

TUE JUL 17 1923

Rpt. 13.

No. 15563

REPORT ON ELECTRIC FITTINGS.

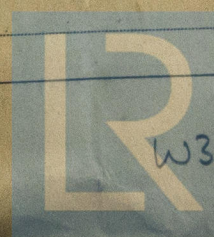
(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office

TUE JUL 17 1923

Date of writing Report 5th July 1923 When handed in at Local OfficePort of HAMBURGNo. in Survey held at RostockDate, First Survey 8th May Last Survey 4th June 1923(Number of Visits 2)

Reg. Book.

on the Deut. Fr. GreteTons { Gross 6567
Net 3994Built at RostockBy whom built Acc. Ges. Neptun Yard No. 377When built 1923Owners Carl WohlenbergPort belonging to HamburgElectric Light Installation fitted by Schiffs-Installation, R. G. Contract No. When fitted 1923System of Distribution Single wire with full return, in vicinity of compasses double wire.Pressure of supply for Lighting 110 volts, Heating ✓ volts, Power 110 volts.Direct or Alternating Current, Lighting direct current Power direct currentIf 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 yesGenerators, do they comply with the requirements regarding overload yes, are they compound wound yesare 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 no, is an adjustable regulating resistance fitted in series with each shunt field yesAre all terminals accessible and clearly marked yes, are they so spaced or shielded that they cannot be accidentally earthed, or short circuited yesPosition of Generators Engine room Sbb. side Are the lubricating arrangements of the generators as per Rule yesis the ventilation in way of the generators satisfactory yes, are they clear of all inflammable material yesif 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 yesare their axis of rotation fore and aft yesEarthing, are the bedplates and frames of the generating plant efficiently earthed yes are the prime movers and their respective generators in metallic contact yesMain Switch Boards, where placed Engine room Sbb. sideIf 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 are they protected from mechanical injury and damage from water, steam or oil yeswoodwork 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 yesif 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 yesAre 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 each of 35 x 5 mmindividual fuses to voltmeter, pilot or earth lamp yes, connections of switches yesMain Switchgear, description of switchgear for each generator and each outgoing circuit, and arrangement of equalizer switches 2 single polelink main switches; for each outgoing circuit on single pole link switch,8 change over switches for engine room lights.Instruments on main switchboard two ammeters two 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 2 control lampsSwitches, Circuit Breakers and Fusible Cut-outs, do these comply with the requirements of the Rules yesSection and Distribution Boards, is the construction, protection, insulation, material, and position of these as per rule yes

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W32-0077
Lloyd's Register
Foundation

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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 *abs. 4%*

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

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. *Armoured cables secured by galvanized clips, where exposed to mechanical risk by iron coverings; in accommodation rooms laid in wooden coamers.*

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 *no joints.*

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.

Earthing Connections, state what earthing connections are fitted and their respective sectional areas. *Generators, workshop motor and lamps with the same sectional area as the corresponding conductors, with the exception of lamps in the vicinity of compasses (double wire) 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 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 210, are separate screens provided for the use of oil and electric side lights yes.

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

....., how are the cables led

where are the controlling switches situated...✓

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

Arc Lamps, other than searchlight lamps, No. of 5, 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 yes, are the coils self-contained and readily removable for replacement yes.

are the brushes, brush holders, terminals and lubricating arrangements as per Rule 460, 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

✓....., 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.....✓

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

PARTICULARS OF GENERATING PLANT.

PARTICULARS OF GENERATOR						WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE.		
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	10	115	90	450	2 Cylinder steam engine Direct coupled.	✓	✓
AUXILIARY ...	1	10	115	90	450		✓	
EMERGENCY								
ROTARY TRANSFORMER	1	7.7	110	10	3600			

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	1	2.5 sq. in.	1	18 mm	20	6 m.	rubber	Lead covered & armoured.
	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.

Schinag
Schiffs-Installation Aktiengesellschaft
Zweig Niederlassung Hamburg
Hamburg

Electrical Engineers.

Date 5th July 1923.

COMPASSES.

Distance between electric generators or motors and standard compass abt. 40 m

Distance between electric generators or motors and steering compass 38

The nearest cables to the compasses are as follows:—

A cable carrying 0.5 Ampères close to feet from standard compass close to 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 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 2-3 degrees on all course in the case of the standard compass, and 2-3 degrees on all course in the case of the steering compass.

Neptun-Gesellschaft
Schiffswerft u. Maschinenfabrik

Builder's Signature.

Date 5th July 1923.

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.)

Workmanship and material are of best quality. As the conductors used are of the German Standard the Society's Rules respecting conductors have been applied generally. The Electric Installation is otherwise made and fitted in conformity with the requirements of the Rules and eligible in my opinion for the record of "Electric Light".

It is submitted that
this vessel is eligible for
THE RECORD. Electric Light
10/8/23

Total Capacity of Generators 20 Kilowatts

The amount of Fee ... £ 14: 10: When applied for, 6 July 1923

Travelling Expenses (if any) £ : : When received, 30. 7. 23

M. Golke
Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned