

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office 1 JAN 1937

Date of writing Report 14th Dec 1936 When handed in at Local Office 14th Dec 1936 Port of KOBE.

No. in Survey held at KOBE. Date, First Survey 22/3/36 Last Survey 15/11 1936

Reg. Book. 12871 on the T.M.S. CHICHIBU MARU. (Number of Visits 3)

Last Report No 4.Kg. 7688 Tons { Gross 17498

Built at YOKOHAMA By whom built YOKOHAMA DOCK CO LTD Yard No. ✓ When built 1930-3

Owners NIPPON YUSEN KAISHA Port belonging to TOKIO.

Electric Light Installation fitted by SEE 1ST ENTRY RPT. Contract No. When fitted

Is the Vessel fitted for carrying Petroleum in bulk No.

WIRELESS TELEPHONE INSTALLATION ONLY.

System of Distribution TWO CONDUCTOR INSULATED.

Pressure of supply for Lighting 220 volts, Heating volts, Power 220. volts.

Direct or Alternating Current, Lighting Power D.C.

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 ✓

Generators, do they comply with the requirements regarding rating YES, are they compound wound No.

are they over compounded 5 per cent. ✓, if not compound wound state distance between each generator ✓

Where more than one generator is fitted are they arranged to run in parallel No., is an adjustable regulating resistance fitted in

series with each shunt field YES

Are all terminals accessible, clearly marked, and furnished with sockets YES, are they so spaced or shielded that they cannot be accidentally earthed,

short circuited, or touched YES. Are the lubricating arrangements of the generators as per Rule YES.

Position of Generators N^o1 MOTOR ROOM - BOAT DECK, 3 Kw. 2000 V. 4 Kw. 28V. + 0.5 Kw. 600 V. HOUSE TOP, 6 Kw. 6000 V.

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 ✓

are their axes 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 TRANSMITTING ROOM - BOAT DECK.

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, non-ignitable 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 insulated from the slab

with mica or micanite or other non-hygroscopic insulating material, and the slab similarly insulated from its framework YES.

and is the frame effectively earthed YES. Are the fittings as per Rule regarding: - spacing or shielding of live parts

YES, accessibility of all parts YES, absence of fuses on back of board YES, proportion of omnibus

bars ✓, 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

D.P.K. SWITCHES & D.P. FUSES.

Instruments on main switchboard 4 ammeters 4 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 ✓

Switches, Circuit Breakers and Fusible Cut-outs, do these comply with the requirements of the Rules YES.

Joint Boxes Section and Distribution Boards, is the construction, protection, insulation, material, and position of these as per rule ✓



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Cables: Single, twin, concentric, or multicore SINGLE are the cables insulated and protected as per Tables IV, V, XI or XIII of the Rules YES.

Fall of Pressure, state maximum between bus bars and any point of the installation under maximum load 1.7 VOLTS.

Cable Sockets and other connections, are the ends of all cables having a sectional area of 0.04 square inch and above provided with soldering sockets YES.

Paper Insulated Cables. If cables are paper covered, is the dielectric at the exposed ends of the conductor protected from moisture by being suitably sealed with insulating compound

Cable Runs, are the cables fixed as far as possible in accessible positions not exposed to drip or accumulation of water or oil, or to high temperature from boilers, steam pipes, uptakes or other hot objects, or to avoidable risk of mechanical damage YES

Support and Protection of Cables, state how the cables are supported and protected CLIPS, ARMoured & RUN IN STRONG STEEL CASINGS WHERE EXPOSED TO WEATHER & FOR RISK OF DAMAGE.

If cables are run in wood casings, are the casings and caps secured by screws , are the cap screws of brass , are the cables run in separate grooves . If armoured and lead covered cables are secured by metal clips, are the clips spaced as per Table VIII YES

Refrigerated Chambers, if lights are fitted, are the cables and fittings in accordance with the special requirements

Joints in Cables, state if any, and how made, insulated, and protected NONE

Watertight Glands and Deck Tubes, are all cables passing through decks and watertight bulkheads provided with deck tubes or watertight glands YES

Bushes in Beams and Non-watertight Partitions, where unarmoured cables pass through beams and non-watertight partitions, are the holes efficiently bushed state the material of which the bushes are made

Earthing Connections, state what earthing connections are fitted and their respective sectional areas ALL LEAD SHEATHING & ARMOURING OF CABLES & BASE PLATES OF MOTORS & GENERATORS ARE EARTHED EFFECTIVELY. are their connections made as per Rule YES

Alternative Lighting, are the groups of lights in the propelling machinery space arranged as per Rule

Emergency Supply, state position and method of control of the emergency supply and how the generator is driven

Navigation Lamps, are these separately wired , controlled by separate switch and separate fuses , are the fuses double pole , are the switches and fuses grouped in a position accessible only to the officers on watch has each navigation lamp an automatic indicator as per Rule

Secondary Batteries, are they constructed and fitted as per Rule

Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, watertight are any fittings placed in spaces in which goods are liable to be stacked in close proximity to them; if so, how are they protected NONE

are any fittings placed in spaces where inflammable or explosive dust or gases are liable to be present, if so, how are they protected NONE

how are the cables led ON BOAT DECK FROM NO 1 MOTOR ROOM. & DIRECT FROM NO 2 MOTOR ROOM.

where are the controlling switches situated IN TRANSMITTING ROOM.

