

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 77213

Port of NEWCASTLE-ON-TYNE Date of First Survey 8/11/23 Date of Last Survey 8/11/23 No. of Visits 1 (Keith 5)
 No. in on the Iron or Steel "Chiswick Manor" Port belonging to London
 Reg. Book 16592 Built at Glasgow By whom Lloyd Royal Belge Ltd When built 1919
 Owners Manor Line Owners' Address _____
 Yard No. 1 Electric Light Installation fitted by Middle Dock & Eng Co. South Shields When fitted 1923

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Dynamo compound wound direct coupled to single cylinder steam engine

Capacity of Dynamo 10 Amperes at 100 Volts, whether continuous or alternating current continuous

Where is Dynamo fixed engine room aft eng. Whether single or double wire system is used double

Position of Main Switch Board engine room on aft bulkhead having switches to groups ✓ of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each ✓

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 ✓ and at each position where a cable is branched or reduced in size ✓ and to each lamp circuit ✓

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 ✓

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

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

A Wireless lights each of _____ candle power requiring a total current of 5.0 Amperes

B _____ lights each of _____ candle power requiring a total current of _____ 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

Mast head light with _____ lamps each of _____ candle power requiring a total current of _____ Amperes

Side light with _____ lamps each of _____ candle power requiring a total current of _____ Amperes

Cargo lights of _____ candle power, whether incandescent or arc lights

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

Where are the switches controlling the masthead and side lights placed _____

DESCRIPTION OF CABLES.

Main cable carrying 10 Amperes, comprised of 7 wires, each .064 S.W.G. diameter, .02214 square inches total sectional area

A. Branch cables carrying 5 Amperes, comprised of 7 wires, each .044 S.W.G. diameter, .01046 square inches total sectional area

Branch cables carrying ✓ Amperes, comprised of ✓ wires, each ✓ S.W.G. diameter, ✓ square inches total sectional area

Leads to lamps carrying ✓ Amperes, comprised of ✓ wires, each ✓ S.W.G. diameter, ✓ square inches total sectional area

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

DESCRIPTION OF INSULATION, PROTECTION, ETC.

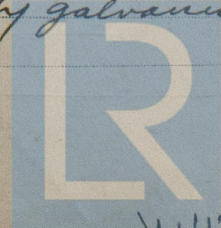
Dynamo mains & wireless mains are lead covered & armoured.

Joints in cables, how made, insulated, and protected none 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 no

How are the cables led through the ship, and how protected clipped along bulkhead by galvanised iron clips



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

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

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

What special protection has been provided for the cables in engine room *lead covered & armoured cable.*

How are cables carried through beams *Fitted with lead bushes* through bulkheads, &c. *lead bushes.*

How are cables carried through decks *Tubes filled with bitumen*

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

Cargo light cables, whether portable or permanently fixed *no* 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 *switch 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 *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.

Electrical Engineers

Date

COMPASSES.

Distance between dynamo or electric motors and standard compass *50 ft*

Distance between dynamo or electric motors and steering compass *60 ft*

The nearest cables to the compasses are as follows:—

A cable carrying *500* Amperes *50* 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 — course in the case of the

standard compass and *nil* degrees on — course in the case of the steering compass.

Builder's Signature. Date

GENERAL REMARKS.

The above installation is in accordance with the Societys Rules. The vessel is eligible in ^{our} opinion for notation. wireless. The above has been tested under full working conditions & found to be satisfactory.

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

Le £5.0.0. applied for 9/11/23.

W.T. Badger & R.J. Easthope. Surveyors to Lloyd's Register of Shipping.

Committee's Minute



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THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.