

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 1651

Port of Vancouver Date of First Survey June 21 Date of Last Survey July 24 No. of Visits 8
 No. in Reg. Book on the Steel M.V. MARPOLITE Port belonging to Vancouver
 Built at N. Vancouver By whom Bunara Dry dock Co When built 1926.7.
 Owners Imperial Oil Co. Owners' Address Vancouver
 Yard No. 110 Electric Light Installation fitted by J.C. Reston: Vancouver When fitted 1926.7.

DESCRIPTION OF DYNAMO, ENGINE, ETC.

A 3 KW. direct connected generator set. 5 HP single cyl. hot bulb Petter Engine
1/2 KW do do Emergency do do 2 HP do do do do
 Capacity of Dynamo 27.5 Amperes at 110. Volts, whether continuous or alternating current Continuous
 Where is Dynamo fixed in Engine room. lower platform Whether single or double wire system is used double.
 Position of Main Switch Board Eng. room - near dynamo having switches to groups Six of lights, &c., as below
 Positions of auxiliary switch boards and numbers of switches on each main switch board only - fitted with one main switch. 2 switches for Eng room + deck and 4 switches for search light, navigation lights, upper cabins + lower cabins

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 10% 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 no wires.
 Are all switches and fuses constructed of incombustible materials and fitted on incombustible bases yes

Number of lights provided for 36. arranged in the following groups:—

Description	Quantity	Candle Power	Amperes
Search light	1	500	11 Amperes
Navigation lights	4	32	2 Amperes
Eng room	7	32	3 1/2 Amperes
Upper cabins	17	50	8 1/2 Amperes
Lower cabins	17	50	16 Amperes
Eng room	3	50	1 1/2 Amperes
Mast head light with	1	32	1 Amperes
Side light with	2	32	1/2 Amperes
Cargo lights of	1	50	1/2 Amperes

Are lights, what protection is provided against fire, sparks, &c. no arcs.

Where are the switches controlling the masthead and side lights placed Wheel house.

DESCRIPTION OF CABLES.

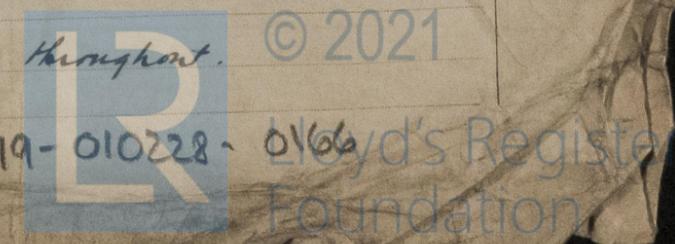
Each cable carrying 30 Amperes, comprised of 7 wires, each 2 1/2 S.W.G. diameter, 1.5 square inches total sectional area
 Each cables carrying 15 Amperes, comprised of 3 wires, each 20 S.W.G. diameter, 0.5 square inches total sectional area
 Each cables carrying 15 Amperes, comprised of 3 wires, each 20 S.W.G. diameter, 0.5 square inches total sectional area
 Cables to lamps carrying 15 Amperes, comprised of 3 wires, each 20 S.W.G. diameter, 0.5 square inches total sectional area
 Light cables carrying 5 Amperes, comprised of 3 wires, each 20 S.W.G. diameter, 0.5 square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Are cables covered with insulation rubber covered in Conduit throughout, except where exposed to weather where wires are lead covered.

Are cables, how made, insulated, and protected Soldered, two coats of rubber, tape and covering of friction tape

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 yes
 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 gas tight conduit piping throughout.



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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 Blat Conduit & gas proof fittings

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

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

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

How are cables carried through beams none. through bulkheads, &c. metal light fittings

How are cables carried through decks metal light duct 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 no

Cargo light cables, whether portable or permanently fixed portable How fixed metal & gas proof receptacle.

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 switch 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 yes

Are any switches, fuses, or joints of cables fitted in the pump room or companion no.

How are the lamps specially protected in places liable to the accumulation of vapour or gas vapour proof fittings.

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.

RESTON ELECTRIC CO.
R. P. Reston

Electrical Engineers

Date July 30, 1926.

COMPASSES.

Distance between dynamo or electric motors and standard compass

Distance between dynamo or electric motors and steering compass 45 feet

The nearest cables to the compasses are as follows:—

A cable carrying	<u>15</u>	Amperes	<u>6</u>	feet from standard compass	feet from steering compass
A cable carrying	<input checked="" type="checkbox"/>	Amperes	<input checked="" type="checkbox"/>	feet from standard compass	feet from steering compass
A cable carrying	<input checked="" type="checkbox"/>	Amperes	<input checked="" type="checkbox"/>	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

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

Burnard Dry Dock Co. Ltd. Per W. Power Builder's Signature. Date July 28th 1926.

GENERAL REMARKS. This installation has been fitted under survey, and according to rules. The material & workmanship are good, and a satisfactory test under full & varying loads has been carried out.

\$ 750.00

Elec. Light
N.A.
21/8/26

A. Scott

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI. 20 AUG 1926



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Foundation

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