

Rpt. 13.

# REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 71236

Port of Newcastle Date of First Survey 19<sup>th</sup> August Date of Last Survey 29<sup>th</sup> August No. of Visits Four  
 No. in Reg. Book 1 on the Iron or Steel S.S. "War Beach" Port belonging to ✓  
 Built at Newcastle-on-Tyne By whom The Tyne Iron Shpg. Co When built 1918  
 Owners The Shipping Controller Owners' Address \_\_\_\_\_  
 Yard No. 213 Electric Light Installation fitted by Messrs Salomon Bros & Co When fitted 1918  
Newcastle-on-Tyne

## DESCRIPTION OF DYNAMO, ENGINE, ETC.

1. 4 x 5 Open Type Engine coupled direct to a multipolar compound wound dynamo. Steam pressure 100 lbs per sq. in. 360 R.P.M.  
 Capacity of Dynamo 100 Amperes at 100 Volts, whether continuous or alternating current Continuous  
 Where is Dynamo fixed In engine room Whether single or double wire system is used Double  
 Position of Main Switch Board In engine room having switches to groups A.B.C.D.E of lights, &c., as below  
 Positions of auxiliary fuse switch boards and numbers of fuses on each 3-way Section Boxes: - Saloon Passage 1, Steam Steer: Gear 2. 10-way Fuse Boards in: Engine Room 1, Saloon Pass: 1. 5-way Fuse Boards in: Accom: Aft 1, Wheel House 1. 2-way Fuse Board in: Forecastle 1.  
 If fuses 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 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 50 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 yes  
 Are all switches and fuses constructed of incombustible materials and fitted on incombustible bases yes

Total number of lights provided for 136 arranged in the following groups:—

Group	Description	Number of Lights	Candle Power	Current (Amperes)
A	Cargo	30	16	15
B	Accommodation	63	16	31.5
C	Wireless	—	—	10.5
D	Navigation	10	16	5
E	Engine and Boiler Rooms	24	16	13.5
1	Mast head light with 1 lamps each of	32	—	1
2	Side light with 1 lamps each of	32	—	2
5	Cargo lights of	6 - 16	—	Incandescent

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

Where are the switches controlling the masthead and side lights placed On Bridge

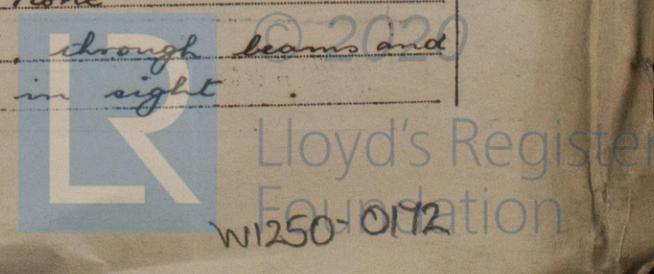
## DESCRIPTION OF CABLES.

Main cable carrying 48.5 Amperes, comprised of 19 wires, each 14 S.W.G. diameter, .094 square inches total sectional area  
 Branch cables carrying 31.5 Amperes, comprised of 4 wires, each 16 S.W.G. diameter, .0282 square inches total sectional area  
 Branch cables carrying 15 Amperes, comprised of 4 wires, each 18 S.W.G. diameter, .0225 square inches total sectional area  
 Leads to lamps carrying .5 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 114 wires, each 38 S.W.G. diameter, .0032 square inches total sectional area

## DESCRIPTION OF INSULATION, PROTECTION, ETC.

Lead covered and Armoured and Braided cables. Linned copper conductors, insulated with pure para rubber, vulcanised india rubber, taped and braided.  
 Joints in cables, how made, insulated, and protected No joints made.

Are all the joints of cables thoroughly soldered, and the flux used not containing acids or other corrosive substances — 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 None  
 How are the cables led through the ship, and how protected On underside of decks, through beams and on Bulkheads. all in sight.



**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 In open alleyways—  
armoured cables. Where exposed to weather—led through G.I. pipes.

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

What special protection has been provided for the cables near boiler casings Armoured and braided

What special protection has been provided for the cables in engine room Armoured and braided

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

How are cables carried through decks Watertight deck tubes

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 steel armoured cables led between beams

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 yes and with an amperemeter yes, fixed On switchboard

**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 600 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.

Galvanic Corrado Electrical Engineers Date 26<sup>th</sup> August 1918

**COMPASSES.**

Distance between dynamo or electric motors and standard compass 90 ft.

Distance between dynamo or electric motors and steering compass 85 ft.

The nearest cables to the compasses are as follows:—

A cable carrying	<u>8.5</u>	Ampere	<u>12</u>	feet from standard compass	<u>9</u>	feet from steering compass
A cable carrying	<u>.5</u>	Ampere	<u>3</u>	feet from standard compass	<u>3</u>	feet from steering compass
A cable carrying		Ampere		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 all courses in the case of the standard compass and nil degrees on all courses in the case of the steering compass.

G. F. Mulherson Builder's Signature. Date 4<sup>th</sup> September 1918

**GENERAL REMARKS.**

The above installation has been fitted in accordance with the rules, tested & found satisfactory.

It is submitted that this vessel is eligible for THE RECORD. ELEC. LIGHT

10-9-18

W. T. Badger

Surveyor to Lloyd's Register of Shipping.

Committee's Minute



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