

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office.....

Date of writing Report 19... When handed in at Local Office 19... Port of **Kobe**

No. in Survey held at **OSAKA** Date, First Survey **20/12/26** Last Survey **18.6.1927**
 Reg. Book. (Number of Visits **14**)

on the **Single screw motor ship "CHOKO MARU"** Tons { Gross **2613.47**
 Net **1375.43**

Built at **Osaka** By whom built **Osaka Iron Works Ltd** Yard No. **1095** When built **1927**

Owners **Osaka Shosen Kaisha** Port belonging to **OSAKA**

Electric Light Installation fitted by **Osaka Iron Works Ltd** Contract No. **1095** When fitted **1927**

System of Distribution **Two Conductor, Insulated** ✓

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 **Two on starboard side & one on port side engine room 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 **on starboard side of middle platform at aft end of 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 **Yes**

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 (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 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 **linked double pole**

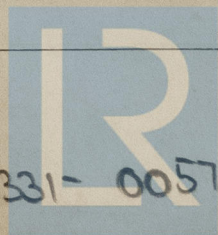
Main Switchgear, description of switchgear for each generator and each outgoing circuit, and arrangement of equalizer switches **Double pole knife switches fitted to circuits on switch boards, & double pole circuit breakers with interlocked equalizer switch.**

Instruments on main switchboard **3** ammeters **3** voltmeters **3** 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 **Two earth lamp with change switches to positive & negative poles**

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

W1331-0057 1/2

Lloyd's Register
Foundation

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.				
M 11	BALLAST PUMP	1	.061 ✓	19	1/16 S.W.G.	70	35	RUBBER	LEAD & ARMoured
M 12	MAIN BILGE LINE PUMPS ...	1	.023 ✓	7	16 "	31.2	75	do	do
M 10	GENERAL SERVICE PUMP ...	1	.151 ✓	37	15 "	132	35	do	do
	EMERGENCY BILGE PUMP								
M 14	SANITARY PUMP	1	.023 ✓	7	16 "	33	20	do	do
	CIRC. SEA WATER PUMPS ...								
	CIRC. FRESH WATER PUMPS								
M 1	AIR COMPRESSOR	1	.405 x 2 ✓	61	13 "	528	200	do	do
M 13	FRESH WATER PUMP	1	.007 ✓	7	20 "	13.4	40	do	do
	ENGINE TURNING GEAR ...								
	ENGINE REVERSING GEAR ...								
M 8-9	LUBRICATING OIL PUMPS ...	2	.007 ✓	7	20 "	16 EACH	100 MAX.	do	do
M 15	OIL FUEL TRANSFER PUMP	1	.007 ✓	7	20 "	16	200	do	do
M 17	WINDLASS	1	.151 ✓	37	15 "	125	150	do	do
M 18 & 21	WINCHES, FORWARD	4	.095 ✓	19	14 "	106 EACH	15	do	do
M 22 & 25	WINCHES, AFT	4	.095 ✓	19	14 "	do	57	do	do
M 27	STEERING GEAR	1	.023 ✓	7	16 "	38	300	do	do
	WORKSHOP MOTOR								
	VENTILATING FANS								
M 28	REFRIG. MACHINE	1	.023 ✓	7	16 "	40	140	do	do
M 29	" SPARE BRINE PWD	1	.003 ✓	3	20 "	4.8	30	do	do
M 4-5	J.C.W. PUMPS	2	.061 ✓	19	16 "	47.5 EACH	130 MAX.	do	do
M 6-7	P.C.W. "	2	.023 ✓	7	16 "	36 "	130 "	do	do
M 26	CAPSTAN	1	.061 ✓	19	16 "	81	232	do	do
M 16	OIL PURIFIERS	1	.003 ✓	3	20 "	6	50	do	do
M 2-3	TURBO BLOWER	2	.405 x 2 ✓	61	13 "	42.5	14 MEAN	do	do

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.

Osaka Iron Works Ltd

Electrical Engineers.

Date June 25th 1927.

COMPASSES.

Distance between electric generators or motors and standard compass

about 80 feet

Distance between electric generators or motors and steering compass

about 75 feet.

The nearest cables to the compasses are as follows:—

A cable carrying 4.55 Ampères 3 feet from standard compass 6 feet from steering compass.

A cable carrying 2.2 Ampères 13 feet from standard compass 5 feet from steering compass.

A cable carrying .1 Ampères 2 feet from standard compass 2 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

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.

OSAKA IRON WORKS, LTD.

[Signature]

Builder's Signature.

Date 25/6/27

Is this installation a duplicate of a previous case. Yes If so, state name of vessel "CHOAN MARU" RPN^o 5665.

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

This installation has been constructed & installed under special survey in accordance with the Rules & approved plans. The material & workmanship is good, it has been tested under full load conditions with satisfactory results.

This vessel is eligible in my opinion to have the notation of "Electric Light & Wireless" in Register Book.

Copies of main generator, ^{crank shaft.} certificate forwarded herewith Augsburg N^o 94,102,107
" " main switch board certificate " " Nagasaki N^o 17, dated 25/4/27

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

[Signature]
25/7/27

Total Capacity of Generators 240 Kilowatts

The amount of Fee ... £393⁰⁰ : When applied for, 18th June 1927
" " Travelling Expenses (if any) £ SEE HULL RPT. : When received, 8.10.1927

A.D. Buchanan
Surveyor to Lloyd's Register of Shipping.

FRI. 29 JUL 1927

Committee's Minute

Assigned

[Signature]
Elec Light