

1915. 8 MAR 1910

Rpt. 13.

Received at London Office
MUN. 28 FEB 1910

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 2367.

Port of *Trieste* Date of First Survey *28-12-09* Date of Last Survey *23-2-10* No. of Visits *8*
No. in Reg. Book *on the Iron or Steel* *S. Sarajewo* Port belonging to *Trieste*
Built at *Marulone* By whom *Cantine Navele Tri* When built *1910*
Owners *Aloja Austriaco* Owners' Address *Trieste*
Yard No. *10* Electric Light Installation fitted by *A. G. G. Lewin Trieste* When fitted *1910*

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Continu current shunt wound dynamo coupled direct to compound engine. Gp No 215 MM dia 150 MM. 45 H.P.

Capacity of Dynamo *100* Amperes at *115* Volts, whether continuous or alternating current *Continuous*

Where is Dynamo fixed *In Engine Room* Whether single or double wire system is used *Double*

Position of Main Switch Board *Adjoining dynamo* having switches to groups *6* of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each *One in Wheel House with 7 switches*
One in Men Room with 2 switches, one at top of 1st Room with 4 switches
Also a section for without switches in 1st Class pantry & another in 2nd Class pantry.

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 *199* arranged in the following groups:—

A <i>1st Class cabin</i>	<i>42</i> lights each of <i>16</i>	candle power requiring a total current of <i>21</i> Amperes
B <i>2nd " "</i>	<i>26</i> lights each of <i>16</i>	candle power requiring a total current of <i>13</i> Amperes
C <i>Galleyways etc.</i>	<i>39</i> lights each of <i>10 + 16</i>	candle power requiring a total current of <i>11</i> Amperes
D <i>Cargo lights of galleyways</i>	<i>22</i> lights each of <i>16</i>	candle power requiring a total current of <i>11</i> Amperes
E <i>1st Class rooms</i>	<i>44</i> lights each of <i>16 + 10</i>	candle power requiring a total current of <i>20</i> Amperes
<i>Wheel House</i>	<i>5</i> lights each of <i>16</i>	candle power requiring a total current of <i>2.5</i> Amperes
<i>2 Mast head light with 2 lamps each of 2 " (red)</i>	<i>16</i>	candle power requiring a total current of <i>2</i> Amperes
<i>2 " Side light with 2 lamps each of 25</i>	<i>25</i>	candle power requiring a total current of <i>0.6</i> Amperes
<i>12 Cargo lights of 16</i>	<i>16</i>	candle power, whether incandescent or arc lights <i>Incandescent</i>

If are lights, what protection is provided against fire, sparks, &c. *No arc lights*

Where are the switches controlling the masthead and side lights placed *In wheel House*

DESCRIPTION OF CABLES.

Main cable carrying <i>96</i> Amperes, comprised of <i>38</i> wires, each <i>16/17</i> L.S.G. diameter, <i>1074</i> square inches total sectional area
Branch cables carrying <i>21</i> Amperes, comprised of <i>7</i> wires, each <i>15/16</i> L.S.G. diameter, <i>02251</i> square inches total sectional area
Branch cables carrying <i>13</i> Amperes, comprised of <i>7</i> wires, each <i>18</i> L.S.G. diameter, <i>0260</i> square inches total sectional area
Leads to lamps carrying <i>4</i> Amperes, comprised of <i>4</i> wires, each <i>15</i> L.S.G. diameter, <i>00284</i> square inches total sectional area
Cargo light cables carrying <i>3</i> Amperes, comprised of <i>1</i> wires, each <i>15</i> L.S.G. diameter, <i>00407</i> 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 vulcanising india rubber then with a layer of indiarubber coated tape. The whole is then vulcanised & covered with rubber coated tape & made watertight with insulating tape. In some cases the joints are in tight 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 & also in iron tubes*

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

Lined with fibre

in iron tubes

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

Iron tubes

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

Iron tubes

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

Iron tubes

How are cables carried through beams

Through fibre ferrules

through bulkheads, &c.

Stuffing boxes

How are cables carried through decks

Through iron tubes

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

Yes

Yes

If so, how are they protected

Armoured cables

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

Yes

If so, how are the lamp fittings and cable terminals specially protected

Thick glass cases + in wire, + in cases

Where are the main switches and cut outs for these lights fitted

In engine room

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

✓

The installation is supplied with a voltmeter and

an amperemeter, fixed

in big 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.

A. E. G. UNION
SOCIETÀ ANONIMA DI ELETTRICITÀ
Ufficio Tecnico

Electrical Engineers

Date

23. Feb 1910

COMPASSES.

Distance between dynamo or electric motors and standard compass

about 56 feet.

Distance between dynamo or electric motors and steering compass

The nearest cables to the compasses are as follows:—

A cable carrying	Amperes	feet from standard compass	feet from steering compass
8	7	7	
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 Zero degrees on course in the case of the standard compass and Zero degrees on course in the case of the steering compass.

Per Canthare Navale Trestem
James Stewart

Builder's Signature.

Date

22/2/10

GENERAL REMARKS.

fitted in accordance with the Society's Rules & the workmanship is good. Notification of Elec. light should be under the Register's notice this vessel is eligible for THE RECORD. Elec. light.

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