

REPORT ON ELECTRIC LIGHTING INSTALLATION.

No. ~~2077~~

Port of Genoa Date of First Survey July 1st Date of Last Survey July 31st No. of Visits 5
 No. in Reg. Book on the Iron or Steel S. S. "Francis" Port belonging to Venice
 Built at Sestri Ponente By whom G. Adorno & C. When built 1900
 Owners Societa Veneziana di Mar e Rapide Owners' Address Venice
 Yard No. 187 Electric Light Installation fitted by G. di G. Rossi & Ing. E. D. Schmidt When fitted 1900

DESCRIPTION OF DYNAMO, ENGINE, ETC.

one single cylinder engine with extended bed plate to carry dynamo coupled direct to one shuntwound dynamo

Capacity of Dynamo 46 Amperes at 110 Volts, whether continuous or alternating current Continuous
 Where is Dynamo fixed on a platform on the port side of engine room
 Position of Main Switch Board Near Dynamo having switches to groups 3 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 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-oxidizable metal yes and constructed to fuse at an excess of 100 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 50 arranged in the following groups :-

A	<u>30</u> lights each of <u>2 of 8 + 28 of 16</u> candle power requiring a total current of <u>13.35</u> Amperes
B	<u>15</u> lights each of <u>16</u> candle power requiring a total current of <u>6.90</u> Amperes
C	<u>5</u> lights each of <u>16</u> candle power requiring a total current of <u>2.30</u> Amperes
D	<u>✓</u> lights each of <u>✓</u> candle power requiring a total current of <u>✓</u> Amperes
E	<u>✓</u> lights each of <u>✓</u> candle power requiring a total current of <u>✓</u> Amperes
	<u>2</u> Mast head light with <u>2</u> lamps each of <u>32</u> candle power requiring a total current of <u>3.70</u> Amperes
	<u>2</u> Side light with <u>2</u> lamps each of <u>32</u> candle power requiring a total current of <u>3.70</u> Amperes
	<u>14</u> Cargo lights of <u>cluster of 6 each of 16</u> candle power, whether incandescent or arc lights <u>Incandescent</u>

If arc lights, what protection is provided against fire, sparks, &c. none
 Where are the switches controlling the masthead and side lights placed Chart Room

DESCRIPTION OF CABLES.

Main cable carrying 40 Amperes, comprised of 19 wires, each 15 L.S.G. diameter, .0443 square inches total sectional area
 Branch cables carrying 15 Amperes, comprised of 1 wires, each 22 L.S.G. diameter, .0117 square inches total sectional area
 Branch cables carrying 6 Amperes, comprised of 1 wires, each 14 L.S.G. diameter, .0050 square inches total sectional area
 Leads to lamps carrying 1 1/2 Amperes, comprised of 1 wires, each 20 L.S.G. diameter, .0010 square inches total sectional area
 Cargo light cables carrying 3 Amperes, comprised of 15 wires, each 28 L.S.G. diameter, .00258 square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Copper wires tinned, covered with a layer of India Rubber, then flax, then vulcanised india rubber, then india rubber coated tape, the whole vulcanised together and protected with braided waterproof fibre.

Joints in cables, how made, insulated, and protected no joints

Are all the joints of cables thoroughly soldered, resin only having been used as a flux ✓ 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 In wooden casings + in iron pipes

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 2-12-0



D. D. Mann

MANIN No 2099

DESCRIPTION OF INSULATION, PROTECTION, ETC.—continued.

Are they in places always accessible

yes Guard Book

What special protection has been provided for the cables in open alleyways or where exposed to weather or moisture

Enclosed in iron pipes

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

none there

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

Iron pipes

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

In wooden casings

How are cables carried through beams

In hard wood bents through bulkheads, &c. Brass made tight-screwed glands.

How are cables carried through decks

none carried through decks

Are any cables run through coal bunkers or cargo spaces or spaces which may be used for carrying cargo, stores, or baggage

yes or cargo spaces yes or spaces which may be used for carrying cargo, stores, or baggage yes

If so, how are they protected

In iron pipes

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

✓

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

single wire system

How are the returns from the lamps connected to the hull

✓

Are all the joints with the hull in accessible positions

✓

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 installation is supplied with a voltmeter and an amperemeter, fixed

yes

yes

main panel board

The copper used is guaranteed to have a conductivity of 98 per cent. that of pure copper.

98

Insulation of cables is guaranteed to have a resistance of not less than 600 megohms per statute mile after 24 hours' immersion in seawater.

600

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.

Adolf Ross Englandshmidt

Electrical Engineers

Date 20th Aug 1900

COMPASSES.

Distance between dynamo or electric motors and standard compass

50 feet

Distance between dynamo or electric motors and steering compass

50

The nearest cables to the compasses are as follows:—

A cable carrying	Amperes	feet from standard compass	feet from steering compass
A cable carrying	20	50	50
A cable carrying	20	50	50
A cable carrying	✓	✓	✓

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 no degrees on each course in the case of the standard compass and no degrees on each course in the case of the steering compass.

Builder's Signature. Date

GENERAL REMARKS.

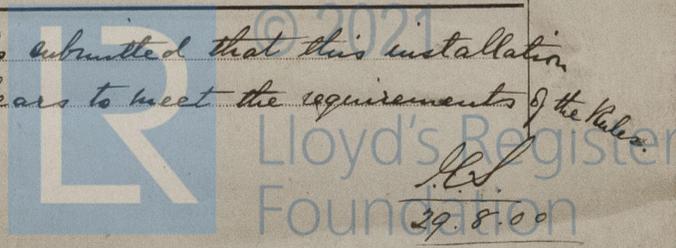
This Electric Light installation has been examined during construction, & the materials & workmanship appear to be good, & in accordance with the rules requirements.

Maurice Piteon

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

Committee's Minute

It is submitted that this installation appears to meet the requirements of the Rules.



THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

REPORT FORM No. 12.

20 Aug 1900