

# REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office 11/11/1928

Date of writing Report 9-6-1928 When handed in at Local Office

19 Port of Kobe

No. in Survey held at Lama

Date, First Survey

9-3-28

Last Survey

9-6-1928

Reg. Book.

on the

Steel Single Screw Motorship "TAKAMISAN MARU."

(Number of Visits 16)

Tons { Gross 1992

Net 1099

When built 1928

Built at Lama

By whom built Mitsui Bussan Kaisha Yard No. 133

Owners Mitsui Bussan Kaisha

Port belonging to

Tokyo

Electric Light Installation fitted by Mitsui Bussan Kaisha

Contract No. 133 When fitted 1928

System of Distribution Two wire, closed circuit

Pressure of supply for Lighting 220 volts, Heating 220

volts, Power 220 volts

Direct or Alternating Current, Lighting Direct

Power Direct

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, 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 Bottom engine room 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 Port side forward end of engine room on a special platform raised about 4'-0" above bottom engine room platform 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 No. (MARBLE SLABS), 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

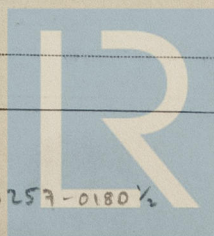
Main Switchgear, description of switchgear for each generator and each outgoing circuit, and arrangement of equalizer switches Each generator fitted with a double pole switch & double pole circuit breaker with overload & reverse current release. Circuit breakers suitably connected with equalizer leads as per Rule requirements.

Instruments on main switchboard 4 ammeters 2 voltmeters 4 pilot lamps 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 2 earth lamps & switches

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 ☒

MOTOR CONDUCTORS.									
Ref. No.	DESCRIPTION.	No. of Motors.	Effective Area of each Conductor. Sq. Ins.	COMPOSITION OF STRAND.		Total Maximum Current. Amperes.	Approximate Length. (Lead and Return). Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
7	BALLAST PUMP ... ..	1	0305	30	20	26	30	Rubber	LEAD & ARMORED.
8	MAIN BILGE LINE PUMPS	1	0305	30	20	28	120	"	" " "
	GENERAL SERVICE PUMP	✓							
	EMERGENCY BILGE PUMP	✓							
6	SANITARY PUMP ... .. COMBINED AUGER AND - CIRC. SEA WATER PUMPS	See 8							
	CIRC. FRESH WATER PUMPS	✓	0611	60	20	54	70	"	" " "
	AIR COMPRESSOR ... ..	✓							
10	FRESH WATER PUMP ... ..	1	0071	7	20	10	150	"	" " "
9	ENGINE TURNING GEAR	1	0071	7	20	10	70	"	" " "
	ENGINE REVERSING GEAR	✓							
	LUBRICATING OIL PUMPS	See 516							
5	COMBINED LUG OIL AND - OIL FUEL TRANSFER PUMP	1	0611	60	20	54	120	"	" " "
19	WINDLASS ... ..	1	1527	150	20	132	860	"	" " "
17	WINCHES, FORWARD	2	1527	150	20	184	480	"	" " "
16	WINCHES, AFT	2	1527	150	20	184	300	"	" " "
15	WINCHES, AFT	2	1527	150	20	184	100	"	" " "
13	STEERING GEAR ... ..	1	0305	30	20	32	180	"	" " "
	WORKSHOP MOTOR	✓	0071	7	20	10	180	"	" " "
4	VENTILATING FANS	✓							
11	Oil Separator	1	0611	60	20	64	70	"	" " "
14	Capsstan.	1	0611	60	20	60	180	"	" " "



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.

*D. T. T. M.*

Electrical Engineers.

Date 7-6-1928.

#### COMPASSES.

Distance between electric generators or motors and <sup>P.O.P.</sup> standard compass 20 feet.

Distance between electric generators or motors and steering compass 10 feet.

The nearest cables to the compasses are as follows:—

A cable carrying 32 Ampères ✓ feet from <sup>P.O.P.</sup> standard compass 10 feet from <sup>P.O.P.</sup> steering compass.

A cable carrying 89 Ampères 20 feet from standard compass ✓ 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 No

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

The maximum deviation due to electric currents was found to be ✓ degrees on ✓ course in the case of the standard

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

*P. J. T. M.*

Builder's Signature.

Date 8-6-28

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 electrical apparatus herein referred to, has been constructed & installed in accordance with the Rule requirements & approved plans. The materials used & the workmanship are both good & in my opinion, the vessel is entitled to the highest class awarded.

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

*Elec. Light*

*J. A. 12/7/28.*

Total Capacity of Generators 99 Kilowatts

The amount of Fee ... <sup>YEN</sup> 330 : = { When applied for, June 11<sup>th</sup> 1928.  
When received, July 1<sup>st</sup> 1928.

Travelling Expenses (if any) £ - : -  
Included in Hull expenses.

FRI 13 JUL 1928

Committee's Minute

Assigned

*Elec Light*

*L. Kimber*

Surveyor to Lloyd's Register of Shipping.

5c. 12s. Transfer. (The Surveyors are requested not to write on or below the space for Committee's Minute.)



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