

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Date of writing Report Jun 11th 1926 When handed in at Local OfficePort of BilbaoNo. in Survey held at BilbaoDate, First Survey May 8th Last Survey May 27th 1926

Reg. Book.

27329 on the p.s. "MENHIR" now "MUSILLA"

(Number of Visits.....6.....)

Tons { Gross 567
Net 379Built at Badajoz By whom built Echegarai y Larrea Yard No.When built 1920-2Owners La Compania Maritima "Maskar" Port belonging to BilbaoElectric Light Installation fitted by Astilleros del Maritim

Contract No.

When fitted 1926

System of Distribution

Two conductor
insulated, direct current.

Pressure of supply for Lighting

110

volts, Heating

volts, Power

volts.

Direct or Alternating Current, Lighting

Direct current

Power

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

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

In engine room on built platform, starboard side.

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

Yes

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

In engine room alongside generator

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

None

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

Slate slab

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

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

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 equalising switches

Double pole linked switch, with fuse each pole, on generator. Double pole linked switch, with fuse each pole on each outgoing circuit

Instruments on main switchboard

One

ammeters

One

voltmeters

synchronising device for paralleling purposes.

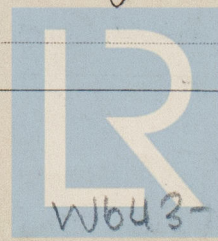
Earth Testing, state what means are provided at the main switchboard for indicating the state of the insulation of the system

Earth 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

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Insulation of Cables, state type of cables, single or twin Single are the cables insulated and protected as per Tables III or IV of the Rules Yes

Fall of Pressure, state maximum between bus bars and any point of the installation under maximum load 3 volts

Cable Sockets and other connections, are the ends of all cables having a sectional area of 0.007 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 Yes

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 Main circuits run inside jointed iron pipes efficiently clipped. All cables lead covered, clipped to casings in accommodation
If cables are run in wood casings, are the casings and caps secured by screws Yes, are the cap screws of brass Yes, are the cables run in separate grooves Yes. If armoured and lead covered cables are secured by metal clips, are the clips spaced as per Table VI Yes

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

Joints in Cables, state if any, and how made, insulated, and protected junction boxes

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

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

Earthing Connections, state what earthing connections are fitted and their respective sectional areas Yes

Yes, are their connections made as per Rule Yes

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

Emergency Supply, state position and method of control of the emergency supply and how the generator is driven None

Navigation Lamps, are these separately wired Yes, controlled by separate switch and separate fuses Yes, are the fuses double pole Yes, are the switches and fuses grouped in a position accessible only to the officers on watch Yes

has each navigation lamp an automatic indicator as per Rule Yes, are separate screens provided for the use of oil and electric side lights No
are separate oil lanterns provided for the mast head lights and side lights Yes

Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, watertight Yes
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 in way

of holds or cofferdams, how are the cables led inside jointed galv. iron pipe led along under bulwark rail
where are the controlling switches situated Engine room

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

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

Motors, are their working parts readily accessible None, 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 axis 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 Yes
if not of this type, state distance of the combustible material horizontally or vertically above the motors and

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

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

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 Also 150° F

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

PARTICULARS OF GENERATING PLANT.

DESCRIPTION OF GENERATOR.	No. of	RATED AT				DRIVEN BY.	WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE.	
		Kilowatts.	Volts.	Amps.	Revs. per Min.		Fuel Used.	Flash Point of Fuel.
MAIN ...	1	5	110	46	500	Steam engine	✓	✓
AUXILIARY ...	✓							
EMERGENCY ...	✓							
ROTARY TRANSFORMER	✓							

LIGHTING AND HEATING CONDUCTORS.

Ref. No.	DESCRIPTION.	No. of Conductors.	Effective Area of each Conductor. Sq. Ins.	COMPOSITION OF STRAND.		Total Maximum Current. Amps.	Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	MAIN GENERATOR...	2	11.25 sq. in.	7	1.67	45.5	5 meters	Rubber	Lead, Iron pipe
	AUXILIARY GENERATOR	✓							
	EMERGENCY GENERATOR	✓							
	ROTARY TRANSFORMER...	✓							
	AUXILIARY SWITCHBOARDS	✓							
	ENGINE ROOM ...	6	17	1	1.17	36	90 meters	Rubber	Lead, Iron pipe
	BOILER ROOM ...	2	17	1	1.17	36	60 meters	"	" " "
	Cabin	2	27	1	1.67	15	60 "	"	" " "
	Engine Room	2	27	1	1.67	15	30 "	"	" " "
	Heater	2	27	1	1.67	15	80 "	"	" " "
	WIRELESS ...	✓							
	SEARCHLIGHT ...	✓							
	MASTHEAD LIGHT...	2	17	1	1.17	36	80 mts.	Rubber	Lead, Iron pipe
	SIDE LIGHTS ...	2	17	1	1.17	36	12 "	"	" " "
	COMPASS LIGHTS ...	2	17	1	1.17	18	12 "	"	Lead " "
	POOP LIGHTS ...	2	17	1	1.17	36	80 "	"	" " "
	CARGO LIGHTS ...	✓							
	ARC LAMPS ...	✓							
	HEATERS ...	✓							

MOTOR CONDUCTORS.

Ref. No.	DESCRIPTION.	No. of Motors.	Effective Area of each Conductor. Sq. Ins.	COMPOSITION OF STRAND.		Total Maximum Current. Amps.	Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	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 ...								
	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.

Javier Filadelfo Electrical Engineers.

Date

COMPASSES.

Distance between electric generators or motors and standard compass

Distance between electric generators or motors and steering compass *abv. 80 ft.*

The nearest cables to the compasses are as follows:—

A cable carrying *18* Amperes ☒ feet from standard compass *1* feet from steering compass.

A cable carrying ☒ Amperes feet from standard compass feet from steering compass.

A cable carrying ☒ Amperes 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 *0* degrees on ☒ course in the case of the standard compass, and *Nil* degrees on ☒ course in the case of the steering compass.

Javier Filadelfo 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 Electric Light Installation

has been fitted on board this vessel in accordance with the Rules. The material & workmanship are good, and the installation is eligible in my opinion to be classed, with the notation of "Electric Light" in the Register Book.

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

Elec. Light.

W.H. 25/6/26

Total Capacity of Generators *5* Kilowatts

The amount of Fee ... *Pto. 240/-*

When applied for,
<i>15/6/19.26</i>
When received,
<i>15/6/19.26</i>

Travelling Expenses (if any) £ ☒

J. M. Kendall
Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned *Elec. Lt.*

Im. 9. 2. Transfer.
(The Surveyors are requested not to write on or below the space for Committee's Minute.)



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