

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 2895

Port of Trieste Date of First Survey 16/3/14 Date of Last Survey 11/4/14 No. of Visits four
 No. in Reg. Book on the Iron or Steel Ship ERY Port belonging to Trieste
 Built at Monfalcone By whom Cantieri Navali Triestini When built 1914
 Owners Unione Austriaca di Nav. Owners' Address Trieste
 Yard No. 46 Electric Light Installation fitted by Shipbuilders When fitted 1914

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Single cylinder vertical engine direct-coupled compound wound dynamo.

Capacity of Dynamo 90 Amperes at 110 Volts, whether continuous or alternating current continuous

Where is Dynamo fixed Bottom front platform Whether single or double wire system is used Double

Position of Main Switch Board Near dynamo having switches to groups 5 of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each at top of engine room, 2 auxiliary boards each having switches, 1 in pantry without switches, 1 in wheelhouse with switches.

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-oxidisable 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 205 arranged in the following groups:—

A	<u>33</u> lights each of	<u>16</u> candle power requiring a total current of	<u>17</u> Amperes
B	<u>54</u> lights each of	<u>16</u> candle power requiring a total current of	<u>27</u> Amperes
C	<u>42</u> lights each of	<u>16</u> candle power requiring a total current of	<u>21</u> Amperes
D	lights each of	candle power requiring a total current of	Amperes
E	lights each of	candle power requiring a total current of	Amperes
<u>2</u>	Mast head light with <u>1</u> lamps each of	<u>32</u> candle power requiring a total current of	<u>2</u> Amperes
<u>2</u>	Side light with <u>1</u> lamps each of	<u>32</u> candle power requiring a total current of	<u>2</u> Amperes

12 pairs of 16 light Cargo lights of each light 16 candle power, whether incandescent or arc lights Incandescent

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 90 Amperes, comprised of 19 wires, each 15 S.W.G. diameter, .075 square inches total sectional area

Branch cables carrying 87 Amperes, comprised of 7 wires, each 15 S.W.G. diameter, .028 square inches total sectional area

Branch cables carrying 47 Amperes, comprised of 7 wires, each 16 S.W.G. diameter, .022 square inches total sectional area

Leads to lamps carrying 22 Amperes, comprised of 1 wires, each 18 S.W.G. diameter, .0018 square inches total sectional area

Cargo light cables carrying 36 Amperes, comprised of 7 wires, each 16 S.W.G. diameter, .022 square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

The wires are tinned, covered with 2 layers of rubber, then with rubber coated tape. Some of the cables are lead covered, with or without air cushioning.

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

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 In accommodation lead covered cables in other places armoured cables clipped to decks etc. No cables are enclosed in wood covers.



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DESCRIPTION OF INSULATION, PROTECTION, ETC.—continued.

Are they in places always accessible Yes except in hold & bunkers

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

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

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 Armoured cables only through bulkheads, &c. Made watertight

How are cables carried through decks In pipes made watertight

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 Armoured cables clipped under decks

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 _____

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 Board

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 600 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.

CANTIERE NAVALE TRIESTINO Hewart Electrical Engineers Date 15/4/14

COMPASSES.

Distance between dynamo or electric motors and standard compass 110 feet

Distance between dynamo or electric motors and steering compass 100 feet

The nearest cables to the compasses are as follows:—

A cable carrying <u>8</u> Amperes	<u>10</u> feet from standard compass	<u>6</u> feet from steering compass
A cable carrying <u>1/2</u> Amperes	<u>4</u> feet from standard compass	<u>at</u> 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.

CANTIERE NAVALE TRIESTINO Hewart Builder's Signature. Date 15/4/14

GENERAL REMARKS.

This installation has been fitted in accordance with the rules & has been tested & found satisfactory.

It is submitted that this vessel is eligible for **THE RECORD, Elec. light.** JWD 20/4/14 Surveyor to Lloyd's Register of British and Foreign Shipping.

B. Ritchie.

Committee's Minute TUE. APR. 21. 1914



Im. 9.12.—Transfer.