

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 5730

Port of Trieste Day of First Survey 22. 4. 21 Date of Last Survey 23. 5. 21 No. of Visits Six
 No. in Reg. Book 100 on the Iron or Steel of Sonzo / SONZO Port belonging to Trieste
 Built at Trieste By whom Cantieri San Rocco SA When built 1921
 Owners Navigazione Libera Italiana Owners' Address _____
 Yard No. 38 Electric Light Installation fitted by Shipyard When fitted 1921

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Compound wound dynamo direct coupled to single cylinder steam engine. new 30 KW. dynamo engine fitted 4.34 in line

Capacity of Dynamo 120 Amperes at 110 Volts, whether continuous or alternating current continuous

Where is Dynamo fixed Bottom platform of Eng Room Whether single or double wire system is used double.

Position of Main Switch Board near dynamo having switches to groups A.B.C.D.E.F.G. of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each two on bridge with 5 & 6 switches respectively one in Salon with 4. 4 at aft end bridge space with 10. 2. 2 & 3 respectively one on bridge deck aft with 6; one in Eng Room with 6.

If fuses 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 fuses fitted to both flow and return wires or cables of all circuits including lamp circuits yes

Are the fuses of non-oxidizable metal yes and constructed to fuse at an excess of 100 per cent over the normal current

Are all fuses 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 fuses constructed of incombustible materials and fitted on incombustible bases yes

Total number of lights provided for 262 arranged in the following groups:—

A	<u>12 (25) & 29 (70)</u> lights each of <u>30, 32, 10, 25, 35, 16, 10</u> candle power requiring a total current of <u>10.16</u> Amperes
B	<u>WIRELESS</u> lights each of <u>—</u> candle power requiring a total current of <u>15.00</u> Amperes
C	<u>2 (21)</u> lights each of <u>1000</u> candle power requiring a total current of <u>10.00</u> Amperes
D	<u>5 (70) & 19 (25)</u> lights each of <u>5, 10, 15, 20, 30, 16, 15, 10</u> candle power requiring a total current of <u>9.46</u> Amperes
E	<u>118 (70) & 26 (25)</u> lights each of <u>120 & 16</u> candle power requiring a total current of <u>21.90</u> Amperes
F	<u>RESERVE</u> lights each of <u>—</u> candle power requiring a total current of <u>—</u> Amperes
G	<u>2</u> Mast head light with <u>1</u> lamps each of <u>32</u> candle power requiring a total current of <u>Included in</u> Amperes
H	<u>2</u> Side light with <u>2</u> lamps each of <u>16</u> candle power requiring a total current of <u>along</u> Amperes
I	<u>30 & 5</u> Cargo lights of <u>10 & 50</u> respectively candle power, whether incandescent or arc lights <u>along</u>

If arc lights, what protection is provided against fire, sparks, &c. also two incandescent lamps of 1000 CP.

Where are the switches controlling the masthead and side lights placed In Chart Room.

DESCRIPTION OF CABLES.

Main cable carrying	<u>78</u> Amperes, comprised of <u>19</u> wires, each <u>3.70</u> S.W.G. diameter, <u>70</u> square inches total sectional area
Branch cables carrying	<u>22</u> Amperes, comprised of <u>7</u> wires, each <u>1.44</u> S.W.G. diameter, <u>10</u> square inches total sectional area
Branch cables carrying	<u>12</u> Amperes, comprised of <u>7</u> wires, each <u>0.86</u> S.W.G. diameter, <u>6</u> square inches total sectional area
Leads to lamps carrying	<u>202</u> Amperes, comprised of <u>1</u> wires, each <u>1.4</u> S.W.G. diameter, <u>1.5</u> square inches total sectional area
Cargo light cables carrying	<u>5</u> Amperes, comprised of <u>7</u> wires, each <u>0.58</u> S.W.G. diameter, <u>4</u> square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

The wires are tinned, two coats of rubber, then braided, lead, jute and armoured.

Joints in cables, how made, insulated, and protected In water tight boxes.

Are all the joints of cables thoroughly soldered, and the flux used not containing acids or other corrosive substances 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 Armoured, or lead covered, fastened with iron clips.



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 lead covered or in tubes*

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

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

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

How are cables carried through beams *Armoured* through bulkheads, &c. *W.T. glands*

How are cables carried through decks *W.T. in tubes*

Are any cables run through coal bunkers *No* or cargo spaces *Yes* or spaces which may be used for carrying cargo, stores, or baggage *No*

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 *✓*

Where are the main switches and fuses for these lights fitted *✓*

If in the spaces, how are they specially protected *✓*

Are any switches or fuses fitted in bunkers *No*

Cargo light cables, whether portable or permanently fixed *Portable* How fixed *Plugs*

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 *✓*

Is the installation supplied with a voltmeter *Yes*, and with an amperemeter *Yes*, fixed *Main Switch Room*

VESSELS BUILT FOR CARRYING PETROLEUM.

In vessels built for carrying petroleum, are all switches and fuses fitted in positions not liable to the accumulation of petroleum vapour or gas *✓*

Are any switches, fuses, 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 not less than that of the Engineering Standards Committee's standard, and the wires are protected by tinning from the sulphur compounds present in the insulating material.

Insulation of cables is guaranteed to have a resistance of not less than _____ megohms per statute mile at 60° Fahrenheit after 24 hours' immersion in water, the test being made after one minute's electrification at not less than 500 volts and while the cable is still immersed.

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. M. Searcy Electrical Engineers Date *5-2-21*

COMPASSES.

Distance between dynamo or electric motors and standard compass *about 120 ft*

Distance between dynamo or electric motors and steering compass *do*

The nearest cables to the compasses are as follows:—

A cable carrying <i>2</i> Amperes <i>8</i> feet from standard compass <i>8</i> feet from steering compass
A cable carrying <i>1/2</i> Amperes <i>in the</i> feet from standard compass <i>in the</i> 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 _____ degrees on _____ course in the case of the steering compass.

CANTIERE SAN RUCCO S. A.
DIREZIONE TECNICA

Primer Builder's Signature. Date *5/8/21*

GENERAL REMARKS.

This installation has been fitted in accordance with the Rules, the materials and workmanship are good, and on completion was tested under full working conditions with satisfactory results.

J. M. Searcy Surveyor to Lloyd's Register of Shipping. Date *19/8/21*

Committee's Minute

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

