

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office

Date of writing Report *7th Nov.* 19*25* When handed in at Local Office *10* Port of *Nobe*No. in Survey held at *Osaka* Date, First Survey *8th June* Last Survey *2nd Nov.* 19*25*
Reg. Book. (Number of Visits *10*)on the *Steel Single Screw Steamer ITIVO MARU* Tons { Gross *4273.5*
Net *2658.80*Built at *Osaka Sakuraguni* By whom built *Osaka Iron Works.* Yard No. *1056* When built *1925*Owners *Osaka Iron Works Ltd* Port belonging to *Takasago.*Electric Light Installation fitted by *Osaka Iron Works Ltd* Contract No. *1056* When fitted *1925*

System of Distribution

*Two Wire*Pressure of supply for Lighting *100* volts, Heating *✓* volts, Power *100* volts.Direct or Alternating Current, Lighting *Direct and Alternating* Power *direct current*If alternating current system, state frequency of periods per second *60*Has the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on or off **Yes.*Generators, do they comply with the requirements regarding overload *Yes*, are they compound wound *Yes*are they over compounded 5 per cent. *Yes*, if not compound wound state distance between each generator *✓*Where more than one generator is fitted are they arranged to run in parallel *No*, is an adjustable regulating resistance fitted in series with each shunt field *Yes*Are all terminals accessible and clearly marked *Yes*, are they so spaced or shielded that they cannot be accidentally earthed, or short circuited *Yes* Are the lubricating arrangements of the generators as per Rule *Yes*Position of Generators *Lower Engine room*is the ventilation in way of the generators satisfactory *Yes*, are they clear of all inflammable material *Yes*if situated near unprotected woodwork or other combustible material, state distance of same horizontally from or vertically above the generators *None* and *None*, are the generators protected from mechanical injury and damage from water, steam or oil *Guards fitted*are their axis of rotation fore and aft *Yes*Earthing, are the bedplates and frames of the generating plant efficiently earthed *Yes* are the prime movers and their respective generators in metallic contact *Yes*Main Switch Boards, where placed *Near generator*If the generators and main switchboard are not placed in the same compartment, is each generator provided with a fuse on each insulated pole as near as possible to the terminals of the generator, additional to that provided on the main switchboard *✓*Switchboards, are they placed in accessible positions, free from inflammable gases and acid fumes *Yes*are they protected from mechanical injury and damage from water, steam or oil *Yes*, if situated near unprotected woodwork or other combustible material, state distance of same horizontally from or vertically above the switchboards *None* and *None*are they constructed wholly of durable, incombustible non-absorbent materials *Yes, Marble*, is all insulation of high dielectric strength and of permanently high insulation resistance *Yes*, if semi-insulating material is used, are all conducting parts connected to one poleinsulated from the slab with mica or micanite and the slab similarly insulated from its framework *Yes*, and is the frame effectively earthed *Yes, metal to metal connections* Are the following fittings as per Rule, viz.:— spacing or shielding of live parts*Yes*, accessibility of all parts *Yes*, absence of fuses on back of board *Yes*, proportion of omnibus bars *ample*, individual fuses to voltmeter, pilot or earth lamp *Yes*, connections of switches *Yes*Main Switchgear, description of switchgear for each generator and each outgoing circuit, and arrangement of equalizer switches *Two main switches for 6 K.W. dynamo & 5 K.V.A transformer + one change over switch for same. Three feeder switches for Wireless, lighting, & power. Five lightning switches for Navigation, Cargo lights, (2) Machinery Space, & Crew Space.*Instruments on main switchboard *1* ammeters *2* voltmeters *✓* synchronising device for paralleling purposes.Earth Testing, state what means are provided at the main switchboard for indicating the state of the insulation of the system *Earth lamp**connected in series by key to each pole & earth.*Switches, Circuit Breakers and Fusible Cut-outs, do these comply with the requirements of the Rules *Yes.*Section and Distribution Boards, is the construction, protection, insulation, material, and position of these as per rule *Yes.*

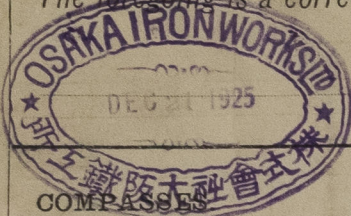
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All Conductors are of annealed copper conforming to British Standard Specification No. 7.

The Insulated Conductors are guaranteed to withstand the immersion and resistance tests specified in the Rules.

The foregoing is a correct description.



K. Nagase

Electrical Engineers.

Date 21-12-25

COMPASSES

Distance between electric generators or motors and standard compass About 95 ft from propelling generator & motor

Distance between electric generators or motors and steering compass " 140 140 ft " " " " "

The nearest cables to the compasses are as follows:—

A cable carrying 0.2 Ampères 4 feet from standard compass 4 feet from steering compass.

A cable carrying 1.0 Ampères 7 feet from standard compass 7 feet from steering compass.

A cable carrying 5.6 Ampères 7 feet from standard compass feet from steering compass.

Have the compasses been adjusted with and without the electric installation at work at full power Yes

Has the effect of switching on and off circuits, motors and other electro-magnetic apparatus within the vicinity of the compasses been noted Yes

The maximum deviation due to electric currents was found to be No degrees on all courses in the case of the standard

compass, and nil degrees on each course in the case of the steering compass.

[Signature]

Builder's Signature.

Date 21-12-25.

Is this installation a duplicate of a previous case YES If so, state name of vessel S.S. BIYO MARU.

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

The fitting of the wires are as stated in this report & appear to be in accordance with the rules of this Society. All power & lighting circuits were tried under full load conditions & found satisfactory.

All power cable insulation was tested with a 500 volt Megger, including starter & motor, & the resistances = 15 Meg. Ohms for port side & 30 Megohms for starboard side cables.

This case is eligible in my opinion for the notation Electric Light & Wires.

Two prints showing (1) arrangement of engine room cables & wiring for electric power installation forwarded herewith.

It is submitted that
this vessel is eligible for
THE RECORD. Elec. light.

Total Capacity of Generators Small 6 Kilowatts

" " " TURBO " 1,000 "

The amount of Fee ... £EN 106⁰⁰ : When applied for, 14-11-1925

Travelling Expenses (if any) £ SEE HULL REP When received, 4-12-1925

Committee's Minute

FRI. 5 FEB 1926

Assigned

Elec Lt



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