

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 5925

Port of Belfast Date of First Survey March 27 Date of Last Survey May 25 No. of Visits 6
 No. in Reg. Book on the London Register 100 Port belonging to Genoa
 Built at Belfast By whom Harland & Wolff L^r When built 1905
 Owners Italia Società di Navigazione Owners' Address Genoa
 Yard No. 368 Electric Light Installation fitted by W. H. Allen & Co. L^r When fitted 1905

DESCRIPTION OF DYNAMO, ENGINE, ETC.

One 8' x 13' x 8' Engine & 4 pole dynamo compound wound
 One 7' x 6' " " "

Capacity of Dynamos 200 & 72 Amperes at 105 Volts, whether continuous or alternating current continuous

Where is Dynamo fixed Larger Dynamo in Thrust Room, Smaller in Dynamo Room Main Deck level, port

Position of Main Switch Board on after bulkhead Pass having switches to groups A, B, C, D, E, F, G, H, J, K, L of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each emergency switchboard in upper Dynamo room, 3 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 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 yes

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

Total number of lights provided for 472 arranged in the following groups:—
1st Class B & B Deck say 62 lights each of 16 candle power requiring a total current of 38 35 Amperes
A 1st Class Upper Deck say 67 lights each of 16 candle power requiring a total current of 21 25 Amperes
3rd Class Forward say 44 lights each of 16 candle power requiring a total current of 7 48 Amperes
2nd Class Aft say 37 lights each of 16 candle power requiring a total current of 23 24 Amperes
Deck General say 84 lights each of 16 candle power requiring a total current of 14 20 Amperes
C Signaling say 13 lights each of 16 candle power requiring a total current of 1.14 Amperes
Port B & B Deck say 42 lights each of 16 candle power requiring a total current of 1.14 Amperes
D Police Midship Deck say 41 lights each of 16 candle power requiring a total current of 1.14 Amperes
Engine Room say 34 lights each of 16 candle power requiring a total current of 1.14 Amperes
E Store Room say 24 lights each of 16 candle power requiring a total current of 1.14 Amperes
2 Mast head lights with 1 lamp each of 32 candle power requiring a total current of 1.14 Amperes
2 Side lights with 1 lamp each of 32 candle power requiring a total current of 1.14 Amperes
4 Cargo lights each of 5 16 candle power, whether incandescent or are lights incandescent

If are lights, what protection is provided against fire, sparks, &c. —

Where are the switches controlling the masthead and side lights placed in Wheelhouse on Bridge

DESCRIPTION OF CABLES.

Main cable carrying 200 Amperes, comprised of 61 wires, each 16 L.S.G. diameter, .200 square inches total sectional area
 Branch cables carrying 51 Amperes, comprised of 19 wires, each 15 L.S.G. diameter, .0789 square inches total sectional area
 Branch cables carrying 41 Amperes, comprised of 19 wires, each 16 L.S.G. diameter, .062 square inches total sectional area
 Branch cables carrying 26 Amperes, comprised of 7 wires, each 17 L.S.G. diameter, .0477 square inches total sectional area
 Leads to lamps carrying 3.5 Amperes, comprised of 7 wires, each 16 L.S.G. diameter, .0229 square inches total sectional area
 Cargo light cables carrying 2.9 Amperes, comprised of 145 wires, each 38 L.S.G. diameter, .0043 square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

The conductor is covered with one layer pure Para rubber, then two layers vulcanizing rubber, the whole vulcanized together & finally taped & braided; the main cables, after vulcanizing, are spirally armoured with G. I. wire; the wires in Machinery spaces, after vulcanizing, are lead covered, lined & armoured with G. I. wire

Joints in cables, how made, insulated, and protected

Thoroughly soldered, insulated with two layers pure rubber, then two layers prepared tape & varnished

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, none in bunkers

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 strong wood casing, main cables being armoured with G. I. wire

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 *lead covered, served & armoured*

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat *none near under heat*

What special protection has been provided for the cables near boiler casings *Lead covered served & spirally armoured*

What special protection has been provided for the cables in engine room *with G.I. wires*

How are cables carried through beams *in fibre ferrules* through bulkheads, &c. *in fibre ferrules*

How are cables carried through decks *in G.I. pipes bushed with fibre* " W.T. " *in W.T. glands with brass nut*

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

If so, how are they protected *through bunker in iron pipe, elsewhere in strong wood casing*

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

If so, how are the lamp fittings and cable terminals specially protected *the glass, guard & lamp are removed & a cast*

Where are the main switches and cut outs for these lights fitted *in stairway on deck below* *brass cap substituted completely*

If in the spaces, how are they specially protected *covering the terminals*

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 *screwed to yoke of magnet*

How are the returns from the lamps connected to the hull *soldered to 3/8 brass screws*

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 supplied with *2* voltmeters and *2* amperemeters fixed on *matchboards*

The copper used is guaranteed to have a conductivity of *100* per cent. that of pure copper.

Insulation of cables is guaranteed to have a resistance of not less than *2500* 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.

FOR W. H. ALLEN, SON & CO. LTD.

C. P. Hunter

Electrical Engineers

Date

24.11.05

COMPASSES.

Distance between dynamo or electric motors and standard compass *90 ft, to double wired fan motor in Ladies Saloon 18 ft*

Distance between dynamo or electric motors and steering compass *90 ft, — — — — — 20 ft*

The nearest cables to the compasses are as follows:—

A cable carrying *10* Amperes *5* feet from standard compass *8* feet from steering compass

A cable carrying *—* Amperes *—* feet from standard compass *—* feet from steering compass

A cable carrying *The above is double wired* 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 *every* course in the case of the standard compass and *nil* degrees on *every* course in the case of the steering compass.

FOR HARLAND & WOLFF LTD.

A. H. Capin

Builder's Signature.

Date

1st July 1905.

GENERAL REMARKS.

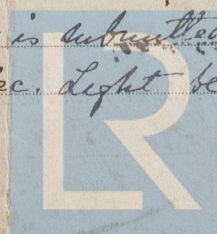
This installation appears to be of good description, and has been fitted in accordance with the Rules.

R. F. D. Jennings

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

Committee's Minute

It is submitted that the Record Rec. Light be noted in the Reg. Books.



Lloyd's Register Foundation

14.7.05

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

REPORT FORM No. 18.