

# REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

No. 603

10 OCT 1927

Date of writing Report **15th Sept. 27** When handed in at Local Office **15th Sept. 27** Port of **NAGASAKI.**

No. in Survey held at **NAGASAKI.** Date, First Survey **5th July.** Last Survey **30th August 19 27.**  
(Number of Visits **11**)

Reg. Book. on the **Steel Screw Motor Vessel "OLYMPIA MARU".** Tons { Gross **5611.74**  
Net **3515.60**

Built at **Nagasaki.** By whom built **Mitsubishi Zosen Kaisha** Yard No. **4 2 8.** 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.** volts, Power **225** volts.

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

Direct or Alternating Current, Lighting **Direct current**

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

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, **Yes.**

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 **Yes.**

/ 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**

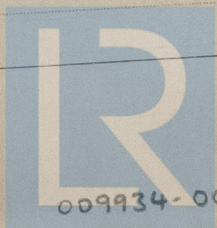
**on each pole & for each out going circuit, a fuse on each pole & a double pole knife switch.**

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.**



© 2021

Lloyd's Register Foundation

009934-009942-0307 1/3



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

[illegible]



Insulation of Cables  
Fall of Pressure, s  
Cable Sockets and  
**Yes.**

Paper Insulated Ca  
insulating compound

Cable Runs, are the c  
steam pipes, uptakes or

Support and Protec  
galvanized st  
mechanical da  
If cables are run in w  
separate grooves /

Refrigerated Cham

Joints in Cables, st  
by metal cov

Watertight Glands  
**Yes.**

Bushes in Beams a  
bushed **Yes.**

Earthing Connecti  
except for wi

Alternative Lighti  
Emergency Supply,

Navigation Lamps,

are the fuses double po  
has each navigation la

are separate oil lantern

Fittings, are all fitti

are any fittings placed

are any fittings placed

/

where are the contr

Searchlight Lamp

Are Lamps, other th

Motors, are their u

are the brushes, brush

inflammable gases can

are they protected fro

if situated near unpro

**Totally**

**enclosed**

Control Gear and

Lightning Conduc

Ships carrying 0

section and distribut

If portable lamps for

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. Aki*  
GENERAL MANAGER.

Electrical Engineers.

Date 23/9/27

#### 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 stand

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

NAGASAKI WORKS, MITSUBISHI ZOSEN KAISHA, LTD.

*M. Aki*  
GENERAL MANAGER.

Builder's Signature.

Date 23/9/27

Is this installation a duplicate of a previous case **Yes.** If so, state name of vessel "Columbia Maru" Nag. Rpt. 16

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 work 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.

*J.W.D.*  
12/10/27

*George Anderson*  
Surveyor to Lloyd's Register of Shipping.

Total Capacity of Generators 251. Kilowatts

The amount of Fee ... £ 368.00 : 1. 9. 19. 27

Travelling Expenses (if any) £ : 17. 9. 19. 27

Committee's Minute FRI. 14 OCT 1927

Assigned

Rpt. 9a.

Port of NAGASAKI.

