

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 11394

Port of Rotterdam Date of First Survey 1-7-20 Date of Last Survey 10-5-20 No. of Visits 5
 on the Iron or Steel s.s. Alchiba Port belonging to Rotterdam
 No. in Reg. Book 109 Built at Schuyt. H. N. Waterweg By whom Schieglam When built 1919
 Owners Wieland Goudriaan & Co Owners' Address Rotterdam
 Electric Light Installation fitted by A. de Hoop R. dam When fitted 1920

DESCRIPTION OF DYNAMO, ENGINE, ETC.

2 dynamo's compound wound, protected. Engine vertical single cylinder suitable for superheated steam 322 lbs 120 lbs.

Capacity of Dynamo 1 of 11 K.W. & 1 of 5 K.W. Amperes at 110 Volts, whether continuous or alternating current continuous

Where is Dynamo fixed in Engine room Whether single or double wire system is used double wire

Position of Main Switch Board near dynamo having switches to groups 6 of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each Fore castle, Chart room, Saloon & Stidship, Engine room, Rear castle & Wireless.

If fuses are fitted on main switch board to the cables of main circuit yes and on each auxiliary switch board to the cables of auxiliary circuits yes and at each position where a cable is branched or reduced in size yes and to each lamp circuit yes

If vessel is wired on the double wire system are fuses fitted to both flow and return wires or cables of all circuits including lamp circuits yes

Are the fuses of non-oxidizable metal yes and constructed to fuse at an excess of 100 per cent over the normal current

Are all fuses fitted in easily accessible positions yes Are the fuses of standard dimensions yes If wire fuses are used are permanent instructions fitted on or near each switch board giving particulars of proper size of fuse for each circuit yes

Are all switches and fuses constructed of incombustible materials and fitted on incombustible bases yes porcelain

Total number of lights provided for 166 arranged in the following groups:—

Group	Number of lights	Each light	Total candle power	Amperes
A	6	25	150	2.7
B	31	25	775	7
C	17	25	425	3.9
D	41	25	1025	9.5
E	44	25	1100	10.7
F	2	32	64	5.5
G	2	32	64	2
H	10	6 x 25	150	2

If arc lights, what protection is provided against fire, sparks, &c.

Where are the switches controlling the masthead and side lights placed in Chart room

DESCRIPTION OF CABLES.

Number of wires	Each wire diameter (S.W.G.)	Total sectional area (square inches)
Main cable carrying 100 Amperes, comprised of 19 wires, each .201	.201	.150
Branch cables carrying 10 Amperes, comprised of 4 wires, each .19	.19	.00730
Branch cables carrying 11 Amperes, comprised of 4 wires, each .060	.060	.025
Leads to lamps carrying 1 Amperes, comprised of 1 wire, each .17	.17	.00246
Cargo light cables carrying 3 Amperes, comprised of 33 wires, each .20	.20	.00399

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Vulcanised, rubber insulated, lead covered, in screwed tubes

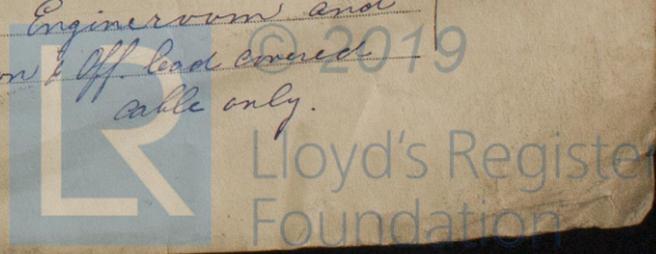
Joints in cables, how made, insulated, and protected No joints

Are all the joints of cables thoroughly soldered, and the flux used not containing acids or other corrosive substances Are all joints in accessible positions, none being made in bunks, cargo spaces, or spaces which may at any time be used for carrying cargo, stores, or baggage

Are there any joints in or branches from the cable leading from dynamo to main switch board No

How are the cables led through the ship, and how protected Main cables and wiring in Engine room and on deck protected by steel tubes, watertight fitted. Saloon & Off lead covered cable only.

1100-311M



DESCRIPTION OF INSULATION, PROTECTION, ETC.—continued.

Are they in places always accessible yes

What special protection has been provided for the cables in open alleyways or where exposed to weather or moisture screwed steel tubes

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat same

What special protection has been provided for the cables near boiler casings same

What special protection has been provided for the cables in engine room same

How are cables carried through beams also in screwed tubes through bulkheads, &c. same

How are cables carried through decks same

Are any cables run through coal bunkers No or cargo spaces yes or spaces which may be used for carrying cargo, stores, or baggage yes

If so, how are they protected screwed steel tubes

Are any lamps fitted in coal bunkers or spaces which may at times be used for cargo, coals, or baggage No

If so, how are the lamp fittings and cable terminals specially protected _____

Where are the main switches and fuses for these lights fitted _____

If in the spaces, how are they specially protected _____

Are any switches or fuses fitted in bunkers No

Cargo light cables, whether portable or permanently fixed portable How fixed watertight plugs

In vessels fitted on the single wire system, how is the dynamo terminal fixed to the hull of vessel _____

How are the returns from the lamps connected to the hull _____

Are all the joints with the hull in accessible positions _____

Is the installation supplied with a voltmeter yes, and with an amperemeter yes, fixed on main dw. board

VESSELS BUILT FOR CARRYING PETROLEUM.

In vessels built for carrying petroleum, are all switches and fuses fitted in positions not liable to the accumulation of petroleum vapour or gas _____

Are any switches, fuses, or joints of cables fitted in the pump room or companion _____

How are the lamps specially protected in places liable to the accumulation of vapour or gas _____

The copper used is guaranteed to have a conductivity of not less than that of the Engineering Standards Committee's standard, and the wires are protected by tinning from the sulphur compounds present in the insulating material.

Insulation of cables is guaranteed to have a resistance of not less than 600 megohms per statute mile at 60° Fahrenheit after 24 hours' immersion in water, the test being made after one minute's electrification at not less than 500 volts and while the cable is still immersed.

The foregoing statements are a correct description of the Electric Light installation fitted by us on this vessel and we declare that it is at this date in good order and safe working condition.

[Signature] Electrical Engineers Date _____

COMPASSES.

Distance between dynamo or electric motors and standard compass 00 feet

Distance between dynamo or electric motors and steering compass 00 feet

The nearest cables to the compasses are as follows:—

A cable carrying	<u>0.25</u>	Amperes	<u>0</u>	feet from standard compass	<u>6</u>	feet from steering compass
A cable carrying	<u>-</u>	Amperes	<u>-</u>	feet from standard compass	<u>-</u>	feet from steering compass
A cable carrying	<u>-</u>	Amperes	<u>-</u>	feet from standard compass	<u>-</u>	feet from steering compass

Have the compasses been adjusted with and without the electric installation at work at full power yes

The maximum deviation due to electric currents, etc., was found to be nil degrees on every course in the case of the standard compass and _____ degrees on _____ course in the case of the steering compass.

[Signature] Builder's Signature. Date 1-9-20

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

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

Committee's Minute TUE. SEP. 14 1920

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.



1 in. 7/16 in. Transfer.