

## REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 1347

Port of Dunkirk Date of First Survey 3<sup>rd</sup> November 07 Date of Last Survey 25<sup>th</sup> January 09 No. of Visits 13  
 No. in Reg. Book on the Iron or Steel Screw Ste "Eugene Grosos" Port belonging to Havre  
 Built at Dunkirk By whom Ateliers & Chantiers de France When built 1909  
 Owners Compagnie Havraise Peninsulaire Owners' Address Havre  
 Yard No. 56 Electric Light Installation fitted by Ateliers & Chantiers de France Dunk When fitted 1909

## DESCRIPTION OF DYNAMO, ENGINE, ETC.

an open type engine with piston valve - 250 revs per minute  
a continuous current; compound dynamo.

Capacity of Dynamo 9.5 Amperes at 100 Volts, whether continuous or alternating current

Where is Dynamo fixed in the engine room at aft bulkhead on starboard side

Position of Main Switch Board on after E.R. bulkhead side having switches to groups 5 switches of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each one auxiliary switch board having 3 switches is placed in pantry; another auxiliary switch board serving mast lights, &c. and having 5 switches is placed in chart room.

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 \_\_\_\_\_

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

Total number of lights provided for 159 lamps of 16 c. arranged in the following groups:—  
5 " " 25 c.

A	32	lights each of	16	candle power requiring a total current of	17.60	Amperes
B	14	lights each of	16	candle power requiring a total current of	7.70	Amperes
C	8	lights each of	16	candle power requiring a total current of	4.40	Amperes
D	76	lights each of	16	candle power requiring a total current of	41.80	Amperes
E	{ 29	lights each of	{ 25	candle power requiring a total current of	20.95	Amperes
included	2	Mast head light with 1 lamps each of	25	candle power requiring a total current of	2.00	Amperes
in group E	2	Side light with 1 lamps each of	25	candle power requiring a total current of	2.00	Amperes
	5	Cargo lights of 5 lamps each	16	candle power, <del>whether</del> 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 the chart room.

## DESCRIPTION OF CABLES.

Main cable carrying 92.45 Amperes, comprised of 37 wires, each 15/10 mm E.S.G. diameter, .101 square inches total sectional area

Branch cables carrying 41.80 Amperes, comprised of 19 wires, each 14/10 mm E.S.G. diameter, .045 square inches total sectional area

Branch cables carrying 17.60 Amperes, comprised of 7 wires, each 15/10 mm E.S.G. diameter, .019 square inches total sectional area

Leads to lamps carrying .55 Amperes, comprised of 1 wires, each 12/10 mm E.S.G. diameter, .0017 square inches total sectional area

Cargo light cables carrying 13.75 Amperes, comprised of 14 wires, each 12/10 mm E.S.G. diameter, .024 square inches total sectional area

## DESCRIPTION OF INSULATION, PROTECTION, ETC.

The insulation resistance of wires and cables is not less than 450 megohms / 1 km after 24 hours immersion in sea water.

Wires and cables are well protected being carried in iron pipes.

Joints in cables, how made, insulated, and protected there are no joints, all cables are fitted in one length.

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 no.

How are the cables led through the ship, and how protected cables are carried through cargo spaces in iron pipes, elsewhere in wooden mouldings.



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

Are they in places always accessible *yes (except in cargo spaces)*

What special protection has been provided for the cables in open alleyways or where exposed to weather or moisture *no cable exposed*

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

What special protection has been provided for the cables near boiler casings *the cables are not lead near the boilers*

What special protection has been provided for the cables in engine room *cables carried in wooden mouldings*

How are cables carried through beams \_\_\_\_\_ through bulkheads, &c. \_\_\_\_\_

How are cables carried through decks \_\_\_\_\_

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

If so, how are they protected *cables carried in iron pipes*

Are any lamps fitted in coal bunkers or spaces which may at times be used for cargo, coal, or baggage \_\_\_\_\_

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 *portable* 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 \_\_\_\_\_

**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 \_\_\_\_\_

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 *450* megohms per km 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 *31<sup>st</sup> March 1909*

**COMPASSES.**

Distance between dynamo or electric motors and standard compass *110' 0"*

Distance between dynamo or electric motors and steering compass *115' 0"*

The nearest cables to the compasses are as follows:—

A cable carrying	<i>7.2</i> Amperes	<i>7</i> feet from standard compass	<i>8.5</i> feet from steering compass
A cable carrying	<i>3.3</i> Amperes	<i>10</i> feet from standard compass	<i>16</i> feet from steering compass
A cable carrying	<i>11</i> Amperes	<i>11.5</i> feet from standard compass	<i>11.5</i> feet from steering compass

Have the compasses been adjusted with and without the electric installation at work at full power \_\_\_\_\_

The maximum deviation due to electric currents, etc., was found to be \_\_\_\_\_ degrees on \_\_\_\_\_ course in the case of the standard compass and \_\_\_\_\_ course in the case of the steering compass.

*J. Henry*  


Builder's Signature. Date *31<sup>st</sup> March 1909*

**GENERAL REMARKS.**

*The electric lighting installation is in very good order; protection of cables and wires and insulation are safe and efficient.*

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

Committee's Minute \_\_\_\_\_

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

REPORT FORM No. 13.

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS PAGE



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