

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 49382

Port of Newcastle Date of First Survey Aug 26 '04 Date of Last Survey Sept 13 '05 No. of Visits 4
 No. in 1 on the Iron Steel 1/2 N Mendoza Port belonging to Genoa
 Ref. Book 1 Built at Walker on Lynce By whom Luigi Cammion Whitworth When built 1904
 Owners Aloyd Italiano Soc de Navag Owners' Address Genoa
 Yard No. 739 Electric Light Installation fitted by H. Holmes & Co When fitted 1904.5

DESCRIPTION OF DYNAMOS ENGINES ETC.

Two 6 3/4" x 11 1/2" x 8" COYCE open type engines 180 lbs coupled to two Holmes dynamos compound wound N° 22/RH.

Capacity of Dynamo 220 Amperes at 100 Volts, whether continuous or alternating current continuous

Where is Dynamo fixed on platform in eng room.

Position of Main Switch Board over machinery having switches to groups ABCD of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each

SEE SKETCH

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 no

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

yes 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 378 arranged in the following groups:—

A <u>lights</u>	<u>57</u> lights each of	<u>16</u> candle power requiring a total current of	<u>340</u> Amperes
B <u>lights</u>	<u>92</u> lights each of	- candle power requiring a total current of	<u>550</u> Amperes
C <u>lights</u>	<u>80</u> lights each of	- candle power requiring a total current of	<u>460</u> Amperes
D <u>lights</u>	<u>149</u> lights each of	- candle power requiring a total current of	<u>900</u> Amperes
E	lights each of	candle power requiring a total current of	Amperes
<u>2</u>	Mast head lights with <u>1</u> lamps each of	<u>32</u> candle power requiring a total current of	<u>32</u> Amperes
<u>2</u>	Side lights with <u>1</u> 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 in wheel house.

DESCRIPTION OF CABLES.

Main cable carrying 300 Amperes, comprised of 61 wires, each 15 L.S.G. diameter, .245 square inches total sectional area
 Branch cables carrying 66 Amperes, comprised of 19 wires, each 17 L.S.G. diameter, .046 square inches total sectional area
 Branch cables carrying 98 Amperes, comprised of 19 wires, each 14 L.S.G. diameter, .094 square inches total sectional area
 Leads to lamps carrying .6 Amperes, comprised of 1 wire, each 18 L.S.G. diameter, .0018 square inches total sectional area
 Cargo light cables carrying 3.6 Amperes, comprised of 108 wires, each 38 L.S.G. diameter, .0074 square inches total sectional area

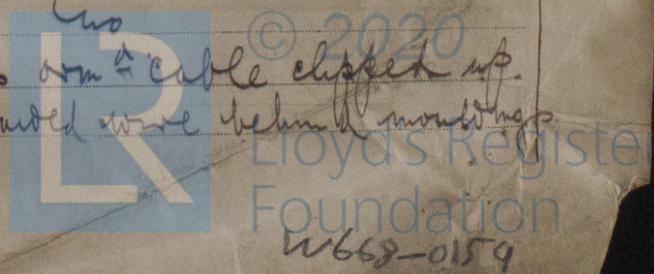
DESCRIPTION OF INSULATION, PROTECTION, ETC.

Cables reinsulated with pure rubber vulc & taped & where enclosed in mouldings further braided overall, where annoyed annoying consists of galv. iron wire braided overall & in staterooms lead covered
 Joints in cables, how made, insulated, and protected spliced soldered and over-taping
insulated with approved rubber protective tapes &c.

Are all the joints of cables thoroughly soldered, resin only having been used as a flux yes 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 no

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 for min events own cable clipped up
in staterooms &c clipped up & in saloon taped & braided wire behind mouldings



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 cable banded over

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat no

What special protection has been provided for the cables near boiler casings no

What special protection has been provided for the cables in engine room no

How are cables carried through beams insulating bush through bulkheads, &c. stiffening brace

How are cables carried through decks deck tubes

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

If so, how are they protected armoured

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 no

Where are the main switches and cut outs for these lights fitted no

If in the spaces, how are they specially protected no

Are any switches or cut outs fitted in bunkers no

Cargo light cables, whether portable or permanently fixed portable How fixed no

In vessels fitted on the single wire system, how is the dynamo terminal fixed to the hull of vessel no

How are the returns from the lamps connected to the hull no

Are all the joints with the hull in accessible positions no

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 no

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 no

The installation is not supplied with a voltmeter and not an amperemeter, fixed no

The copper used is guaranteed to have a conductivity of 95 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.

J. H. Holmes & Co.

Electrical Engineers

Date Sept. 19. 05.

COMPASSES.

Distance between dynamo or electric motors and standard compass about 160 ft.

Distance between dynamo or electric motors and steering compass " 140 "

The nearest cables to the compasses are as follows:—

A cable carrying	<u>6.6</u>	Amperes	<u>12</u>	feet from standard compass	<u>8</u>	feet from steering compass
A cable carrying	<u>9.6</u>	Amperes	<u>30</u>	feet from standard compass	<u>30</u>	feet from steering compass
A cable carrying	<u>27</u>	Amperes	<u>45</u>	feet from standard compass	<u>40</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 nil degrees on all course in the case of the standard compass and nil degrees on all course in the case of the steering compass.

R. Sinton White

Builder's Signature.

Date 29/9/05

GENERAL REMARKS.

This installation has been examined & tested & found satisfactory

J. J. Lindley

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

Committee's Minute

It is submitted that this installation appears to be satisfactory

 Lloyd's Register
 3.10.05

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

REPORT FORM No. 13.