

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 14305.

Port of Greenock Date of First Survey 25th April Date of Last Survey 15th May 1905 No. of Visits 16
 No. in on the Iron Steel S. S. "Loke" Port belonging to Stockholm
 Reg. Book 60 Suppl. Built at Campbeltown By whom Campbeltown S.B.C. When built 1905
 Owners Wicanders Rederi Actiebolag Owners' Address Stockholm
 Yard No. 70 Electric Light Installation fitted by Hunter & Co. Glasgow When fitted 18 May 1905

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Compound. Dynamo. 45 amp. 100 Volts. Engine coupled direct to dynamo. Robery

Capacity of Dynamo 45 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 A. B. C. D. Circuits of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each Engine 1-4 mag. Saloon 1-5 mag. D.P. chart room 1-4 mag. D.P. Forecastle 1-2 mag. D.P. Fuse Board.

If cut outs are fitted on main switch board to the cables of main circuit yes. D.P. and on each auxiliary switch board to the cables of auxiliary circuits yes. D.P. 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-oxidisable metal Iron fuse wire and constructed to fuse at an excess of 5 per cent over the normal current

Are all cut outs fitted in easily accessible positions yes Are the fuses of standard dimensions S.W.G 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

Are all switches and cut-outs constructed of incombustible materials and fitted on incombustible bases Marble & slate, Brass

Total number of lights provided for 58 arranged in the following groups:—

A Engine Room lights each of 16 CP. = 20 candle power requiring a total current of 12 Amperes

B Saloon lights each of 16 CP. = 32 candle power requiring a total current of 14.2 Amperes

C Forecastle lights each of 16 CP. = 16 candle power requiring a total current of 9.6 Amperes

D arc lamp. lights each of candle power requiring a total current of 5.0 Amperes

E lights each of candle power requiring a total current of Amperes

Mast head light with 1 lamps each of 32 CP. candle power requiring a total current of 1 Amperes

Side light with 1 lamps each of 32 CP. candle power requiring a total current of 1 Amperes

Cargo lights of 2 arc lamp. candle power, whether incandescent or arc lights Enclosed Arc

If are lights, what protection is provided against fire, sparks, &c. Enclosed arc lamp. with double glass.

Where are the switches controlling the masthead and side lights placed in chart room

DESCRIPTION OF CABLES.

Main cable carrying 60 Amperes, comprised of 19/16 wires, each 16 L.S.G. diameter, .320 square inches total sectional area

Branch cables carrying 12 Amperes, comprised of 7 wires, each 16 L.S.G. diameter, .192 square inches total sectional area

Branch cables carrying 15 Amperes, comprised of 7 wires, each 16 L.S.G. diameter, .192 square inches total sectional area

Leads to lamps carrying Amperes, comprised of 3 wires, each 20 L.S.G. diameter, .078 square inches total sectional area

Cargo light cables carrying Amperes, comprised of wires, each L.S.G. diameter, square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

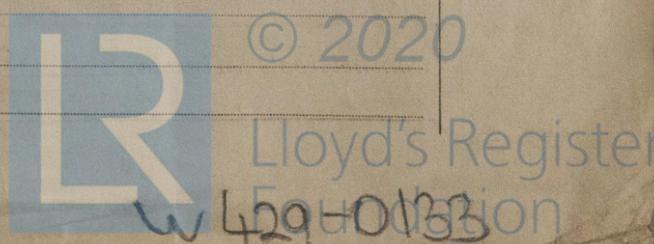
Pure & vulcanizing India rubber insulated wires & cables, run in iron tubes with steam tight junction boxes.

Joints in cables, how made, insulated, and protected almost no joints, if any, soldered, taped with rubber & prepared tape & solution

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

How are the cables led through the ship, and how protected In glands.



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 Iron Pipes

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

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

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

How are cables carried through beams glands through bulkheads, &c. glands.

How are cables carried through decks Deck pipes

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

If so, how are they protected Iron pipes

Are any lamps fitted in coal bunkers or spaces which may at times be used for cargo, coals, or baggage 10 lamps in each hold

If so, how are the lamp fittings and cable terminals specially protected Screw down cast iron covers.

Where are the main switches and cut outs for these lights fitted in engine room

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 Portable How fixed ---

In vessels fitted on the single wire system, how is the dynamo terminal fixed to the hull of vessel Double wire system

How are the returns from the lamps connected to the hull ---

Are all the joints with the hull in accessible positions ---

The installation is --- supplied with a voltmeter and --- an amperemeter, fixed on switchboard

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 2500 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 19th May/05.

COMPASSES.

Distance between dynamo or electric motors and standard compass 30 feet

Distance between dynamo or electric motors and steering compass 35 feet.

The nearest cables to the compasses are as follows:—

A cable carrying <u>Compass light.</u>	Amperes <u>-6</u>	feet from standard compass	feet from steering compass
A cable carrying <u>---</u>	Amperes <u>---</u>	feet from standard compass	feet from steering compass
A cable carrying <u>---</u>	Amperes <u>---</u>	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 every course in the case of the standard compass and nil degrees on every course in the case of the steering compass.

Campbell Builder's Signature. Date 23 May 1905

GENERAL REMARKS.

The installation has been fitted in accordance with the rules and on trial, proved satisfactory.

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

Committee's Minute Glasgow 29 MAY 1905
Revera "Electric Light"

It is submitted that this installation appears to be satisfactory.
Lloyd's Register Foundation
30.5.05

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

REPORT FORM No. 13.—5m.34.