

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office

5 - JUN 1926

Date of writing Report 4th May. 1926 When handed in at Local Office 4th May. 1926 Port of NAGASAKI.

No. in Survey held at NAGASAKI. Date, First Survey 6th Jan. 26 Last Survey 21st April 1926.
Reg. Book. (Number of Visits 13.)

on the Steel Twin Screw Motor Vessel "LA PLATA MARU".

Tons { Gross 7,267.
Net 4387.

Built at Nagasaki. By whom built Mitsubishi Zosen Kaisha Yard No. 4 1 1. When built 1926.

Owners Osaka Shosen Kabushiki Kaisha. Port belonging to Osaka.

Electric Light Installation fitted by Mitsubishi Zosen Kaisha, Ltd., Contract No. When fitted 1926.

System of Distribution Two wire closed circuit.

Pressure of supply for Lighting 225. volts, Heating 225. volts, Power 225. 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. 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 All on bottom platform of Engine room space.

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 Fore end of Engine room on 2nd deck level.

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 In same compartment.

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 micaite and the slab similarly insulated from its framework No semi insulating material., 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 150 KW. and 37.5 KW. generators are each fitted with a double pole circuit breaker with overload and reverse current release together with a single pole equalizer switch interlocked with circuit breaker as per Rule, and an enclosed fuse and knife switch on each pole... 3.5 KW generator fitted with a single pole circuit breaker with overload release plus a double pole knife switch and fuse.... each out-going circuit, a fuse on each pole and a double pole switch.

Instruments on main switchboard 8 ammeters 3 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 By lamps.

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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Foundation

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

[illegible]

Insulation
Fall of Pr
Cable Sock
Yes.
Paper Insu
insulating con
Cable Runs
steam pipes, u
Support and
galavanil
If cables are
separate groov
Refrigerate
Joints in Ca
protecte
Watertight
With wat
Bushes in B
bushed Y
Earthing Co
telegrap
Alternative
Emergency S
Generato
Navigation L
are the fuses do
has each naviga
are separate oil
Fittings, are a
are any fittings
are prote
are any fittings
where are the
Searchlight I
Arc Lamps, ot
Motors, are th
are the brushes,
inflammable gas
are they protected
if situated near
Totally
enclos
Control Gear
Lightning Con
Ships carryin
section and distr
If portable lamps

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.

The builder (or under) Electrical Engineers. Date

COMPASSES.

Distance between electric generators or motors and standard compass About 10 feet from Gyro-pilot compass.

Distance between electric generators or motors and steering compass About 3 feet " " " "

The nearest cables to the compasses are as follows :-

A cable carrying 0.1 Ampères One feet from standard compass One feet from steering compass. For Compass light.

A cable carrying 1.0 Ampères Twelve feet from standard compass Three feet from steering compass. For Gyro-pilot motor.

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 No. degrees on Any & every course in the case of the standard compass, and about 18 degrees on Westerly or Easterly course in the case of the steering compass.

S. Motora Builder's Signature. Date MAY 1926

Is this installation a duplicate of a previous case. Yes If so, state name of vessel M.V. "Santos Maru".

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

and the installation as a whole complies with the Rules, and special instructions, & tests

have been carried out accordingly and it is the opinion of the undersigned that the vessel

be given the highest class.

Plans sent under separate cover of:- "Load Distribution Diagram", and "Connection Diagram of

Main Switchboard".

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

Total Capacity of Generators 491. Kilowatts

The amount of Fee ... £ 683:60 : 21. 4. 26.

Travelling Expenses (if any) £ : 26. 4. 26.

Committee's Minute TUES. 8 JUN 1926

Assigned

pt. 9a.

Port of NAGASAKI. (1). Continuation of Report No. 1533. dated 4th May, 1926. on the

Steel Twin Screw Motor Vessel "LA PLATA MARU".

Generator, Lighting, Heating Condensers.

