

# REPORT ON ELECTRIC LIGHTING INSTALLATION. No 24630

Port of Glasgow Date of First Survey 22<sup>nd</sup> Oct Date of Last Survey 15<sup>th</sup> Nov No. of Visits 7  
 No. in Reg. Book 58 on the Iron or Steel S.S. Steppin Dudgeon Kamajuk Port belonging to  
 Built at Rings By whom Tom Simons & Co. Ltd When built  
 Owners \_\_\_\_\_ Owners' Address \_\_\_\_\_  
 Yard No. 436 Electric Light Installation fitted by \_\_\_\_\_ When fitted \_\_\_\_\_

### DESCRIPTION OF DYNAMO, ENGINE, ETC.

Single Cylinder open type vertical engine coupled direct to dynamo.  
 Capacity of Dynamo 75 Amperes at 60 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 Rm Port side having switches to groups A. B. C. D. E. of lights, &c., as below  
 Positions of auxiliary switch boards and numbers of switches on each One in Eng. Rm. 8 switches.

If cut outs are fitted on main switch board to the cables of main circuit no 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 Zin and constructed to fuse at an excess of 100 per cent over the normal current  
 Are all cut outs fitted in easily accessible positions yes Are the fuses of standard dimensions Wire 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 \_\_\_\_\_ arranged in the following groups:—  
 A Arc lamp 2 lights each of 2000 candle power requiring a total current of 10 Amperes  
 B " " 2 lights each of 2000 candle power requiring a total current of 10 Amperes  
 C Projector 2 lights each of 2000 candle power requiring a total current of 10 Amperes  
 D Accommodation 12 lights each of 16 candle power requiring a total current of 10 Amperes  
 E Eng. Rm 35 lights each of 16 candle power requiring a total current of 31 Amperes  
 No Mast head light with \_\_\_\_\_ lamps each of \_\_\_\_\_ candle power requiring a total current of \_\_\_\_\_ Amperes  
 No Side light with \_\_\_\_\_ lamps each of \_\_\_\_\_ candle power requiring a total current of \_\_\_\_\_ Amperes  
 No Cargo lights of \_\_\_\_\_ candle power, whether incandescent or arc lights

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

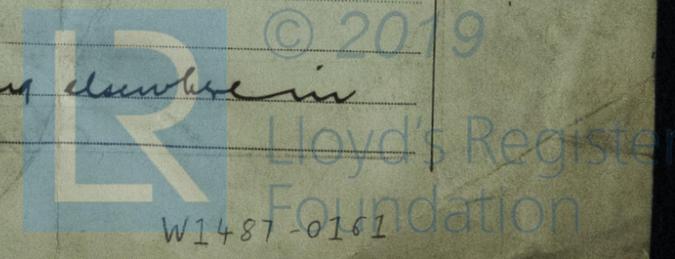
Where are the switches controlling the masthead and side lights placed None.

### DESCRIPTION OF CABLES.

Main cable carrying 75 Amperes, comprised of 19 wires, each 15 L.S.G. diameter, .765 square inches total sectional area  
 Branch cables carrying 32 Amperes, comprised of 7 wires, each 14 L.S.G. diameter, .034 square inches total sectional area  
 Branch cables carrying 10 Amperes, comprised of 7 wires, each 18 L.S.G. diameter, .0725 square inches total sectional area  
 Leads to lamps carrying 9 Amperes, comprised of 1 wires, each 18 L.S.G. diameter, .00181 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 vulcanised India Rubber, J. R. coated tape bairing and preservative compound.  
 Joints in cables, how made, insulated, and protected None  
 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 Accommodation in wood casing elsewhere in secured iron piping.



**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 pipe.

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

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

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

How are cables carried through beams none through bulkheads, &c. in pipings

How are cables carried through decks Deck Bulbs.

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 pipings

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

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

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

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 — How fixed —

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

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 board

**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 600 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.

J. Charters, Glasgow. Electrical Engineers Date 27<sup>th</sup> Octr 1906

**COMPASSES.**

Distance between dynamo or electric motors and standard compass

Distance between dynamo or electric motors and steering compass 46 ft.

The nearest cables to the compasses are as follows:—

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 \_\_\_\_\_ degrees on \_\_\_\_\_ course in the case of the standard compass and \_\_\_\_\_ degrees on \_\_\_\_\_ course in the case of the steering compass.

James M. Simons Builder's Signature. Date 6<sup>th</sup> December 1906

**GENERAL REMARKS.**

This installation has been well fitted on board and when run under ordinary working conditions was satisfactory

A. M. Clark

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

Committee's Minute

Glasgow 10 DEC 1906  
Received "Electric Light"  
Amval

It is submitted that the Record Elec. Light be noted in the Register Books.

11.12.06

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

REPORT FORM NO. 13—5m, 2A.

Lloyd's Register Foundation