

M.V. "KOSOH MARU"

Rpt. 4c.

# REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 1897

Date of writing Report 15/4 March 1956 When handed in at Local Office 19 Port of YOKOHAMA Received at London Office 9 - AUG 1956  
No. in Survey held at Niigata Date, First Survey 14-10-55 Last Survey 7-2-56 (Yokohama)  
Reg. Book. Single on the Twin Triple Quadruple Screw vessel Number of Visits 10 (Yokohama) 19  
Built at Mitsubishi Zosen K.K. By whom built Mitsubishi Zosen K.K. Yard No. 1465 When built 1955  
Owners Port belonging to 18825  
Oil Engines made at Niigata By whom made Niigata Engineering Co., Ltd. Engine No. 18826 When made 2-56  
Generators made at Nagasaki By whom made Mitsubishi Electric Co., Ltd. Generator No. 532940 When made 12-55  
No. of Sets 3 B.H.P. of each Set 300 M.N. of each Set as per Rule 60 Capacity of each Generator 250 KVA Kilowatts  
Is Set intended for essential services Yes

**OIL ENGINES, &c.**—Type of Engines Model L5F25BS, trunk piston 2 or 4 stroke cycle 4 Single or double acting Single  
Maximum pressure in cylinders 60 kg/cm<sup>2</sup> Diameter of cylinders 250 mm Length of stroke 320 mm No. of cylinders 5 No. of cranks 5  
Mean indicated pressure 8.78 kg/cm<sup>2</sup> Span of bearings (i.e., distance between inner edges of bearings in way of a crank) 288 mm  
Is there a bearing between each crank Yes { Moment of inertia of flywheel (16 m<sup>2</sup> or Kg.-cm<sup>2</sup>) 1860 Kg.-m<sup>2</sup> Revolutions per minute 450  
Flywheel dia. 1300 mm Weight 1841 kg Means of ignition Compression Kind of fuel used —  
Crank Shaft, { Solid forged as per Rule 150.43 mm Crank pin dia 160 mm Crank Webs Mid. length breadth 235 mm Thickness parallel to axis —  
Semi-built as fitted 170 Crank pin dia 160 mm Crank Webs Mid. length thickness 78 mm shrunk Thickness round eye-hole —  
All-built as fitted 170 Crank pin dia 160 mm Crank Webs Mid. length thickness 78 mm shrunk Thickness round eye-hole —  
Flywheel Shaft, diameter as per Rule Generator armature, moment of inertia (16 m<sup>2</sup> or Kg.-cm<sup>2</sup>) 970 Kg.-m<sup>2</sup>  
Are means provided to prevent racing of the engine Yes Means of lubrication Forced Kind of damper if fitted Disc oil  
Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material lagged  
Cooling Water Pumps, No. and how driven each Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes  
Lubricating Oil Pumps, No. and size each: gear pump, 4050 c.c. P.C.D. 72 mm M.B. no. of teeth 12 B.42 mm RPM 700  
Air Compressors, No. 2 No. of stages 3 Diameters HP. 95 mm MP. 310-260 Stroke 150 mm Driven by Dynamo engine  
Scavenging Air Pumps or Blowers, No. — How driven —

**AIR RECEIVERS:**—Have they been made under Survey Yes State No. of Report or Certificate —  
(other than main engines)  
State full details of safety devices —  
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

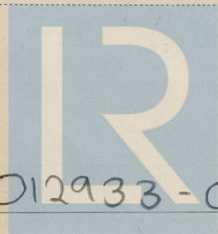
**High Pressure Air Receivers, No.** — Cubic capacity of each — Internal diameter — thickness —  
Seamless, lap welded or riveted longitudinal joint — Material — Range of tensile strength — Working pressure —  
**Starting Air Receivers, No.** — Total cubic capacity — Internal diameter — thickness —  
Seamless, lap welded or riveted longitudinal joint — Material — Range of tensile strength — Working pressure —

**ELECTRIC GENERATORS:**—Type Drip proof, self ventilated  
Pressure of supply 450 volts. Full Load Current 321 Amperes. Direct or Alternating Current A.C.  
alternating current system, state the periodicity 60 Has the Automatic Governor been tested and found as per Rule when full load is suddenly thrown  
and off Yes 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 Yes Are they so spaced —  
shielded that they cannot be accidentally earthed, short circuited, or touched Yes Are the lubricating arrangements of the generators as per Rule Yes  
the generators are under 100 kw. full load rating, have the makers supplied certificates of test — and do the results comply with the requirements —  
the generators are 100 kw. or over have they been built and tested under survey Yes  
Details of driven machinery other than generator 2 sets of starting air compressor, coupled by magnet clutch