Searchlight Lamps, No. of , whether fixed or portable , are their fittings as per Rule

Arc Lamps, other than searchlight lamps, No. of , are their live parts insulated from the frame or case , are their fittings as per Rule

Motors, are their working parts readily accessible YES, are the coils self-contained and readily removable for replacement YES, are the brushes, brush holders, terminals and lubricating arrangements as per Rule YES, are the motors placed in well-ventilated compartments in which inflammable gases cannot accumulate and clear of all inflammable material YES, are they protected from mechanical injury and damage from water, steam or oil YES, are their axes of rotation fore and aft YES, if situated near unprotected woodwork or other combustible material, are the motors of the totally enclosed, pipe ventilated, forced draught, drip or flame proof type No, if not of this type, state distance of the combustible material horizontally or vertically above the motors NONE IN VICINITY.

Control Gear and Resistances, are the generator field and motor speed regulators, starters and controllers constructed and fitted as per Rule YES.

Lightning Conductors, where lightning conductors are required, are these fitted as per Rule

Ships carrying Oil having a Flash Point less than 150° F. Have the special requirements of the Rules been complied with regarding switches, joint boxes, section and distribution boards, protection of cables, method of distribution, lead of cables, lights and fittings If portable lamps for use in dangerous spaces are supplied, are they of a type approved by the Home Office

PARTICULARS OF GENERATING PLANT.										
DESCRIPTION OF GENERATOR.	No. of	RATED AT				DRIVEN BY	WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE.			
		Kilowatts.	Volts.	Ampères.	Revs. per Min.		Fuel Used.	Flash Point of Fuel.		
MAIN										
AUXILIARY										
EMERGENCY										
ROTARY TRANSFORMER										
MOTOR & GENERATOR, WINDING AND HEATING CONDUCTORS.										
DESCRIPTION.	No. per Pole.	CONDUCTORS.		COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT AMPERES.		Approximate Length (Lead and Return) Feet.	Insulated with	HOW PROTECTED.
		Total Effective Area per Pole Sq. MM.	No.	Diameter.	In Circuit.	Rule.				
MAIN GENERATOR										
EQUALISE CONNECTIONS										
AUXILIARY GENERATOR										
EMERGENCY GENERATOR										
ROTARY MOTOR TRANSFORMER										
ENGINE ROOM										
BOILER ROOM										
AUXILIARY SWITCHBOARDS										
7 HP. MOTOR FOR 28V GEN.	1	38.21	19	1.6.	28	83.	330	V.I.R.	L-C.A.	
1" " " 600V "	1	5.5	7	1.0.	4.5	27	330	"	"	
5" " " 2000V "	1	14.08	7	1.6.	20	46.	330	"	"	
10" " " 6000V "	1	38.21	19	1.6.	40	83	95	"	"	
28V GEN. FIELD. {G.F.	1	153.7	37	2.3	143	214	330	"	"	
Accommodation	1	5.5	7	1.0.	-	27	330	"	"	
600V GEN.	1	5.5	7	1.0.	8.35	27	330	"	"	
2000V "	1	3.52	7	0.8.	1.5	18.5	330	"	"	
6000V "	1	3.52	7	0.8	1.0.	18.5	95	"	"	
WIRELESS										
SEARCHLIGHT										
MASTHEAD LIGHT										
SIDE LIGHTS										
COMPASS LIGHTS										
POOP LIGHTS										
CARGO LIGHTS										
ARC LAMPS										
HEATERS										
MOTOR CONDUCTORS.										
DESCRIPTION.	No. of Motors.	CONDUCTORS.		COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT AMPERES.		Approximate Length (Lead and Return) Feet.	Insulated with	HOW PROTECTED.
		No. Per Pole.	Total Effective Area per Pole Sq. Ins.	No.	Diameter.	In Circuit.	Rule.			
BALLAST PUMP										
MAIN BILGE LINE PUMPS										
GENERAL SERVICE PUMP										
EMERGENCY BILGE PUMP										
SANITARY PUMP										
CIRC. SEA WATER PUMPS										
CIRC. FRESH WATER PUMPS										
AIR COMPRESSOR										
FRESH WATER PUMP										
ENGINE TURNING GEAR										
ENGINE REVERSING GEAR										
LUBRICATING OIL PUMPS										
OIL FUEL TRANSFER PUMP										
WINDLASS										
WINCHES, FORWARD										
WINCHES, AFT										
STEERING GEAR—										
(a) MOTOR GENERATOR										
(b) MAIN MOTOR										
WORKSHOP MOTOR										
VENTILATING FANS										

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.

✓ Electrical Engineers. Date _____

COMPASSES.

Distance between electric generators or motors and standard compass _____

Distance between electric generators or motors and steering compass _____

The nearest cables to the compasses are as follows:—

A cable carrying _____ Ampères _____ feet from standard compass _____ feet from steering compass.

A cable carrying _____ Ampères _____ 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 _____

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.

✓ Builder's Signature. Date _____

Is this installation a duplicate of a previous case ✓ If so, state name of vessel ✓

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

The above installation has been fitted on board the vessel in accordance with the Rules, Approved plans & Secretary's letters. The workmanship is good & the safety circuits have been tested & found to operate satisfactorily.

Noted
 J.A.
 18/1/37

Total Capacity of Generators _____ Kilowatts.

The amount of Fee ... Yen 250.-
 Cost of Cablegrams (Tok + Lon.) 44.72
 Travelling Expenses (if any) £ 14.-
 - special attendance fee.

When applied for, 17th Nov 1936
 When received, 28th Dec 1936

e. Macpherson.
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE. JAN 12 1937 WED 31 MAR 1937 FRI 24 SEP 1937

Assigned As now WED 19 MAY 1937 FRI 23 JUL 1937

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2m.33L—Transfer. The Surveyors are requested not to write on or below the space for Committee's Minute.

