

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 24326

Port of Glasgow Date of First Survey 4 July Date of Last Survey 10 Aug No. of Visits 6
 No. in on the Iron or Steel 55 Superia Port belonging to Glasgow
 Reg. Book 1790 Built at Port Glasgow By whom Russell & Co. Ltd. When built 1906
 Owners Bank Line Ltd Owners' Address _____
 Yard No. 548 Electric Light Installation fitted by Fletcher Kilpatrick & Co. When fitted 1906

DESCRIPTION OF DYNAMO, ENGINE, ETC.

1. Open Type Engine 8" Dia x 7" Stroke Running at 350 RPM Coupled Direct to a Compound Wound 4 Pole Generator

Capacity of Dynamo 100 Amperes at 100 Volts, whether continuous or alternating current Continuous
 Where is Dynamo fixed Engine Room Whether single or double wire system is used Double
 Position of Main Switch Board Engine Room having switches to groups 5 Circuits of lights, &c., as below
 Positions of auxiliary switch boards and numbers of switches on each Chart Room. 6

If cut outs 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 cut outs fitted to both flow and return wires or cables of all circuits including lamp circuits yes

Are the cut outs of non-oxidizable metal yes and constructed to fuse at an excess of 25% per cent over the normal current

Are all cut outs 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 cut-outs constructed of incombustible materials and fitted on incombustible bases yes

Total number of lights provided for 190 Lights arranged in the following groups:—

A	<u>59</u>	lights each of	<u>16</u>	candle power requiring a total current of	<u>29.5</u>	Amperes
B	<u>52</u>	lights each of	<u>16</u>	candle power requiring a total current of	<u>26</u>	Amperes
C	<u>31</u>	lights each of	<u>16</u>	candle power requiring a total current of	<u>15.5</u>	Amperes
D	<u>28</u>	lights each of	<u>16</u>	candle power requiring a total current of	<u>14</u>	Amperes
E	10	lights each of	16	candle power requiring a total current of	5	Amperes
	<u>1</u>	Mast head light with <u>1</u> lamps each of	<u>32</u>	candle power requiring a total current of	<u>1</u>	Amperes
	<u>2</u>	Side lights with <u>1</u> lamps each of	<u>32</u>	candle power requiring a total current of	<u>2</u>	Amperes
	<u>7</u>	Cargo lights of	<u>100</u>	candle power, whether incandescent or arc lights	<u>incandescent</u>	

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

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

DESCRIPTION OF CABLES.

Main cable carrying 90 Amperes, comprised of 19 wires, each 14 L.S.G. diameter, 109442 square inches total sectional area
 Branch cables carrying 30 Amperes, comprised of 7 wires, each 14 L.S.G. diameter, 03483 square inches total sectional area
 Branch cables carrying 26 Amperes, comprised of 7 wires, each 1.5 L.S.G. diameter, 02822 square inches total sectional area
 Leads to lamps carrying 2 Amperes, comprised of 1 wires, each 16 L.S.G. diameter, 003214 square inches total sectional area
 Cargo light cables carrying 3 Amperes, comprised of 70 wires, each 40 L.S.G. diameter, _____ square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

H.C. Copper Wire tinned Insulated with Pure & Vulcanized India Rubber & Yarn. The whole Vulcanized together & compounded Lead covered & Armoured with Galvanized Steel Wire

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

Are all the joints of cables thoroughly soldered, resin only having been used as a flux _____ 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 No

How are the cables led through the ship, and how protected Clipped to Deck & Armoured



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 Lead Covered & Armoured

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

What special protection has been provided for the cables near boiler casings Lead Covered & Armoured

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

How are cables carried through beams Through Holes through bulkheads, &c. Waterlights & Lamps

How are cables carried through decks Through pipe flush with Coaming

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

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 No

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

Where are the main switches and cut outs for these lights fitted _____

If in the spaces, how are they specially protected _____

Are any switches or cut outs fitted in bunkers _____

Cargo light cables, whether portable or permanently fixed Fixed How fixed Clipped to Deck

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 _____

The installation is 1 supplied with a voltmeter and 1 an amperemeter, fixed in Engine Room

VESSELS BUILT FOR CARRYING PETROLEUM.

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

Are any switches, cut outs, 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 100 per cent. that of pure copper.

Insulation of cables is guaranteed to have a resistance of not less than 4000 megohms per statute mile after 24 hours' immersion in seawater.

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.

Fletcher Kilpatrick & Co Electrical Engineers Date 4/9/06

COMPASSES.

Distance between dynamo or electric motors and standard compass 60 yds

Distance between dynamo or electric motors and steering compass 60 yds

The nearest cables to the compasses are as follows:—

A cable carrying 6 Amperes 8 feet from standard compass 8 feet from steering compass

A cable carrying 1 Amperes 2 Light in feet from standard compass _____ feet from steering compass

A cable carrying _____ Amperes _____ feet from standard compass _____ feet from steering compass

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 any course in the case of the standard compass and nil degrees on any course in the case of the steering compass.

For Russell & Company Builder's Signature. Date Sept. 15th 1906

GENERAL REMARKS.

The Electric Lighting of this vessel has been satisfactorily carried out & tried under full power.

H. Sandner-Smith.

Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute _____

Glasgow 28 SEP 1906
Record "Electric Light."

It is sub'd that the Record of Electric Light be noted in the Reg. Book.
Lloyd's Register Foundation

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

REPORT FORM No. 13.-2m.34.

27.9.06