Continuation of Report No. 603, dated 15th Sept. 1927. on the

#### Steel Screw Motor Vessel "OLYMPIA MARU"

#### LIGHTING & HEATING CONDUCTORS.

Ref. No.	Description.	No. of Conduc- tors.	Effective Area of each Conductor. Sq. Ins.	Composition of Strand. No. Dia.	Total Maximum Current Amperes.	Approximate Length. (L & R) Feet.	Insula- ted with.	How Protected.
1	Main Generator.	1	.00701	7 .036	367	80	Rubber	Lead Covered
2	Equalizer for Generator.	2	.60493	91 .092		40	"	"
3	Auxiliary Generator.	1	.00181	1 .048		110	"	"
48	No.1 Distribution Board.	2	.00322	1 .064	15.6	35	"	"
49	No.2 " "	2	"	1 "	9.82	15	"	"
50	No.3 " "	2	"	1 "	8.91	65	"	"
51	No.4 Cut-out.	2	"	1 "	3.27	15	"	"
52	No.1 Submain Board.	2	.00701	7 .036	27.6	50	"	"
53.54	Cargo cluster (No.3 Hatch)	1	.00475	168 .006	1.08	60	"	"
55	Main Cir. for Cargo Clu.	2	.00322	1 .064	2.16	65	"	"
56.57	Cargo cluster (No.1 H.)	1	.00475	168 .006	1.08	60	"	"
58	Main Cir. for Cargo Clu.	2	.00322	1 .064	2.16	470	"	"
59.61	Cargo cluster (No.2 H.)	1	.00475	168 .006	1.08	60	"	"
60	Cargo lamp (No.2 Hatch)	1	"	"	2.28	60	"	"
62	Main circuit for Cargo cluster & lamp.	2	.00322	1 .064	4.44	210	"	"
63.65	Cargo cluster (No.4 & 5 H.)	1	.00475	168 .006	1.08	60	"	"
64	Cargo lamp (No.4 & 5 H.)	1	"	168 "	2.28	60	"	"
66	Main circuit for Cargo cluster & lamp.	2	.00322	1 .064	4.44	100	"	"
67.68	Cargo cluster (No.6 & 7 H.)	1	.00475	168 .006	1.08	60	"	"
69	Main Cir. for Cargo Clu.	2	.00322	1 .064	2.18	770	"	"
70	No.2 Submain Board.	2	.00701	7 .036	15.44	90	"	"
71	Fore mast lamp.	1	.00181	1 .048	0.27	200	"	L.C.A.
72	Starboard side lamp.	2	.00322	1 .064	"	80	"	"
73	Port side lamp.	2	"	1 "	"	80	"	"
74	Main mast lamp.	1	.00181	1 .048	"	470	"	L.C.A.
75	Stern lamp.	2	.00322	1 .064	"	800	"	L.C.
76	Main Cir. Nav. lamp.	2	"	1 "	1.35	195	"	"
77	Bus-bar lamp circuit.	2	.00181	1 .048	0.18	55	"	"

#### MOTOR CONDUCTORS.

		No. of Motors.									
4	Windlass motor.	1	.15268	150	.036	185	60	Rubber	L.C.		
5.6.	3 tons Winch (fore)	2	.11903	37	.064	120	75	"	"		
7	Main Cir. for Winch.		.40551	61	.092		450	"	"		
8.11.	5 tons Winch (Mid.)	2	.20358	200	.036	160	100	"	"		
9.10.	3 tons Winch ( " )	2	.11903	37	.064	120	75	"	"		
12	Main Cir. for Winch.		.60493	91	.092		200	"	"		
13.14	3 tons Winch (Mid.)	2	.11903	37	.064	120	80	"	"		
15	Main Cir. for Winch.		.40551	61	.092		150	"	"		
16.17	3 tons Winch (aft)	2	.11903	37	.064	120	100	"	"		
18	Main Cir. for Winch.		.40551	61	.092		580	"	"		
19	Steering motor.	1	.06112	19	.064	58.5	520	"	"		
20	Second battery for WL.T.		.00701	7	.036	20	65	"	"		
21	Motor side for 1 KVA.MG.	1	.00701	7	.036	8	60	"	"		
22	Gen. side for 1 KVA.MG.	1	.00181	1	.048		30	"	"		
			.00701	7	.036	10	60	"	"		
23	Motor side for 1/2 KVA.MG.	1	.00701	7	.036	19	60	"	"		
24	Generator side for 1/2 KVA. MG.	1	.00181	1	.048		30	"	"		
			.00701	7	.036	2.5	60	"	"		
25	Main Cir. wireless teleg. switch.		.01267	7	.048	20	100	"	"		
26.27	Turbo blower motor	2	.00701	7	.036			"	"		
			.40551	61x2	.092	425	65	"	"		
28	Main Cir. turbo blower		.40551	"	"	425	50	"	"		
29.30	Aux. Compressor motor	2	"	61	"	285	150	"	"		
31.38	Jacket & Piston Cooling pump motor.	2	.11903	37	.064	100	80	"	"		
32.39	Lub. oil pump motor	2	.01267	7	.048	31	85	"	"		
33	Fuel oil transfer pump motor.	1	.00701	7	.036	18	100	"	"		
34	General service P. motor.	1	.11903	37	.064	112	150	"	"		
35	Lub. oil purifier motor.	1	.00701	7	.036	10	120	"	"		
36	Main Cir. No.5 Junc. box.		.40551	61	.092		105	"	"		
37	Fuel oil purifier motor.	1	.00701	7	.036	12.2	95	"	"		
40	Work shop motor.	1	"	7	"	21	110	"	"		
41	Bilge pump motor.	1	.01267	7	.048	28	125	"	"		
42	Ballast pump motor.	1	.11903	37	.064	100	125	"	"		
43	Main Cir. No.6 Junc. box.		.40551	61	.092		105	"	"		
44	Fuel oil transfer pump M.	1	.00701	7	.036	4.78	70	"	"		
45.46	Galley cooking fan motor.	2	"	7	"	4.58	55	"	"		
47	Main Cir. cooking fan M.		"	7	"		160	"	"		

© 2021

Lloyd's Register  
Foundation