

# REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 2706

Port of Ariste Date of First Survey 11/5/11 Date of Last Survey 12/6/11 No. of Visits 2  
 No. in Reg. Book on the Iron or Steel Ferry Steamer No. 9 Port belonging to Constantinople  
 Built at Regensburg By whom Ch. Ruffot When built 1911  
 Owners Soc. de Nav. a vapeur dans la Mer Noire Owners' Address Constantinople  
 Yard No. 423 Electric Light Installation fitted by Siemens-Schuckert Werke When fitted 1911

**DESCRIPTION OF DYNAMO, ENGINE, ETC.**

Compound wound dynamo & geared Laval turbine.

Capacity of Dynamo 30 Amperes at 70 Volts, whether continuous or alternating current Continuous  
 Where is Dynamo fixed in Eng. Room. Whether single or double wire system is used Double  
 Position of Main Switch Board in Eng. Room. having switches to groups 4 of lights, &c., as below  
 Positions of auxiliary switch boards and numbers of switches on each No auxiliary switch boards.

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 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 No wire fuses.

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

Total number of lights provided for 48 arranged in the following groups:—

A	<u>12</u>	lights each of	<u>16</u>	candle power requiring a total current of	<u>6</u>	Amperes
B	<u>13</u>	lights each of	<u>16</u>	candle power requiring a total current of	<u>6.5</u>	Amperes
C	<u>13</u>	lights each of	<u>16</u>	candle power requiring a total current of	<u>6.5</u>	Amperes
D	<u>9</u>	lights each of	<u>16</u>	candle power requiring a total current of	<u>4.5</u>	Amperes
E		lights each of		candle power requiring a total current of		Amperes
	<u>Forward Mast head</u>	light with <u>4</u> lamps each of	<u>16</u>	candle power requiring a total current of	<u>Included in group C</u>	Amperes
	<u>2 Side</u>	light with <u>2</u> lamps each of	<u>16</u>	candle power requiring a total current of	<u>" " B</u>	Amperes
		Cargo lights of <u>No cargo lights.</u>		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 24 Amperes, comprised of 20 wires, each 17 L.S.G. diameter, .048 square inches total sectional area  
 Branch cables carrying 6.62 Amperes, comprised of 1 wires, each 13/4 L.S.G. diameter, .0063 square inches total sectional area  
 Branch cables carrying 4.2 Amperes, comprised of 1 wires, each 14/5 L.S.G. diameter, .0045 square inches total sectional area  
 Leads to lamps carrying 2.5 Amperes, comprised of 1 wires, each 17 L.S.G. diameter, .0024 square inches total sectional area  
 Cargo light cables carrying \_\_\_\_\_ Amperes, comprised of \_\_\_\_\_ wires, each \_\_\_\_\_ L.S.G. diameter, \_\_\_\_\_ square inches total sectional area

**DESCRIPTION OF INSULATION, PROTECTION, ETC.**

The wires are insulated with a layer of pure rubber then with a layer of vulcanizing india rubber, then with a layer of rubber coated tape, then with cotton water proof covering, some of the cables being armoured & lead covered.

Joints in cables, how made, insulated, and protected

Joints soldered & insulated. Joints of armoured cables in watertight boxes.

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 Yes.

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 wood casings. In exposed places armoured & lead covered cables are used.



**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 *Lead covered*

*Armoured cable used.*

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

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 *Trays where necessary* through bulkheads, &c. *Stuffing boxes*

How are cables carried through decks *through pipes & stuffing boxes*

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 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 *in Eng Room*

**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 *98* 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.

*Siemens Schuckert Werke GmbH H. J. B. Rymerby* Electrical Engineers  
*H. Miller*

Date *15. June, 1911*

**COMPASSES.**

Distance between dynamo or electric motors and standard compass

Distance between dynamo or electric motors and steering compass *30 feet*

The nearest cables to the compasses are as follows:—

A cable carrying <i>one</i> Amperes	feet from standard compass	<i>3</i> 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.

**Christoph Ruthof**

*H. Heeny* in Vollmacht

Builder's Signature. Date

**GENERAL REMARKS.**

*This installation has been fitted in accordance with the Rules to my satisfaction.*

*It is submitted that this vessel is eligible for THE RECORD Elec. light.*

*JWD 06/6/11*

*AFR*

*D. Ritchie*

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

Committee's Minute

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.



Lloyd's Register Foundation