

## REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 2325

Received at London Office

19 OCT 1954

Report 19 When handed in at Local Office OCT. - 8. 1954 19 Port of K O B E

Survey held at Osaka & Aioi, Japan Date, First Survey 28-11-53 Last Survey 23-6-19 54 Number of Visits 12

on the ~~Triple~~ Single Screw vessel M/V "ISE-MARU" Tons { Gross 13,220.70 Net 9,350.81

Aioi, Japan By whom built Harima Shipbuilding & Engineering Yard No. 481 When built July, 1954

Terukuni Kaiun K.K. Port belonging to Tokyo

made at Osaka, Japan By whom made Daihatsu Kogyo K.K. Engine No. 618094 When made July, 54

made at Himeji, Japan By whom made Nishishiba Denki K.K. Generator No. 5354093 When made July, 54

1 B.H.P. of each Set 125 ✓ M.N. of each Set as per Rule 25 Capacity of each Generator 100KVA ~~Kilowatts~~

ed for essential services Yes

INES, &c. Type of Engines 6PS-18B 2 or 4 stroke cycle 4 Single or double acting Single ✓

essure in cylinders 55kg/cm2 ✓ Diameter of cylinders 180mm ✓ Length of stroke 240mm ✓ No. of cylinders 6 ✓ No. of cranks 6

ed 6.4 kg/cm2 ✓ Span of bearings (i.e., distance between inner edges of bearings in way of a crank) 239 mm ✓

boiler ring between each crank Yes Moment of inertia of flywheel (16420 Kg.-cm.<sup>2</sup>) 231 kg-m2 Revolutions per minute 600 ✓

Work 900 mm Weight 510 kgs Means of ignition Compression Kind of fuel used Diesel Oil

Hydro Solid forged As per Rule. As Approved dia. of journals 130 mm ✓ Crank pin dia 115 mm ✓ Crank Webs Mid. length breadth 170 mm Thickness parallel to axis -

as fitted 130 mm ✓ Mid. length thickness 60mm shrunk Thickness round eye hole -

aft, diameter as per Rule - Generator armature, moment of inertia (11400 Kg.-cm.<sup>2</sup>) 1.6 x 10<sup>6</sup>

provided to prevent racing of the engine Yes ✓ Means of lubrication Forced Kind of damper if fitted -

describers fitted with safety valves Yes ✓ Are the exhaust pipes and silencers water cooled ~~xxxxxx~~ Yes

NG AI Oil Pumps, No. and how driven 1, Gear type Is the sea suction provided with an efficient strainer which can be cleared within the vessel None

LTD Oil Pumps, No. and size 1, Gear type, Quantity 1600 l/h, Revolution 705 r.p.m.

sors, No. - No. of stages - Diameters - Stroke - Driven by -

Air Pumps or Blowers, No. - How driven -

EIVERS: Have they been made under Survey Yes ✓ State No. of Report or Certificate AR 19666

n main engines) 1 x 20 φ Ordinary Type ✓

ails of safety devices Yes ✓

nal surfaces of the receivers be examined and cleaned Yes ✓

in a in arrangement fitted at the lowest part of each receiver Yes ✓

re Air Receivers, No. - Cubic capacity of each - Internal diameter - thickness -

welded or riveted longitudinal joint - Material - Range of tensile strength - Working pressure -

isted Receivers, No. 1 ✓ Total cubic capacity 300 liter ✓ Internal diameter 552 mm ✓ thickness 14 mm ✓

welded or riveted longitudinal joint Welded Material O.H. Steel ✓ Range of tensile strength 49.8kg/mm<sup>2</sup> Working pressure 30kg/cm2 ✓

C GENERATORS: Type Drip Proof

apply 450 volts. Full Load Current 128 Amperes. Direct or Alternating Current A.C.

current system, state the periodicity 60 Has the Automatic Governor been tested and found as per Rule when full load is suddenly thrown

es Generators, are they compounded as per Rule Yes is an adjustable regulating resistance fitted in series with each shunt field -

als accessible, clearly marked, and furnished with sockets. Yes Are they so spaced

at they cannot be accidentally earthed, short circuited, or touched Yes Are the lubricating arrangements of the generators as per Rule Yes

ors are under 100 kw. full load rating, have the makers supplied certificates of test Yes and do the results comply with the requirements Yes

ors are 100 kw. or over have they been built and tested under survey -

ven machinery other than generator -

re approved plans forwarded herewith for Shafting 7-12-53 (KOB E) Receivers 4-11-53 (KOB E) Separate Tanks 30-3-54 (KOB E)

(If not, state date of approval) 7-1-54

il Vibration characteristics if applicable been approved 29th March, 1954 ✓ Armature shaft Drawing No. M 1027713

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

gear required by the Rules been supplied Yes

The foregoing is a correct description,

S. Kurokawa

Manufacturer.

THE HARIMA SHIPBUILDING AND  
ENGINEERING COMPANY, LTD.

008863-008870-0143



Dates of Survey while building  
During progress of work in shops - - 1953:- Nov. 28, Dec. 5,  
1954:- Jan. 20, Feb. 25, March 19, 20,  
During erection on board vessel - - 1954:- May 18, 21, 27, June 18, 21, 23,  
Total No. of visits 12

Dates of Examination of principal parts - Cylinders 25th-Feb.-54 Covers 25th-Feb.-54 Pistons - Piston rods -  
Connecting rods 25th-Feb.-54 Crank ~~and Flywheel~~ shafts 25th-Feb.-54 Intermediate shafts -

Crank shaft Material Forged Steel Tensile strength 54.3 kg/mm<sup>2</sup>  
Elongation 31.0 % Identification Marks No. 01 - CK

Flywheel shaft, Material - Identification Marks -  
Identification marks on Air Receivers NO. AR 551 LLOYD'S TEST W.T.P. 48.5 kg/cm<sup>2</sup> W.P. 30 kg/cm<sup>2</sup>  
KT LR 25-2-54

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 Electric Generator set has been constructed under Special Survey in accordance with Rules, Approved Plans and Secretary's letters.

The Materials and workmanship are sound and good.

The electric generator set has been examined under full load working condition and found satisfactory.

It is submitted that the generator set is worthy to be classed to this Society with notation of +LMC when satisfactorily installed on board the vessel.

The Electric Generator set has now been satisfactorily installed on board the vessel under full working condition and found in order.

The amount of Fee ... £ 23,000  
Travelling Expenses (if any) £ 4,835

When applied for OCT. - 5 1954  
When received 19

Committee's Minute

Assigned

See Rpt. 46.



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