

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 718

Port of Trieste Date of First Survey 12th May Date of Last Survey 28th Jun No. of Visits 8
 No. in Reg. Book on the Steel S. S. Galicia Port belonging to Trieste
 Built at Trieste By whom Lloyd Arsenal When built 1902.4
 Owners Lloyd Austriaco Owners' Address J. Galatti When fitted 1902.5
 Yard No. 66 Electric Light Installation fitted by J. Galatti

DESCRIPTION OF DYNAMO, ENGINE, ETC.

The Dynamo compound wound coupled direct to one compound (Tandem) engine of 4 H.P. 8" - L.P. 14" Stroke 5 7/8" and 350 Revol.

Capacity of Dynamo 225 Amperes at 100 Volts, whether continuous or alternating current continuous

Where is Dynamo fixed in Engine Room, starting platform Starboard side

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

Positions of auxiliary switch boards and numbers of switches on each 3 switch Boards placed on different parts of the ship, having altogether 9 switches

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

Are the cut outs of non-oxidizable metal yes and constructed to fuse at an excess of 50 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 yes

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

Total number of lights provided for 271 arranged in the following groups :-

A	30	lights each of	16	candle power requiring a total current of	15	Amperes
B	46	lights each of	16	candle power requiring a total current of	23	Amperes
C	120	lights each of	16	candle power requiring a total current of	60	Amperes
D	35	lights each of	16	candle power requiring a total current of	17.5	Amperes
E	36	lights each of	16	candle power requiring a total current of	18	Amperes
	2	^{one on each} Mast head light with 2 lamps each of	32	candle power requiring a total current of	2	Amperes
	2	Side light with 2 lamps each of	32	candle power requiring a total current of	2	Amperes
	4	Cargo lights of 5 Amp each		requiring a total current of	20	

If are lights, what protection is provided against fire, sparks, &c. by means of large glass globes and metal guards

Where are the switches controlling the masthead and side lights placed in the chart room.

DESCRIPTION OF CABLES.

Main cable carrying	157.5	Amperes, comprised of	2 x 37	wires, each	16	L.S.G. diameter,	.222	square inches total sectional area
Branch cables carrying	23	Amperes, comprised of	19	wires, each	18	L.S.G. diameter,	.038	square inches total sectional area
Branch cables carrying	60	Amperes, comprised of	37	wires, each	18	L.S.G. diameter,	.074	square inches total sectional area
Leads to lamps carrying	0.5	Amperes, comprised of	1	wires, each	18	L.S.G. diameter,	.0020	square inches total sectional area
Cargo light cables carrying	20	Amperes, comprised of	7	wires, each	17	L.S.G. diameter,	.0175	square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

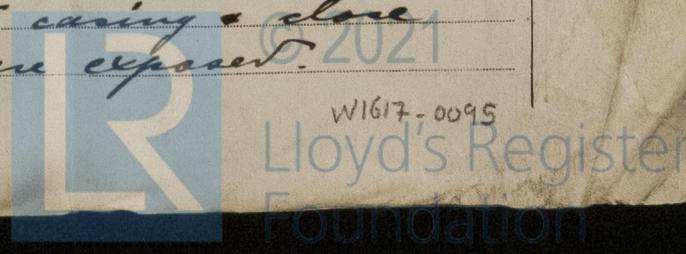
Wires carried through metal & iron tubes where exposed to weather & through wood casing inside

Joints in cables, how made, insulated, and protected India rubber tape & India solution, compound tape and varnishes with India rubber solution

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 none

Are there any joints in or branches from the cable leading from dynamo to main switch board none

How are the cables led through the ship, and how protected in heavy wood casing & close to the deck & through iron tubes where exposed.



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 in Teak casing & through iron tubes

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

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

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

How are cables carried through beams Teak frames through bulkheads, &c. glands

How are cables carried through decks glands & iron 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 yes

If so, how are they protected through iron tubes

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

If so, how are the lamp fittings and cable terminals specially protected strong glass & metal guards

Where are the main switches and cut outs for these lights fitted in Engine Room & on deck houses

If in the spaces, how are they specially protected none

Are any switches or cut outs fitted in bunkers none

Cargo light cables, whether portable or permanently fixed portable How fixed by bolts on deck houses

In vessels fitted on the single wire system, how is the dynamo terminal fixed to the hull of vessel double wire system

How are the returns from the lamps connected to the hull —

Are all the joints with the hull in accessible positions yes

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 also supplied with a voltmeter and one Volt & Amp amperemeter, fixed on the main switch

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.

Eng. G. Padellaro G. Galati Electrical Engineers Date 28th June 1912

COMPASSES.

Distance between dynamo or electric motors and standard compass 43 feet

Distance between dynamo or electric motors and steering compass 69 "

The nearest cables to the compasses are as follows:—

A cable carrying	<u>25</u>	Amperes	<u>18</u>	feet from standard compass	<u>25</u>	feet from steering compass
A cable carrying	<u>6.8</u>	Amperes	<u>9</u>	feet from standard compass	<u>16</u>	feet from steering compass
A cable carrying	<u>2</u>	Amperes		feet from standard compass	<u>3</u>	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 any course in the case of the standard compass and nil degrees on any course in the case of the steering compass.

F. Rodolfini Builder's Signature. Date 28th June 1912

GENERAL REMARKS.

The complete electric lighting installation including dynamo has been supplied & fitted by G. Gallati Trieste. The mainmanship is of a good description & in accordance with the Rules & in my opinion worthy of the Committee consideration.

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

Committee's Minute

It is submitted that this installation appears to be satisfactory.

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

REPORT FORM No. 11.