

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 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
ed for essential services Yes

INES, &c. Type of Engines 6PS-18B 3 or 4 stroke cycle 4 Single or double acting Single
Pressure in cylinders 55kg/cm2 Diameter of cylinders 180mm Length of stroke 240mm No. of cylinders 6 No. of cranks 6
6.4 kg/cm2 Span of bearings (i.e., distance between inner edges of bearings in way of a crank) 239 mm
Distance between each crank Yes Moment of inertia of flywheel (16200 Kg.-cm.²) 231 kg.-m² Revolutions per minute 600
900 mm Weight 510 kgs Means of ignition Compression Kind of fuel used Diesel Oil
Solid forged As Approved Mid. length breadth 170 mm Thickness parallel to axis -
dia. of journals 130 mm Crank pin dia 115 mm Crank Webs 60mm shrunk Thickness round eye-holes -
as fitted 1.6 x 10⁶

Generator armature, moment of inertia (16200 Kg.-cm.²)
provided to prevent racing of the engine Yes Means of lubrication Forced Kind of damper if fitted -
Are the exhaust pipes and silencers water cooled Yes
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
Oil Pumps, No. and size 1, Gear type, Quantity 1600 l/h, Revolution 705 r.p.m.
No. of stages - Diameters - Stroke - Driven by -
Air Pumps or Blowers, No. - How driven -

RECEIVERS: Have they been made under Survey Yes State No. of Report or Certificate AR 19666
Type of safety devices 1 x 20 φ Ordinary Type
Internal surfaces of the receivers be examined and cleaned Yes
Main arrangement fitted at the lowest part of each receiver Yes
Air Receivers, No. - Cubic capacity of each - Internal diameter - thickness -
welded or riveted longitudinal joint - Material - Range of tensile strength - Working pressure -
Receivers, No. 1 Total cubic capacity 300 liter Internal diameter 522 mm thickness 14 mm
welded or riveted longitudinal joint Welded Material O.H. Steel Range of tensile strength 49.8kg/mm² Working pressure 30kg/cm²

GENERATORS: Type Drip Proof
Supply 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
Generators, are they compounded as per Rule Yes is an adjustable regulating resistance fitted in series with each shunt field -
Terminals accessible, clearly marked, and furnished with sockets Yes Are they so spaced
that they cannot be accidentally earthed, short circuited, or touched Yes Are the lubricating arrangements of the generators as per Rule Yes
Generators are under 100 kw. full load rating, have the makers supplied certificates of test Yes and do the results comply with the requirements Yes
Generators are 100 kw. or over have they been built and tested under survey -
Other machinery other than generator -
Approved plans forwarded herewith for Shafting 7-12-53 (KOBE) Receivers 4-11-53 (KOSE) Separate Tanks 30-3-54 (KOBE)
Vibration characteristics if applicable been approved 29th March, 1954 Armature shaft Drawing No. M 1027713
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 ~~shafts~~ shafts 25th-Feb.-54 Intermediate shafts -

Crank shaft
 Material Forged Steel Tensile strength 54.3 kg/mm²
 Elongation 31.0% Identification Marks No. OI - CK

Flywheel shaft, Material - Identification Marks -
 Identification marks on Air Receivers NO. AR 551 LLOYD'S TEST W.T.P. 48.5 kg/cm² W.P. 30 kg/cm²
 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.

4m.562.-T. (MADE AND PRINTED IN ENGLAND)
 (The Surveyors are requested not to write on or below the space for Committee Minutes.)

The amount of Fee ... £ 23,000
 Travelling Expenses (if any) £ 4,825

When applied for OCT. - 5 1954
 When received 19

R.R. H. ... K. ...
 Surveyor to Lloyd's Register of Shipping

Committee's Minute
 Assigned See Ref. 46.

