress of work in shops - - (See Main Eng. rpt).
 { During erection on board vessel - - -
 { Total No. of visits

Dates of Examination of principal parts—Cylinders 2/4/37, 22/6/37, 24/6/37. Covers 20/4/37, 29/6/37. /7/37 Pistons 8/5/37 Piston rods
 Connecting rods 2/7/37 Crank and Flywheel shafts 5/7/37, 5/7/37, 6/7/37 Intermediate shafts
 Crank and Flywheel shafts, Material Forged mild steel Identification Marks Lloyd's No. 6311 F.I. 5-7-37 R Lloyd's No. 6311 F.I. 5-7-37 R Lloyd's No. 6311 F.I. 6-7-37 R
 Intermediate shafts, Material Identification Marks
 Identification marks on Air Receivers LLOYD'S No 6320 R W.P. 45 kg/cm² W.P. 30 kg/cm² F.I. 29-5-37

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

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

These engines have been constructed under special survey in accordance with the Rules and approved plans.
 The materials and workmanship are good.
 Stamped as follows :-

E780 LLOYD'S No. 141 Y.H.R. 28-8-37	E781 LLOYD'S No. 142 Y.H.R. 28-8-37	E782 LLOYD'S No. 143 Y.H.R. 28-8-37
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The spare gear is in accordance with the requirement of the Rules.

This machinery has been efficiently installed on board and tried under full working & overload condituon with satisfactory results.
 Spare gear checked and found sufficient.
 After trials one engine with air compressor opened up, all parts examined & found good.

1m.537.—Transfer. (The Surveyors are requested not to write on or below the space for Committee Minute.)

The amount of Fee ... £ 825 :
 Travelling Expenses (if any) £ 100 :
 When applied for, at 7448
 When received, paid per 49

H. Buchanan / *Y. Yamada*
 Surveyor to Lloyd's Register of Shipping.

FRI. 18 FEB 1938

Committee's Minute
 Assigned *See Mag 2328*

