

# REPORT ON

of *Newcastle*  
 in *on the Iron or Steel*  
 Book *3/3 "Stilly"*  
 Built at *Newcastle on Tyne*  
 Owners *J. Upcott*  
 Card No. *116* Electric Light Installation fitted by *Ed.*

## DESCRIPTION OF DYNAMO, ENGINE, ETC.

*Single cylinder direct acting vertical compound dynamo*

Capacity of Dynamo *125* Amperes at

Where is Dynamo fixed *Engine Room*

Position of Main Switch Board *Engine Room* having switches to groups *four* of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each *Distributing board wiring, one board in Forward, one aft, one engine room, one in saloon*

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 *Standard* and to each lamp circuit *52 per way*

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 *Standard* 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 *Instruction to Engineer*

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

Total number of lights provided for *152* arranged in the following groups:—

A	<i>31</i> lights each of <i>16 CP</i>	candle power requiring a total current of <i>15</i> Amperes
B	<i>19</i> lights each of <i>"</i>	candle power requiring a total current of <i>9.5</i> Amperes
C	<i>46</i> lights each of <i>"</i>	candle power requiring a total current of <i>33</i> Amperes
D	<i>56</i> lights each of <i>"</i>	candle power requiring a total current of <i>28</i> Amperes
E	lights each of <i>"</i>	candle power requiring a total current of <i>"</i> Amperes
	<i>2</i> Mast head light with <i>1</i> lamps each of <i>32 CP</i>	candle power requiring a total current of <i>about one</i> Amperes
	<i>2</i> Side light with <i>1</i> lamps each of <i>32 CP</i>	candle power requiring a total current of <i>one</i> Amperes
	<i>6-6</i> light Cargo lights of <i>16 CP</i>	candle power, whether incandescent or arc lights <i>36 lights in all</i>

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

Where are the switches controlling the masthead and side lights placed *main switch board in engine room*

## DESCRIPTION OF CABLES.

Main cable carrying <i>124</i> Amperes, comprised of <i>19</i> wires, each <i>13</i> L.S.G. diameter, <i>1249</i> square inches total sectional area
<i>15</i> cables carrying <i>9.5</i> Amperes, comprised of <i>3</i> wires, each <i>14</i> L.S.G. diameter, <i>01406</i> square inches total sectional area
<i>23</i> cables carrying <i>2.8</i> Amperes, comprised of <i>4</i> wires, each <i>15</i> L.S.G. diameter, <i>02222</i> square inches total sectional area
<i>1.8</i> lamps carrying <i>1.8</i> Amperes, comprised of <i>3</i> wires, each <i>22</i> L.S.G. diameter, <i>0018</i> square inches total sectional area
<i>3</i> cables carrying <i>3</i> Amperes, comprised of <i>7</i> wires, each <i>22</i> L.S.G. diameter, <i>0042</i> square inches total sectional area

## DESCRIPTION OF INSULATION, PROTECTION, ETC.

*rubber, then vulcanised rubber, IR coated tape the whole sheathed in pairs in sheathing, working places further protected by an armoring of galvanized wire*

How made, insulated, and protected *none*

Are all joints in accessible positions, none being

Are all joints in accessible positions, none being

Are all joints in accessible positions, none being

Are all joints in accessible positions, none being

Are all joints in accessible positions, none being



© 2019

Lloyd's Register Foundation

W476-0090



moisture. removed cables  
other sources of heat none near  
near  
used taps over wire about 1/2 inch plate for  
iron piping  
through bulkheads, &c. Watertight glands  
which may be used for carrying cargo, stores, or baggage  
cargo, coals, or baggage ho

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 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

**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 supplied with a voltmeter and one an amperemeter, fixed on mainboard

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.

Gravel Scott & Mountain Ltd.  
Electrical Engineers

Date Feb 2nd 1905

**COMPASSES.**

Distance between dynamo or electric motors and standard compass  
Distance between dynamo or electric motors and steering compass  
The nearest cables to the compasses are as follows:—

A cable carrying	Amperes	feet from standard compass	feet from steering compass
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 yes  
The maximum deviation due to electric currents, etc., was found to be nil degrees on any course in the  
standard compass and nil degrees on any course in the case of the steering compass.

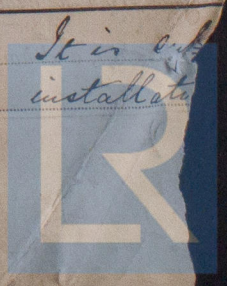
FOR THE NORTHUMBERLAND SHIPBUILDING COMPANY, LIMITED.  
Rawland Strang  
Managing Director.

Builder's Signature. Date 20th February

**GENERAL REMARKS.**

This installation as far as seen appears to be fitted in accordance with the requirements of the Rules.  
J. Y. Findlay  
Surveyor to Lloyd's Register of British and Foreign Shipping

Committee's Minute



THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.