

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 25226

Port of Glasgow Date of First Survey 16 April Date of Last Survey 17 May No. of Visits 6
 No. in Reg. Book on the Iron or Steel Hazembe Port belonging to
 Built at Birkenhead Docks By whom A. Stephens & Co. When built 1907
 Owners Birkenhead Docks Owners' Address
 Yard No. 421 Electric Light Installation fitted by J. A. Holmes & Co. When fitted 1907

DESCRIPTION OF DYNAMO, ENGINE, ETC.

8 1/4" x 6" Open A.C. Engine 20 B.H.P. 275 Revs. S. F. Lubricator
 17 1/2" Dynamo Compound 100 Amps 100 Volts 275 Revs.
 Capacity of Dynamo 130 Amperes at 100 Volts, whether continuous or alternating current Continuous
 Where is Dynamo fixed Stating Platform Whether single or double wire system is used Double
 Position of Main Switch Board Below dynamo 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 9 W. D. P. in Lamp room, 12 W. D. P. in Blanket room, 6 W. D. P. in Steward's room, 9 W. D. P. in Purvey, 12 W. D. P. in Purvey store, 9 W. D. P. in Mess room, 9 W. D. P. in 2nd off. room, 9 W. D. P. in steering gear room, 9 W. D. P. in Forecastle bulk, 6 W. D. P. in Forecastle bulk.
 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-oxidisable metal yes and constructed to fuse at an excess of 25 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 201 arranged in the following groups:—

A Engine room	15	lights each of	16	candle power requiring a total current of	8.4	Amperes
B Aft	27	lights each of	16	candle power requiring a total current of	15.12	Amperes
C Engine room	44	lights each of	16	candle power requiring a total current of	24.64	Amperes
D Forward	42	lights each of	16	candle power requiring a total current of	23.52	Amperes
E Saloon	73	lights each of	16	candle power requiring a total current of	40.88	Amperes
2 Mast head lights with	1	lamp each of	32	candle power requiring a total current of	1.12	Amperes
2 Side lights with	1	lamp each of	32	candle power requiring a total current of	2.24	Amperes
12 Cargo lights of	8 + 16			candle power, whether incandescent or are lights	Incandescent	

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

Where are the switches controlling the masthead and side lights placed

DESCRIPTION OF CABLES.

2 Main cables carrying 112.5 Amperes, comprised of 19 wires, each 16 L.S.G. diameter, .0612 square inches total sectional area
 Branch cables carrying 40.8 Amperes, comprised of 19 wires, each 17 L.S.G. diameter, .0617 square inches total sectional area
 Branch cables carrying 24.6 Amperes, comprised of 7 wires, each 15 L.S.G. diameter, .0285 square inches total sectional area
 Leads to lamps carrying 5.6 Amperes, comprised of 1 wires, each 18 L.S.G. diameter, .00181 square inches total sectional area
 Cargo light cables carrying 4.48 Amperes, comprised of 7 wires, each 21.5 L.S.G. diameter, .0049 square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

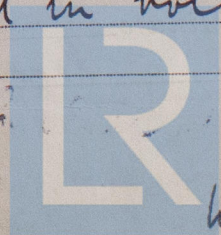
Pure Para rubber vulcanized rubber + taped + lead covered in cabins & in holds + armoured
in holds + armoured

Joints in cables, how made, insulated, and protected

Are all the joints of cables thoroughly soldered, resin only having been used as a flux None 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

How are the cables led through the ship, and how protected Armoured - L.B. clipped in holds & Lead covered clipped in cabins &c.



Lloyd's Register
 1/56-02-25

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 Amund - L. B.

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

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

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

How are cables carried through beams fiber bushes through bulkheads, &c. stuffing boxes

How are cables carried through decks 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 Amund - L. B.

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 u

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

If in the spaces, how are they specially protected u

Are any switches or cut outs fitted in bunkers no

Cargo light cables, whether portable or permanently fixed Portable How fixed W. I. sockets

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

How are the returns from the lamps connected to the hull u

Are all the joints with the hull in accessible positions u

The installation is u supplied with a voltmeter and u an amperemeter, fixed Main 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 u

Are any switches, cut outs, or joints of cables fitted in the pump room or companion u

How are the lamps specially protected in places liable to the accumulation of vapour or gas u

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 2000 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. P. Jones. Con. Electrical Engineers Date 15/5/07

COMPASSES.

Distance between dynamo or electric motors and standard compass 120 ft

Distance between dynamo or electric motors and steering compass 125 "

The nearest cables to the compasses are as follows:—

A cable carrying	Amperes	feet from standard compass	feet from steering compass
<u>8.41</u>	<u>12 ft.</u>	<u>17 ft.</u>	<u>17 ft.</u>
<u>'56</u>	<u>2 "</u>	<u>7 "</u>	<u>7 "</u>
<u>A cable carrying</u>	<u>Amperes</u>	<u>feet from standard compass</u>	<u>feet from steering compass</u>

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

Ally Stephen & Son Ltd. Builder's Signature. Date 17th May 1907.

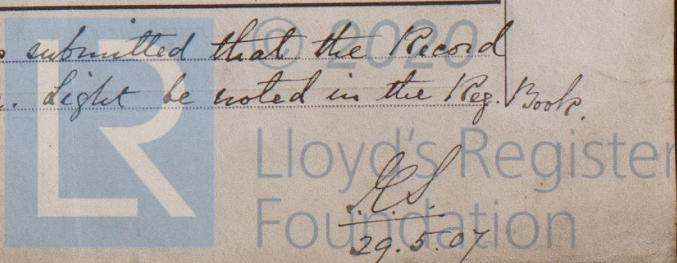
GENERAL REMARKS.

The insulation of this vessel was fitted on board under survey & tested under working conditions with satisfactory results.

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

Glasgow 27 MAY 1907.
Committee's Minute Record Electric Light

It is submitted that the Record Elec. light be noted in the Reg. Book.



THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

REPORT FORM No. 1, 2, 3, 4.