

Rpt. 4c.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 570

Received at London Office 9 - AUG 1956

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

No. in Survey held at Nagasaki, Japan Date, First Survey 12-5-56 Last Survey 3-6-1956
Reg. Book. 36405 on the Single Screw vessel M.T. "KOSOH MARU" Number of Visits 8

Built at Nagasaki, Japan By whom built Mitsubishi Zosen K. K. Yard No. 1465 When built 6-1956

Owners Saio Kasei K. K. Port belonging to Kobe

Oil Engines made at Niigata By whom made Niigata Engineering Co. Ltd. Engine No. 8825 When made 2-1956
Generators made at Nagasaki By whom made Mitsubishi Electric Ind. Co. Ltd. Generator No. 532940 When made 12-1955
No. of Sets 3 B.H.P. of each Set 300 M.N. of each Set as per Rule - Capacity of each Generator 250 K.W.A.

Is Set intended for essential services Yes

OIL ENGINES, &c.—Type of Engines * 2 or 4 stroke cycle * Single or double acting *

Maximum pressure in cylinders * - Diameter of cylinders * - Length of stroke * - No. of cylinders * - No. of cranks * -

Mean indicated pressure * - Span of bearings (i.e., distance between inner edges of bearings in way of a crank) * -

Is there a bearing between each crank * - Moment of inertia of flywheel (16 m² or Kg.-cm.²) * - Revolutions per minute * -

Flywheel dia. * - Weight * - Means of ignition * - Kind of fuel used Diesel oil

Crank Shaft, { Solid forged - as per Rule * - Crank pin dia. * - Crank Webs - Mid. length breadth * - Thickness parallel to axis * -
Semi-built dia. of journals - as fitted * - Mid. length thickness * - Thickness round eye-holes * -
All-built - as fitted * -

Flywheel Shaft, diameter - as per Rule * - Generator armature, moment of inertia (16 m² or Kg.-cm.²) * -

Are means provided to prevent racing of the engine * - Means of lubrication * - Kind of damper if fitted * -

Are the cylinders fitted with safety valves * - Are the exhaust pipes and silencers water cooled or lagged with non-conducting material * -

Cooling Water Pumps, No. and how driven * - Is the sea suction provided with an efficient strainer which can be cleared within the vessel * Yes

Lubricating Oil Pumps, No. and size * -

Air Compressors, No. * - No. of stages * - Diameters * - Stroke * - Driven by * -

scavenging Air Pumps or Blowers, No. One per engine (supercharger) How driven Exhaust gas

AIR RECEIVERS:—Have they been made under Survey Yes State No. of Report or Certificate Nag. M-2324

(other than main engines)

State full details of safety devices 1-10 mm dia. single spring safety valve fitted

Can the internal surfaces of the receivers be examined and cleaned Yes

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 -

Starting Air Receivers, No. 1 Total cubic capacity 0.3 m³ Internal diameter 550 mm thickness 16 mm

Seamless, lap welded or riveted longitudinal joint Welded Material Boiler steel Range of tensile strength 52.2-52.4 kg/cm² Working pressure 30 kg/cm²

ELECTRIC GENERATORS:—Type * -

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

For alternating current system, state the periodicity * - Has the Automatic Governor been tested and found as per Rule when full 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 -

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

Do the generators are under 100 kw. full load rating, have the makers supplied certificates of test * - and do the results comply with the requirements * -

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

Details of driven machinery other than generator * -

PLANS.—Are approved plans forwarded herewith for Shafting * - Receivers 28-2-56 Separate Tanks 17-2-56

(If not, state date of approval)

Have Torsional Vibration characteristics if applicable been approved * - Armature shaft Drawing No. * -

(State date of approval and name of previous duplicate case, if any)

Is the spare gear required by the Rules been supplied * -

The particulars of the installation as fitted are as approved for Torsional Vibration Characteristics.

The foregoing is a correct description,

S. Koga

NAGASAKI WORKS

MITSUBISHI SHIPBUILDING & ENGINEERING CO., LTD.

Manufacturer.

012933-012939-0029

Lloyd's Register
Foundation

Dates of Survey while building { During progress of work in shops - - }
{ During erection on board vessel - - } 1956 May 12, 14, 22, 25, 29, 30, 31 June 3
Total No. of visits 8 (Nagasaki)

Dates of Examination of principal parts—Cylinders * Covers * Pistons * Piston rods *

Connecting rods * Crank and Flywheel shafts * Intermediate shafts *

Crank shaft { Material * Tensile strength *
Elongation * Identification Marks *

Flywheel shaft, Material * Identification Marks *

Identification marks on Air Receivers M-3/ No 1223 LLOYD'S TEST NAG 48.5 KG W.P. 30 KG AM 5-3-56.

Is this machinery duplicate of a previous case No If so, state name of vessel -

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

The Auxiliary Electrical Generating Machinery of this ship has been installed under the supervision of the surveyors in accordance with the requirements of the Rules, the approved plans and the Secretary's letters.

The materials and workmanship are good.

The auxiliary machinery was tested under working conditions after installation on board and found satisfactory.

For the report on survey of the engines during construction in the shops, see Yokohama Surveyors' Rpt. 4C No. 1897 attached herewith.

The places where marked * in this report have been certified by Yokohama Surveyors in their report.

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

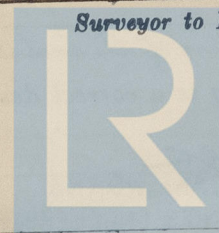
Committee's Minute

Assigned

FRIDAY 14 SEP 1956

Sr Rpt. 4 C.

P. Murao Peter Murao
Surveyor to Lloyd's Register of Shipping.



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