

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 24008

Port of Glasgow Date of First Survey 2 May Date of Last Survey 11 May No. of Visits 4
 No. in on the Iron or Steel Justin Stur. "Viper" Port belonging to Glasgow
 Reg. Book 28 Sep. Built at Glasgow By whom The Fairfield S. & E. Co. Ltd. When built 1906
 Owners Messrs G. & J. Burns, Ltd. Owners' Address Glasgow
 Yard No. 444 Electric Light Installation fitted by The Fairfield S. & E. Co. Ltd. When fitted 1906

DESCRIPTION OF DYNAMO, ENGINE, ETC.

1 Set of Totally Enclosed, Compound, Double Acting, Forced Lubrication Type, of Engine, direct coupled to Compound Wound Dynamo running at 400 R.P.M.

Capacity of Dynamo 200 Amperes at 100 Volts, whether continuous or alternating current Continuous

Where is Dynamo fixed Port Side Engine Room Whether single or double wire system is used Double

Position of Main Switch Board At Dynamo, Engine Room switches to groups 6 in two of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each None

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 None 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 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 No

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

Total number of lights provided for 246 arranged in the following groups:—

A	<u>5</u>	lights each of	<u>32</u>	candle power requiring a total current of	<u>6</u>	Amperes
B	<u>61</u>	lights each of	<u>47-16 C.P. x 14-8</u>	candle power requiring a total current of	<u>27.0</u>	Amperes
C	<u>67</u>	lights each of	<u>61-16 C.P. x 6-8</u>	candle power requiring a total current of	<u>32.0</u>	Amperes
D	<u>42</u>	lights each of	<u>16</u>	candle power requiring a total current of	<u>31.0</u>	Amperes
E	<u>56</u>	lights each of	<u>54-16 C.P. x 2-8</u>	candle power requiring a total current of	<u>27.5</u>	Amperes
F	<u>45</u>	" " " "	<u>43-16 C.P. x 2-8</u>	" " " "	<u>21.5</u>	"
	<u>2</u>	Mast head light with	<u>1</u>	lamps each of	<u>32</u>	candle power requiring a total current of <u>2.4</u> Amperes
	<u>2</u>	Side light with	<u>1</u>	lamps each of	<u>32</u>	candle power requiring a total current of <u>2.4</u> Amperes
	<u>None</u>	Cargo lights of	<u>None</u>	candle power, whether incandescent or arc lights	<u>None</u>	

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

Where are the switches controlling the masthead and side lights placed Aft side of chart house

DESCRIPTION OF CABLES.

Main cable carrying	<u>134</u>	Amperes, comprised of	<u>48</u>	wires, each	<u>1/16</u>	L.S.G. diameter,	<u>.221</u>	square inches total sectional area
Branch cables carrying	<u>6</u>	Amperes, comprised of	<u>7</u>	wires, each	<u>1/18</u>	L.S.G. diameter,	<u>.0129</u>	square inches total sectional area
Branch cables carrying	<u>32.0</u>	Amperes, comprised of	<u>4</u>	wires, each	<u>1/16</u>	L.S.G. diameter,	<u>.0229</u>	square inches total sectional area
Branch cables carrying	<u>28.0</u>	Amperes, comprised of	<u>4</u>	wires, each	<u>1/16</u>	L.S.G. diameter,	<u>.0229</u>	square inches total sectional area
Branch cables carrying	<u>27.5</u>	Amperes, comprised of	<u>4</u>	wires, each	<u>1/16</u>	L.S.G. diameter,	<u>.0229</u>	square inches total sectional area
Branch cables carrying	<u>13.5</u>	Amperes, comprised of	<u>1</u>	wires, each	<u>1/8</u>	L.S.G. diameter,	<u>.0339</u>	square inches total sectional area
Leads to lamps carrying	<u>8.0</u>	Amperes, comprised of	<u>1</u>	wires, each	<u>1/8</u>	L.S.G. diameter,	<u>.0339</u>	square inches total sectional area
Cargo light cables carrying	<u>5.5</u>	Amperes, comprised of	<u>1</u>	wires, each	<u>1/8</u>	L.S.G. diameter,	<u>.0339</u>	square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

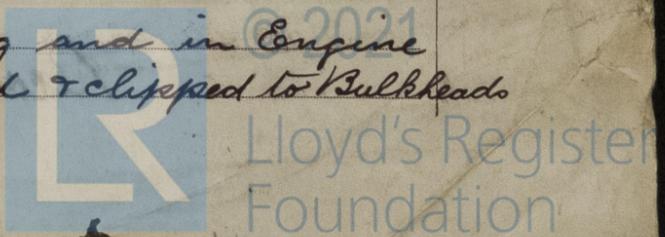
Insulated with pure and vulcanized india-rubber and taped, the whole vulcanized together and braided.

Joints in cables, how made, insulated, and protected None

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 None

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 in grooved casing and in Engine & Boiler rooms lead covered and armoured & clipped to Bulkheads



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 Armoured & Lead covered

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

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

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

How are cables carried through beams Fibre Lubing through bulkheads, &c. G.M. Glands

How are cables carried through decks Galvanized Iron Deck Pipes

Are any cables run through coal bunkers No or cargo spaces No or spaces which may be used for carrying cargo, stores, or baggage Yes, Stores

If so, how are they protected Grooved wood casing

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 cut outs for these lights fitted /

If in the spaces, how are they specially protected /

Are any switches or cut outs fitted in bunkers No

Cargo light cables, whether portable or permanently fixed None 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 /

The installation is / supplied with a voltmeter and / an amperemeter, fixed at 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 /

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 99 per cent. that of pure copper.

Insulation of cables is guaranteed to have a resistance of not less than 2500 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.

Electrical Engineers Date

COMPASSES.

Distance between dynamo or electric motors and standard compass 28 ft.

Distance between dynamo or electric motors and steering compass 94 ft.

The nearest cables to the compasses are as follows:—

A cable carrying All Compasses are Electrically Lighted 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 / degrees on / course in the case of the standard compass and / degrees on / course in the case of the steering compass.

Builder's Signature. Date 18th May 1906

GENERAL REMARKS.

The installation has been well fitted & worked satisfactorily on trial.

Arthur L. Jones

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

Committee's Minute

Glasgow 25 JUN 1906
Record Electric Light

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

Lloyd's Register Foundation

26.6.06

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

REPORT FORM No. 1. 1-2034.