

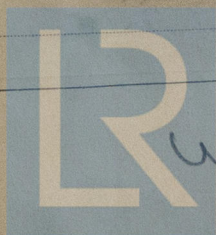
REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office

Date of writing Report 4.3.1927 When handed in at Local Office 10 Port of Rotterdam
 No. in Survey held at Rotterdam Date, First Survey 18.10.26 Last Survey 1-3.1927
 Reg. Book. Heelkruikhamer, SIMON BOLIVAR (Number of Visits 14)
 on the Heelkruikhamer, SIMON BOLIVAR Tons { Gross
 Net
 Built at ROTTERDAM By whom built ROTTERD. DROOGDOK MY. Yard No. 138 When built 1915
 Owners KON. NEDERLANDSCHE STOOMBOT MY. Port belonging to Amsterdam
 Electric Light Installation fitted by MYNSSSEN & CO AMSTERDAM. Contract No. 1927

System of Distribution 2-wire unearthed system
 Pressure of supply for Lighting 110 volts, Heating 110 volts, Power 110 volts.
 Direct or Alternating Current, Lighting DC Power DC
 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. flat, 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 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 Engine room
 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 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, if situated near unprotected woodwork or other combustible material, state distance of same horizontally from or vertically above the switchboards yes and --, are they constructed wholly of durable, incombustible non-absorbent materials yes, is all insulation of high dielectric strength and 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 a double pole quick break linked knife switch and double pole fuse for each outgoing circuit a double pole quick break linked knife switch & double pole fuse.
 Instruments on main switchboard 2 ammeters 2 voltmeters 2 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 2 Earth 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 Section 6 Rule 3
yes



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Insulation of Cables, state type of cables, single or twin both 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*

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* by brass clips woodslats
perforated metal

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 **no**. 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*

Joints in Cables, *state if any, and how made, insulated, and protected* **made in brass joint boxes**

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 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 **lead and brass**

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

..., are their connections made as per Rule

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 ☒ oil-engine driven

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

are separate oil lanterns provided for the mast head lights and side lights

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

by means of guards

are any fittings placed in spaces where inflammable or explosive dust or gases are liable to be present, if so, how are they protected.....no

where are the controlling switches situated

Searchlight Lamps, No. of no, whether fixed or portable —, 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 10, **yes**, are the motors placed in well-ventilated compartments in which inflammable gases cannot accumulate and clear of all inflammable material **yes**

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

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, fights 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	1	49.5 ✓	110	450		Steam Engine		
AUXILIARY ...	1	49.5 ✓	110	450		" "		
EMERGENCY ...	1	17 ✓	110	154			oil	
ROTARY TRANSFORMER								

LIGHTING AND HEATING CONDUCTORS

[illegible]

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.				
	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								
	Household motors	4	0.00402 $\frac{1}{2}$ ✓	1	0.072	7	200	rubber	lead covered
		6	0.00402 $\frac{1}{2}$ ✓		0.072	6	240	"	steelbraided
		1	0.00402 $\frac{1}{2}$ ✓		0.072	6	60	"	"
		1	0.00664 $\frac{1}{2}$ ✓	7	0.036	15	60	"	"

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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.

[Signature] Electrical Engineers.

Date *3 March 1927*

COMPASSES.

Distance between electric generators or motors and standard compass **110** feet

Distance between electric generators or motors and steering compass **106** feet

The nearest cables to the compasses are as follows:—

A cable carrying **4** Ampères **18** feet from standard compass **15** feet from steering compass.

A cable carrying **0.3** Ampères **9** feet from standard compass **7** feet from steering compass.

A cable carrying **0.3** Ampères **12** feet from standard compass **10** 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 **nihil** degrees on **every** course in the case of the standard compass, and **nihil** degrees on **every** course in the case of the steering compass.

ROTTERDAMSCHЕ DROOGMAAT WANTSMAAT

[Signature] Builder's Signature.

Date *31st March 1927.*

Is this installation a duplicate of a previous case **No** If so, state name of vessel

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

This installation has been fitted in accordance with the Society's Rules, was found in a good working condition when tried and merits in my opinion the Committee's approval

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

[Signature]
8/4/27

Total Capacity of Generators **116** Kilowatts

The amount of Fee ... **£ 388.00** When applied for, **29/3 1927**
Travelling Expenses (if any) £ ... When received, **11.4.27**

[Signature]
Secretary to Lloyd's Register of Shipping.

Committee's Minute

THUR. 12 APR 1927

Assigned

Elec. Light



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