

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 20554

Port of Newport, Mon Date of First Survey 22 Sept Date of Last Survey 3 Nov 22 No. of Visits 5
 No. in 80420 on the Iron or Steel Port of London Authority Hopper Port belonging to London
 Reg. Book Light at Sheeps Bay By whom The Ironmount Shipbuilding Co When built 1922
 Owners Port of London Authority Owners' Address Messrs. Jelford, Elsie & Mackay, Ltd When fitted 1922
 Yard No. Electric Light Installation fitted by

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Matthew Paul & Co's single cylinder closed forced lubrication engine direct coupled to compound wound dynamo.

Capacity of Dynamo 50 Amperes at 100 Volts, whether continuous or alternating current continuous

Where is Dynamo fixed Starboard Side of Engine Room Whether single or double wire system is used Double

Position of Main Switch Board Starboard Side by Engine having switches to groups 20 of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each 1 in E.R. by switch bd. with 3 switches

controlling 9 lights, 1 in Lamp Rm. with 4 switches controlling 4 cargo plug boxes

1 in Saloon accommodation with 12 switches controlling 14 lights.

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 Nil 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 30 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 89. arranged in the following groups:—

<u>4</u> lights each of <u>16 (metal)</u> candle power requiring a total current of <u>1.5</u> Amperes
<u>9</u> lights each of <u>16 (metal)</u> candle power requiring a total current of <u>2</u> Amperes
<u>14</u> lights each of <u>16 (metal)</u> candle power requiring a total current of <u>3</u> Amperes
<u>4</u> lights each of <u>16</u> candle power requiring a total current of <u>2</u> Amperes
<u>4</u> lights each of <u>16 (metal)</u> candle power requiring a total current of <u>3</u> Amperes
<u>12</u> lights each of <u>16</u> candle power requiring a total current of <u>1.5</u> Amperes
<u>1</u> lamp each of <u>16</u> candle power requiring a total current of <u>1.5</u> Amperes
<u>2</u> Side lights with <u>1</u> lamps each of <u>16</u> candle power, whether incandescent or are lights <u>12 amperes.</u>
<u>6 (24)</u> Cargo lights of <u>16</u> candle power, whether incandescent or are lights

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

Where are the switches controlling the masthead and side lights placed Separate switches on main switch bd in E.R.

DESCRIPTION OF CABLES.

Main cable carrying <u>2</u> Amperes, comprised of <u>3</u> wires, each <u>20</u> S.W.G. diameter, <u>.003</u> square inches total sectional area
Branch cables carrying <u>3</u> Amperes, comprised of <u>7</u> wires, each <u>18</u> S.W.G. diameter, <u>.0125</u> square inches total sectional area
Branch cables carrying <u>2</u> Amperes, comprised of <u>3</u> wires, each <u>20</u> S.W.G. diameter, <u>.003</u> square inches total sectional area
Leads to lamps carrying <u>1</u> Amperes, comprised of <u>3</u> wires, each <u>20</u> S.W.G. diameter, <u>.003</u> square inches total sectional area
Cargo light cables carrying <u>14</u> Amperes, comprised of <u>7</u> wires, each <u>18</u> S.W.G. diameter, <u>.0125</u> square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Unleaded India Rubber with pure para rubber next to conduit
& lapped & braided in solid drawn gal. conduit

Joints in cables, how made, insulated, and protected Nil. No joints throughout job, all looped from switch to switch & fitting to fitting.

Are all the joints of cables thoroughly soldered, and the flux used not containing acids or other corrosive substances yes. 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 None.

How are the cables led through the ship, and how protected Solid drawn galvanized conduit 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 All solid w.t. job in galvanized tube. ✓

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

What special protection has been provided for the cables near boiler casings Position safe distance from boiler casings ✓

What special protection has been provided for the cables in engine room Solid conduit w.t. ✓

How are cables carried through beams Solid conduit ✓ through bulkheads, &c. w.t. both sides ✓

How are cables carried through decks Solid conduit with red lead washers ✓

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

If so, how are they protected Solid drawn steel conduit ✓

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

If so, how are the lamp fittings and cable terminals specially protected Cylinders fittings with cast iron guards ✓

Where are the main switches and fuses for these lights fitted In engine room ✓

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 from How fixed special cargo boxes in fixed positions ✓

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 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 1500 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.

T. J. P. & M. J. M. & Co. Electrical Engineers Date 24/11/22

COMPASSES.

Distance between dynamo or electric motors and standard compass 50 ft

Distance between dynamo or electric motors and steering compass 60 ft

The nearest cables to the compasses are as follows:—

Cable carrying	Amperes	feet from standard compass	feet from steering compass
<u>5</u>	<u>6</u>	<u>8</u>	<u>8</u>
<u>1</u>	<u>6</u>	<u>8</u>	<u>8</u>
<u>5</u>	<u>6</u>	<u>for light</u>	<u>in feet from steering compass</u>

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

The maximum deviation due to electric currents, etc., was found to be Nil degrees on all courses in the case of the standard compass and Nil degrees on all courses in the case of the steering compass.

FOR MONMOUTH SHIPBUILDING CO. LTD.

Builder's Signature. Date 27. 11. 22.

GENERAL REMARKS.

The Electric lighting & wiring of this vessel have been fitted in accordance with the Rules. It is submitted that this vessel is eligible for THE RECORD. Spec. Light. A.P.D. 5/12/22

£5.0.0 applied on 9. 22

W. B. Brown

Surveyor to Lloyd's Register of Shipping.

Committee's Minute



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