Ref. No.	Description.	No. of Set	Effective Area of each Condfr Sq. in.	Composition of Strand. No. Dia.	Total Maximum Current Amps.	Approx Length (Lead & Return) Feet.	Insula- ted. with.	How. Protec- ted.	Re- Marks.
1.2.3.	Main generator.	3	.605x2	91x2 .092"	666 each	130'	Rubber	L.A.W.	
4	Aux. "	1	.186	37 .08"	166	130'	"	"	
5	Emergency generator	1	.00715	7 .036"	15.6	"	"	"	
13	Fuse board foreward	1	.405x2	61x2 .092"	450	400'	"	"	
16	Fuse box mid winch	1	.186	37 .08"	170	200'	"	"	
22	Fuse board aft.	1	.405	61 .092"	280	420'	"	"	
25	Cooking fan switch	1	.00715	7 .036"	9.4	100'	"	"	
27	Baggage lift switch	1	"	7 .036"	5.1	20'	"	"	
31	Junction box ord fan	1	.0127	7 .048"	30.6	160'	"	"	
35	Cut out Elec. iron.	1	.00715	7 .036"	9	40'	"	"	
38	Junction box laundry motor.	1	.0225	7 .064"	41	580'	"	"	
45	Junction box ref. motor	1	.605	91 .092"	289	67'	"	"	
57	Junction box oil pump	1	.0127	7 .048"	26.1	80'	"	"	
67	Aux. switch board	1	.405	61 .092"	250	110'	"	"	
77	" " "	1	"	61 "	"	"	"	"	
79.80	Fore Cargo lamp	2	.0047	168 .006"	1 each	100'	"	F.C.	
81	Socket for above.	2	.00322	1 .064"	2 "	40'	"	L.A.W.	
82.83.84	Fore cargo lamp	3	.0047	168 .006"	2.3	100'	"	F.C.	
85	Socket for above	3	.00322	1 .064"	4.3	60'	"	L.A.W.	
86.87	Midship cargo lamp	2	.0047	168 .006"	1 each	100'	"	F.C.	
88	Socket for above	2	.00322	1 .064"	2 "	250'	"	L.A.W.	
89	Submain board S 6.	1	.00715	7 .036"	8.3	380'	"	"	
90.91	Aft cargo lamp	2	.0047	168 .006"	1 each	100'	"	F.C.	
92	Socket for above	2	.00322	1 .064"	2 "	45'	"	L.A.W.	
93.94.95	Aft cargo lamp	3	.0047	168 .006"	2.3	100'	"	F.C.	
96	Socket for above	3	.00322	1 .064"	4.3	45'	"	L.A.W.	
97	Submain board S 7.	1	.00715	7 .036"	6.3	370'	"	"	
98.99	1 K.W. elect heater social hall.	2	.00322	1 .064"	4.5 each	50'	"	L.W.	
100.101	1.5 K.W. elect heater social hall.	2	.00322	1 .064"	6.8 each	125'	"	"	
102	Submain board S 10.	1	.0127	7 .048"	22.7 each	100'	"	L.A.W.	
103	2 K.W. elect heater smoke room.	1	.00322	1 .064"	9.1 each	60'	"	L.W.	
104.105	1.5 K.W. elect heater smoke room.	2	.00322	1 .064"	6.8 each	110'	"	"	
106	Submain board S 11.	1	.0127	7 .048"	22.7 each	270'	"	L.A.W.	
107	Distributing board No. 1	1	.00322	1 .064"	6.8	20'	"	"	
108	" " " 2	1	"	1 "	7.4	200'	"	"	
109	" " " 3	1	"	1 "	3.1	20'	"	"	
110	" " " 4	1	"	1 "	7.8	20'	"	"	
111	" " " 5	1	"	1 "	4.25	40'	"	"	
112	" " " 6	1	"	1 "	5.1	20'	"	"	
113	Submain board No. S 1.	1	.0226	7 .064"	32.05	125'	"	"	
114	Distributing Board No. 7	1	.00322	1 .064"	2.55	100'	"	"	
115	" " " 8	1	"	1 "	6.25	20'	"	"	
116	" " " 9	1	"	1 "	9	210'	"	"	
117	" " " 10	1	.00715	7 .036"	11.25	325'	"	"	
118	" " " 11	1	.00322	1 .064"	6.9	200'	"	"	
119	Submain board No. S 2.	1	.0225	7 .064"	28.75	210'	"	"	
120	Distributing board No. 12	1	.00322	1 .064"	6	270'	"	"	
121	" " " 13	1	"	1 "	4.95	80'	"	"	
122	" " " 14	1	"	1 "	4.5	20'	"	"	
123	" " " 15	1	"	1 "	7.7	110'	"	"	
124	" " " 16	1	"	1 "	3.2	460'	"	"	
125	" " " 17	1	"	1 "	4.95	500'	"	"	
126	Submain board No. S 3.	1	.0225	7 .064"	31.3	110'	"	"	
127	Distributing board No. 18	1	.00322	1 .064"	4.2	70'	"	"	
128	" " " 19	1	"	1 "	7.5	170'	"	"	
129	" " " 20	1	"	1 "	4.85	20'	"	"	
130	Submain board No. S 4.	1	.00715	7 .036"	16.55	140'	"	"	
131	Distributing board No. 21	1	.00322	1 .064"	4.6	20'	"	"	
132	" " " 22	1	"	1 "	6.85	20'	"	"	
133	500 watt lamp socket	1	"	1 "	2.25	125'	"	"	
134	500 watt lamp	1	.0047	168 .006"	2.25	100'	"	F.C.	
135	Submain board No. S 5.	1	.00715	7 .036"	13.7	40'	"	L.A.W.	
136	Navigation sig. indicator	1	.00322	1 .064"	2.5	325'	"	"	
137	Distributing board No. 23	1	"	1 "	4.2	20'	"	"	
138	Cut out	1	"	1 "	1.5	215'	"	"	
139	Distributing board No. 24	1	"	1 "	4	20'	"	"	
140	Submain board No. S 8.	1	.00715	7 .036"	9.7	60'	"	"	
141	Distributing board No. 25	1	.00322	1 .064"	4.3	400'	"	"	
142	" " " 26	1	"	1 "	4.2	360'	"	"	
143	" " " 27	1	"	1 "	4.4	140'	"	"	
144	" " " 28	1	"	1 "	4.4	20'	"	"	
145	Submain board No. S 9.	1	.0225	7 .064"	27	110'	"	"	
qualizer	150 K.W. generator	3	.605	91 .092"	65	"	"	"	
"	27.5 K.W. generator	1	.186	37 .08"	65	"	"	"	

