

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office

Date of writing Report 15th Aug. 1927 When handed in at Local Office 15th Aug. 1927 Port of NAGASAKI.

No. in Survey held at NAGASAKI. Date, First Survey 20th June. Last Survey 29th July, 1927.
Reg. Book. (Number of Visits 16.)on the Steel Screw Motpr Vessel "COLUMBIA MARU" Tons { Gross 5611.74
Net 3515.60

Built at Nagasaki. By whom built Mitsubishi Zosen Kaisha Yard No. 427. When built 1927.

Owners Mitsubishi Shoji Kaisha, Ltd., Port belonging to Tokio.

Electric Light Installation fitted by Mitsubishi Zosen Kaisha, Ltd., Contract No. / When fitted 1927.

System of Distribution Two wire system.

Pressure of supply for Lighting 225 volts, Heating / volts, Power 225. volts.

Direct or Alternating Current, Lighting Direct current. Power Direct current.

If alternating current system, state frequency of periods per second /

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 Yes, except 3.5 KW, 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 In engine room. - on bottom platform.

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 / and /, are the generators protected from mechanical injury and damage from water, steam or oil Yes.

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 Starboard side of second deck in engine room.

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 / and /,

are they constructed wholly of durable, incombustible non-absorbent materials Yes., 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 pole

insulated from the slab with mica or micanite and the slab similarly insulated from its framework Yes., and is the

frame effectively earthed Yes. 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 Yes., 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 For each generator of

three sets of 82.5 KW., a double pole circuit breaker with overload and reverse current trip and a single pole equalizer switch interlocked with circuit breaker as per rule: for 3.5 KW. generator a single pole overload circuit breaker, double pole knife switch and enclosed fuse on each pole & for each out going circuit, a fuse on each pole & a double pole knife switch.

Instruments on main switchboard 5 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 Lamp.

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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If portable lamps for use in dangerous spaces are supplied, are they of a type approved by the Home Office.....

[illegible]

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.

NAGASAKI WORKS, MITSUBISHI ZOSEN KAISHA, LTD.

M. Abe

GENERAL MANAGER.

Electrical Engineers.

Date *24th Aug 1927.*

COMPASSES.

Distance between electric generators or motors and standard compass **28 ft (W.T. motor generator)**

Distance between electric generators or motors and steering compass **20 ft (" ")**

The nearest cables to the compasses are as follows :—

A cable carrying **0.05** Ampères **One** feet from standard compass **9** feet from steering compass.

A cable carrying **0.05** Ampères **9** feet from standard compass **One** feet from steering compass.

A cable carrying **/** Ampères **/** 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 **Nil.** degrees on **All.** course in the case of the standard

compass, and **Nil.** degrees on **All.** course in the case of the steering compass.

NAGASAKI WORKS, MITSUBISHI ZOSEN KAISHA, LTD.

M. Abe

GENERAL MANAGER.

Builder's Signature.

Date *24th Aug 1927*

Is this installation a duplicate of a previous case **No.** If so, state name of vessel **/**

General Remarks (State quality of workmanship, opinions as to class, &c. **The materials and workmanship are good**)

and the installation has been fitted in accordance with the Rules,

Tested under full working conditions and found satisfactory.

Plan sent under separate cover of:- "Electric Wiring Diagram".

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

Total Capacity of Generators **251.** Kilowatts

The amount of Fee ... **£ 388:00** : When applied for, **4. 8. 19 27**

Travelling Expenses (if any) £ : : When received, **15. 8. 19 27**

Committee's Minute

30 SEP 1927

Assigned

Electric Light

George Anderson
Surveyor to Lloyd's Register of Shipping



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