

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 11998

of Rotterdam Date of First Survey 2 Aug Date of Last Survey 2 Sept No. of Visits 3
 on the Iron or Steel S/S "Anjer" Port belonging to Rotterdam
 Built at Slikkerveer By whom Int. Scheepst. Bldg. de Maas' When built 1921
Rotterdamsche Lloyd Owners' Address Rotterdam
 Electric Light Installation fitted by W. N. Hoos & Co. Rotterdam When fitted 1921

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Capacity of Dynamo 100 Amperes at 110 Volts, whether continuous or alternating current continuous
 Is Dynamo fixed Dynamoroom n/ Engineroom Whether single or double wire system is used double wire system
 Location of Main Switch Board near Steamdynamo having switches to groups eight of lights, &c., as below
 Locations of auxiliary switch boards and numbers of switches on each Engineroom Aftership Mesfroom
near Salon and Chartroom

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
 Is vessel 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

Total number of lights provided for 266 arranged in the following groups :-
Engineroom lights each of 60 x 32 + 4 x 500 candle power requiring a total current of 28 Amperes
Aftership lights each of 30 x 32 candle power requiring a total current of 10 Amperes
Chartroom lights each of 44 x 32 + 2 x 500 candle power requiring a total current of 19 Amperes
Mesfroom lights each of 65 x 32 + 2 x 500 candle power requiring a total current of 25 Amperes
Saloon lights each of 57 x 32 + 2 x 500 candle power requiring a total current of 24 106 Amperes
 2 Mast head light with one lamps each of 50 candle power requiring a total current of 1 Amperes
 2 Side light with one lamps each of 50 candle power requiring a total current of 1 Amperes
 8 Cargo lights of 5 x 50 candle power, ~~whether~~ incandescent ~~or~~ are lights

If arc lights, what protection is provided against fire, sparks, &c. None

Where are the switches controlling the masthead and side lights placed in Chartroom

DESCRIPTION OF CABLES.

Main cable carrying 100 Amperes, comprised of 17 wires, each 0.064 S.W.G. diameter, 0.0170 square inches total sectional area
 Branch cables carrying 25 Amperes, comprised of 7 wires, each 1.422 S.W.G. diameter, 0.0170 square inches total sectional area
 Branch cables carrying 16 Amperes, comprised of 7 wires, each 1.050 S.W.G. diameter, 0.0125 square inches total sectional area
 Leads to lamps carrying 1 Amperes, comprised of 1 wires, each 16 S.W.G. diameter, 0.00322 square inches total sectional area
 Cargo light cables carrying 3 Amperes, comprised of 48 wires, each 0.2 S.W.G. diameter, 0.003986 square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Vulcanized Rubber insulation

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 bunkers, 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 None

How are the cables led through the ship, and how protected Main cables and wires in Engineroom, protected by galvanized iron tubes.

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 Screw galvanized 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 galvanized iron tubes through bulkheads, &c. watertight stuff & boxes

How are cables carried through decks galvanized iron tubes

Are any cables run through coal bunkers or cargo spaces or spaces which may be used for carrying cargo, stores, or baggage

If so, how are they protected

Are any lamps fitted in coal bunkers or spaces which may at times be used for cargo, coals, or baggage

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

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 one Voltmeter, and with an amperemeter one ampere meter, fixed on main switchboard

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.

N. N. Hoos & Co.

Electrical Engineers

Date Sept 1921

COMPASSES.

Distance between dynamo or electric motors and standard compass 100 feet

Distance between dynamo or electric motors and steering compass 100 feet

The nearest cables to the compasses are as follows:—

A cable carrying	Amperes	feet from standard compass	feet from steering compass
<u>16</u>	<u>12</u>	<u>14</u>	<u>14</u>
<u>6</u>	<u>6</u>	<u>7</u>	<u>7</u>
<u>1</u>	<u>5</u>	<u>8</u>	<u>8</u>

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 Nil degrees on every course in the case of the steering compass.

N. V. Internationale
Scheepshouw Mij. „DE MAAS”.
DE DIRECTIE

Builder's Signature.

Date 15 Sept. 1921

GENERAL REMARKS.

The electric installation has been fitted in accordance with the Society's Rules, and satisfactory during a trial and much in my opinion the approval of the Committee.

RECORD. Elec Light Ref 25/10/21

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI. OCT. 28 1921



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Foundation

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