L.A.W. = Lead covered & armoured copper wire.
F.C. = Flexible Cord.
L.W. = Lead covered copper wire.

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Steel Twin Screw Motor Vessel "L A P L A T A M A R U".
Motor Conductors.

Ref. No.	Discription.	Effective No. of Set	Area of each Cond'r. Sq. in.	Composition of Strand.		Total Maximum current Amperes.	Approx Length (Lead & Return) Ft.	Insula- ted with.	How protec- ted.	Re- Marks
				No.	Dia.					
6	Windlass	1	.406 ✓	61	.092"	216	140'	Rubber	L.A.W.	
7-12	Winches foreward	6	.119 ✓	37	.064"	111	65'	"	"	
14.15	Winches midship	2	.119 ✓	37	.064"	111	30'	"	"	
17.20	Winches Aft.	4	" ✓	37	"	111	55'	"	"	
21	Warping winch	1	.186 ✓	37	.08	145	120'	"	"	
28-30	Ventilator fan	3	.00715 ✓	7	.036"	8.5	180'	"	"	
26	Baggage lift	1	" ✓	7	"	5.1	12'	"	"	
23.24	Cooking range fan	2	" ✓	7	"	4.7	23'	"	"	
37	Washing machine	1	" ✓	7	"	12.7	23'	"	"	
36	Hydroextrator	1	" ✓	7	"	20	8'	"	"	
32-34	Electric iron	3	.00322 ✓	1	.064"	9	10'	"	"	
39.40	Steering engine	2	.119 ✓	37	"	97	350'	"	"	
41.42	Ref. Machine	2	.186 ✓	37	.08"	124	12'	"	"	
43.44	Brine pumps	2	.00715 ✓	7	.036"	20.5	12'	"	"	
46	Gyro pilot	1	.00322 ✓	1	.064"	1.35	250'	"	"	
46	Gyro compass	1	.00715 ✓	7	.036"	4	130'	"	"	
47	Wireless telegraph	1	" ✓	7	.036	20	240'	"	"	* 750 Amp (Max. in service)
48.49	Turbo, blower	2	.605x2 ✓	91x2	.092"	845*	35'	"	"	
50.51	Aux. air comp.	2	.405x2 ✓	61x2	"	528	55'	"	"	
52	Work shop motor	1	.00715 ✓	7	.036"	21.5	70'	"	"	
53.54	Oil pump	2	" ✓	7	"	4.78	20'	"	"	
55.56	Oil purifier	2	" ✓	7	"	8	20'	"	"	
58.68	Jacket cool water pump	2	.119 ✓	37	.064"	86	90'	"	"	
59.69	Piston cool W. pump	2	.0344 ✓	19	.048"	58	85'	"	"	
60.70	Bilge pump	2	.0127 ✓	7	.048"	27.4	35'	"	"	
61.71	Lub. oil pump	2	" ✓	7	"	35	85'	"	"	
62.72	Fuel oil pump	2	.00715 ✓	7	.036"	17.2	110'	"	"	
63	Ballast pump	1	.119 ✓	37	.064"	134	50'	"	"	
64	Cold sanitary pump	1	.0344 ✓	19	.048"	56	50'	"	"	
65	Aux.Eng.jacket C.W.P.	1	.00715 ✓	7	.036"	14.2	90'	"	"	
66	Lub.oil purifier	1	" ✓	7	"	12.3	95'	"	"	
73	General serv. pump	1	.186 ✓	37	.08"	154	40'	"	"	
74	Hat sanitary pump	1	.0225 ✓	7	.064"	36	40'	"	"	
75	Fresh water pump	1	.00715 ✓	7	.036"	13.2	140'	"	"	
76	Aux.Eng.lub.oil pump	1	" ✓	7	"	16	95'	"	"	
78	Motor siren	1	.0127 ✓	7	.048"	32	430'	"	"	