**PLANS:**—Are approved plans forwarded herewith for Shafting 2-12-55 (Kobe) Receivers — Separate Tanks —  
(If not, state date of approval) 3-4-56 9/3/56 Armature shaft Drawing No. C 242373  
Have Torsional Vibration characteristics if applicable been approved Yes (State date of approval and name of previous duplicate case, if any)  
Is the spare gear required by the Rules been supplied Yes

The foregoing is a correct description,

Isao Takahashi Manufacturer.



© 2021

Lloyd's Register  
Foundation

012933-012939-0030



Dates of Survey while building { During progress of work in shops - 1955:- OCT. 14, 21, 22 NOV. 11, 22 DEC. 2, 13, 14, 16  
During erection on board vessel - 1956:- FEB. 7  
Total No. of visits 10 (Yokohama)  
M.N.O. 8825 13-12-55 13-12-55  
8826 14-12-55 14-12-55, 7-2-56  
8827 14-12-55 Covers 14-12-55  
Dates of Examination of principal parts - Cylinders 8827 14-12-55 Pistons 7-2-56 Piston rods -  
Connecting rods 2-12-55 Crank and Flywheel shafts 2-12-55 Intermediate shafts -  
M.N.O. 8825 55.9 kg/mm<sup>2</sup>  
8826 56.2  
8827 57.1  
Crank shaft { Material Electric furnace carbon steel Tensile strength 8827 57.1  
(Elongation 30 % Identification Marks LLOYD'S YMA N.O.S. Y 7456 H.T. 2-12-55  
31 Y 7457 I.S. 2-12-55  
30 Y 7458 H.T. 2-12-55  
Flywheel shaft, Material Identification Marks -  
Identification marks on Air Receivers -

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 Electrical Generator Sets have been constructed under Special Survey in accordance with the Society's Rules, Approved Plans and Secretary's letters.  
The materials and workmanship are good.  
Crankcase relief valves fitted as per Rules.  
The Electrical Generator Sets have been examined under full working condition in the shop and found satisfactory.  
It is recommended that these Electric Generator sets of this vessel are eligible for classification with this Society with the notation of + LMC with date when satisfactorily installed in the vessel.

6. 54 (MADE AND PRINTED IN JAPAN)  
(The Surveyors are requested not to write on or below the space for Committee Minute.)

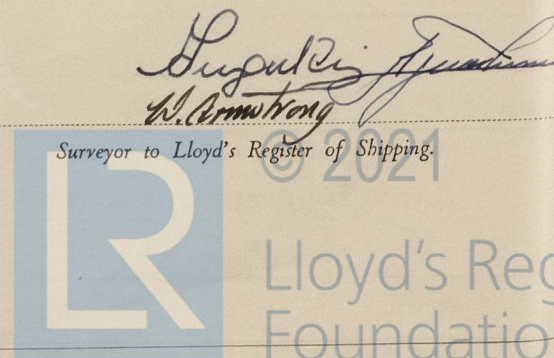
The amount of Fee ... ¥ 132,000.- { When applied for 20th March 1956  
Travelling Expenses (if any) ¥ When received 19

FRIDAY 14 SEP 1956

Committee's Minute

Assigned

Su Rpt. 4 C.



Rpt. 13.  
Date of wr  
No. in  
Reg. Book.  
36402  
Built a  
Owners  
Installat  
Is vessel  
Plans, ho  
Heating  
Prime Mo  
with a tr  
if not co  
in parall  
test for m  
Position  
is the ven  
damage f  
on ph  
are they i  
steam and  
material i  
per Rule  
for each g  
overcur  
fan circ  
and the su  
an over  
Mfg Co  
Are compa  
ammeters  
3 with  
protection  
of met  
Switches, C  
make of fus  
overload do  
Joint Boxes  
Cables, are  
state maxim  
area of 0-01  
cables seale  
high temper  
adequately p  
or of the "H  
metal c  
spaces  
Are all lead  
bulkheads pr  
effectively bu