

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 20742

Port of Newcastle Date of First Survey Hull Aug 29th Date of Last Survey Hull Dec 3rd No. of Visits 9
 Not in 10 Supp on the Iron or Steel S. S. Galileo Port belonging to Hull
 Built at Newcastle By whom The Northumbrian & B. C. When built 1908
 Owners J. Wilson Sons & Co Ltd Owners' Address Hull
 Yard No. 151 Electric Light Installation fitted by J. Wilson Sons & Co Ltd When fitted 1908

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Single cylinder direct acting engine, coupled to a 12 H.P. dynamo made by Messrs Clarke Chapman & Co Ltd.

Capacity of Dynamo 120 Amperes at 100 Volts, whether continuous or alternating current Continuous

Where is Dynamo fixed Port side of engine room. Whether single or double wire system is used Double wire

Position of Main Switch Board On bulkhead of engine store having switches to groups close to dynamo. four circuits of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each Each light is fitted with a separate switch

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 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 Yes and constructed to fuse at an excess of 50 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 Yes

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

Total number of lights provided for 154 arranged in the following groups :-

A	<u>51</u>	lights each of	<u>16</u>	candle power requiring a total current of	<u>30.6</u>	Amperes
B	<u>62</u>	lights each of	<u>16</u>	candle power requiring a total current of	<u>37.2</u>	Amperes
C	<u>22</u>	lights each of	<u>16</u>	candle power requiring a total current of	<u>13.2</u>	Amperes
D	<u>19</u>	lights each of	<u>16</u>	candle power requiring a total current of	<u>14.4</u>	Amperes
E		lights each of		candle power requiring a total current of		Amperes
<u>1</u>	<u>Mast head light with</u>	<u>2</u>	<u>lamps each of</u>	<u>16</u>	<u>candle power requiring a total current of</u>	<u>Amperes</u>
<u>2</u>	<u>Side light with</u>	<u>4</u>	<u>lamps each of</u>	<u>16</u>	<u>candle power requiring a total current of</u>	<u>Amperes</u>
<u>6</u>	<u>Cargo lights of</u>	<u>6</u>	<u>16</u>	<u>candle power, whether incandescent or arc lights</u>	<u>Incandescent</u>	

If arc lights, what protection is provided against fire, sparks, &c. None fitted.

Where are the switches controlling the masthead and side lights placed In Vest Room

DESCRIPTION OF CABLES.

Main cable carrying 92 Amperes, comprised of 21 wires, each 14 L.S.G. diameter, .1037 square inches total sectional area

Branch cables carrying 30.6 Amperes, comprised of 7 wires, each 14 L.S.G. diameter, .0345 square inches total sectional area

Branch cables carrying 37.2 Amperes, comprised of 7 wires, each 14 L.S.G. diameter, .0345 square inches total sectional area

Leads to lamps carrying .6 Amperes, comprised of 1 wires, each 18 L.S.G. diameter, .0018 square inches total sectional area

Cargo light cables carrying 3.6 Amperes, comprised of 7 wires, each 22 L.S.G. diameter, .0042 square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

All cables 600 Pynchon's lead covered & armoured with galvanized steel wires.

Joints in cables, how made, insulated, and protected (No joints made)

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 Led through beams & protected with a galvanized armouring

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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 Lead covered & protected with a galvanized armoring

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat Lead covered & armoured

What special protection has been provided for the cables near boiler casings Lead covered & armoured

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

How are cables carried through beams clipped to deck through bulkheads, &c. with T. T. glands.

How are cables carried through decks through deck tubes

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 Lead covered & steel galvanized armoring

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 None fitted

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 C. I. Connection Boxes

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 _____

The installation is now 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 No.

How are the lamps specially protected in places liable to the accumulation of vapour or gas None fitted

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.

James Wilson Sons & Co Ltd Electrical Engineers Date Nov 4. 1908.

COMPASSES.

Distance between dynamo or electric motors and standard compass 200 ft.

Distance between dynamo or electric motors and steering compass 190 ft.

The nearest cables to the compasses are as follows:—

A cable carrying	<u>6</u>	Amperes	<u>fitted in</u> feet from standard compass	<u>8</u>	feet from steering compass
A cable carrying	<u>1</u>	Amperes	<u>6</u> feet from standard compass	<u>8</u>	feet from steering compass
A cable carrying	<u>5</u>	Amperes	<u>12</u> feet from standard compass	<u>9</u>	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 degrees on all course in the case of the standard compass and No degrees on all course in the case of the steering compass.

W. R. Watson, Master Builder's Signature. Date Dec 11. 08

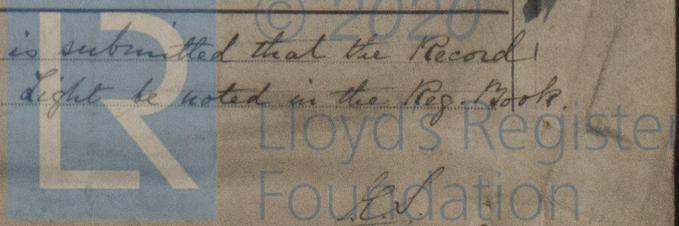
GENERAL REMARKS.

This vessel having been fitted with an Electric Light Installation, is eligible in my opinion to have same noted in Register Book.
James Barclay.

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

Committee's Minute _____

It is submitted that the Record
Rec. Light be noted in the Reg. Books.



12.12.08

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

REPORT FORM No. 18.—500/24.