

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 11941

Port of Greenock Date of First Survey 30th Dec. 1897 Date of Last Survey 25th Feb. 1898 No. of Visits 20
 No. in Reg. Book 37 on the Iron or Steel screw Steamer "Beveric" Port belonging to Glasgow
 Built at Port Glasgow By whom Russell & Co When built 1898
 Owners Steam Ship Beveric Coy. (Lim.) Owners Address 102 Hope Street Glasgow
 Yard No. 412 Electric Light Installation fitted by A Hunter & Jack When fitted July/98

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Electric Construction Co's dynamo & Robey vertical engine

Capacity of Dynamo 85 Amperes at 60 Volts, whether continuous or alternating current continuous

Where is Dynamo fixed Engine Room

Position of Main Switch Board Engine room bulkhead having switches to groups (five) of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each none

If cut outs are fitted on main switch board to the cables of main circuit yes and on each auxiliary switch boards to the cables of auxiliary circuits none and at each position where a cable is branched or reduced in size reduction and to each lamp circuit yes

If cessel 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 single wire

Are the cut outs of non-oxidizable metal tin free wire and constructed to fuse at an excess of 100 per cent over the normal current

Are all cut outs fitted in easily accessible positions distribution boxes Are the fuses of standard dimensions 20.18.16.15.5 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 (porcelain)

Total number of lights provided for 87 arranged in the following groups:—

A Forecastle	16 lights each of 12-16 cp & 4-8 cp	candle power requiring a total current of	14 1/2	Amperes
B Engineers	10 lights each of 8-4 & 2-...	candle power requiring a total current of	9	Amperes
C Chart room	14 lights each of 12-...	candle power requiring a total current of	13 1/2	Amperes
D Gallery	2 lights each of 2-...	candle power requiring a total current of	2	Amperes
E Engine room	19 lights each of 19-...	candle power requiring a total current of	19	Amperes
1 Mast head light with	2 lamps each of 16 cp	candle power requiring a total current of	2	Amperes
2 Side light with	2 lamps each of -	candle power requiring a total current of	4	Amperes
4 Cargo lights of each	5-16 e.p.	candle power, whether incandescent or arc lights	20	
			<u>84</u>	

If arc lights, what protection is provided against fire, sparks, &c. no arc lights

Where are the switches controlling the masthead and side lights placed at distribution boxes under lock & key

DESCRIPTION OF CABLES.

Main cable carrying	84 Amperes, comprised of 37 wires, each 14 L.S.G. diameter, .19 square inches total sectional area
Branch cables carrying	14 1/2 Amperes, comprised of 7 wires, each 17 L.S.G. diameter, .017 square inches total sectional area
2 Branch cables carrying	9 & 8 } Amperes, comprised of 7 wires, each 18 L.S.G. diameter, .012 square inches total sectional area
Leads to lamps carrying	13 1/2 Amperes, comprised of 7 wires, each 17 L.S.G. diameter, .017 square inches total sectional area
2 Cargo light cables carrying	20 & 19 } Amperes, comprised of 7 wires, each 16 L.S.G. diameter, .022 square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Insulated pure & vulcanizing rubber, then taped, the whole thoroughly vulcanized together, then covered with warp & strong patent binding well served with preservative & weather resisting compound
 Joints in cables, how made, insulated, and protected Insulation resistance 1000 megohms per mile
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 Are there any joints in or branches from the cable leading from dynamo to main switch board

How are the cables led through the ship, and how protected Iron pipes in Engine room Tunnel, Stokhole Steering Gear Fiddley, - other parts casing with heavy cover, & in bunkers iron covers

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 pipes (Iron)

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

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

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

How are cables carried through beams Hard wood & vulcanite plugs through bulkheads, &c. Brass watertight glands and iron tubes

How are cables carried through decks Deck pipes with insertion rubber washers

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

If so, how are they protected Bunkers casing with iron cover, Cargo space with wood casing

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

If so, how are the lamp fittings and cable terminals specially protected heavy metal cover

Where are the main switches and cut outs for these lights fitted at distribution boxes on deck above

If in the spaces, how are they specially protected _____

Are any switches or cut outs fitted in bunkers no

Cargo light cables, whether portable or permanently fixed cables fixed, splice of flexible to lamps How fixed Tapped & screwed to beams

In vessels fitted on the single wire system, how is the dynamo terminal fixed to the hull of vessel Large brass socket screwed to steel

How are the returns from the lamps connected to the hull 3/8" Brass tapped studs

Are all the joints with the hull in accessible positions close to casing & all to sight

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 installation is fitted supplied with a voltmeter and no an amperemeter, fixed Voltmeter

fixed on main switchboard.

The copper used is guaranteed to have a conductivity of 98 per cent. that of pure copper.

Insulation of cables is guaranteed to have a resistance of not less than 1000 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.

Hunter & Jack Electrical Engineers Date 25th July/98

COMPASSES.

Distance between dynamo or electric motors and standard compass 47 feet

Distance between dynamo or electric motors and steering compass about 55 feet

The nearest cables to the compasses are as follows:—

A cable carrying	<u>one</u>	Amperes	<u>17 feet</u> feet from standard compass	<u>25 feet</u> feet from steering compass
A cable carrying	<u>Two</u>	Amperes	<u>17 feet</u> feet from standard compass	<u>25 feet</u> 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 Yes

The maximum deviation due to electric currents, etc., was found to be no deviation degrees on _____ course in the case of the standard compass and _____ degrees on _____ course in the case of the steering compass.

Russell Builder's Signature Date 26th Feb. 1898.

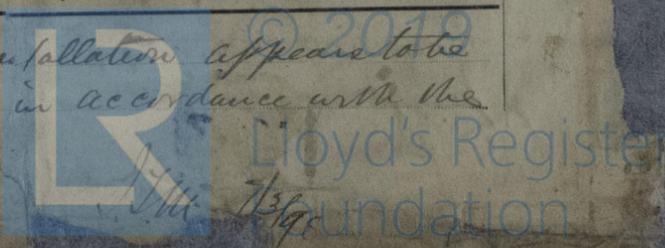
GENERAL REMARKS.

The Electric light installation has been fitted in this vessel under our inspection and to our satisfaction.

A. B. McCreagh, J. J. Howell
Surveyors to Lloyd's Register of British and Foreign Shipping.

Committee's Minute _____

This installation appears to be fitted in accordance with the Rules



THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

REPORT FORM No. 13.

only case