

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 34810

Port of *Glasgow* Date of First Survey *4/2/15* Date of Last Survey *6/2/15* No. of Visits *2*
 No. in on the *Iron or Steel* *Sh. PARKLANDS* *at Glasgow* belonging to *West Hartlepool*
 Reg. Book *539 M* Built at *Rosbech* By whom *Act. Geo. Neptun* When built *1905*
 Owners *W. Baird & Co* Owners' Address *West Hartlepool*
 Yard No. *?* Electric Light Installation fitted by *?* When fitted *?*

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Single cylinder engine direct coupled to compound wound dynamo.

Capacity of Dynamo *13.6* Amperes at *110* Volts, whether continuous or alternating current *Continuous*

Where is Dynamo fixed *near top platform* Whether single or double wire system is used *Single*

Position of Main Switch Board *near dynamo* having switches to groups *2* of lights, &c., as below

Positions of auxiliary ~~switch~~ boards and numbers of switches on each *One each side of house on bridge deck for cargo cluster connections without switches.*

If fuses are fitted on main switch board to the cables of main circuit *Yes* and on ~~each auxiliary~~ *main* switch board to the cables of auxiliary circuits *Yes* and at each position where a cable is branched or reduced in size *No* and to each lamp circuit *No*.

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 *about 100* 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 *✓*

Are all switches and fuses constructed of incombustible materials and fitted on incombustible bases *Yes*

Total number of lights provided for *33* arranged in the following groups:—

A *13* lights each of *16* candle power requiring a total current of *62* Amperes

B *20* lights each of *16* candle power requiring a total current of *10* Amperes

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

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

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

40 Mast head light with *—* lamps each of candle power requiring a total current of Amperes

40 Side light with *—* lamps each of candle power requiring a total current of Amperes

3 Cargo lights of *6-16 cp.* light each candle power, whether incandescent or arc lights *Incandescent*

If arc lights, what protection is provided against fire, sparks, &c. *Cargo lights are included in A+B*

Where are the switches controlling the masthead and side lights placed *No navigation lights.*

DESCRIPTION OF CABLES.

Main cable carrying *16 1/2* Amperes, comprised of *1* wires, each *13* S.W.G. diameter, *.0066* square inches total sectional area

Branch cables carrying *10* Amperes, comprised of *1* wires, each *13* S.W.G. diameter, *.0066* square inches total sectional area

Branch cables carrying *6 1/2* Amperes, comprised of *1* wires, each *13* S.W.G. diameter, *.0066* square inches total sectional area

Leads to lamps carrying *2* Amperes, comprised of *1* wires, each *18* S.W.G. diameter, *.0018* square inches total sectional area

Cargo light cables carrying *3* Amperes, comprised of *Standard* wires, each S.W.G. diameter, *.0018* square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

The wires are insulated with rubber taped. The outside leads to cargo cluster plugs are armoured & lead covered.

Joints in cables, how made, insulated, and protected *Soldered & insulated with tape.*

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 *No*

How are the cables led through the ship, and how protected *The engine room wires are not protected or armoured & are tied to gratings etc. Leads in accommodation lead covered.*

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 *Armoured & lead covered cables.*

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat *no cables.*

What special protection has been provided for the cables near boiler casings *none*

What special protection has been provided for the cables in engine room *none*

How are cables carried through beams *Through fenders.* through bulkheads, &c. *none pass there*

How are cables carried through decks *no cables pass through decks.*

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 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 *✓*

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 *✓*, and with an amperemeter *✓*, 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 _____ 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.

Electrical Engineers Date _____

COMPASSES.

Distance between dynamo or electric motors and standard compass *about forty feet*

Distance between dynamo or electric motors and steering compass *20*

The nearest cables to the compasses are as follows:—

A cable carrying	Amperes	feet from standard compass	feet from steering compass
2	Amperes	8	8
A cable carrying	Amperes	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 *no.*

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

Builder's Signature. Date _____

GENERAL REMARKS.

The vessel will be eligible in my opinion for the record of Electric Light in the Register Book when the Engine room wiring has been renewed & made in accordance with the Rules & the cables protected by fuses where reduced section branches are made & tested in working order.

It is submitted that this vessel is eligible for THE RECORD. Elec. light. *J.W.D. 18/2/15*

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

Committee's Minute

GLASGOW

6 FEB. 1915

Deferred for completion



© 2020

Lloyd's Register Foundation

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.