

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 4921

Port of Belfast Date of First Survey 14th Aug 98 Date of Last Survey 6th Oct 98 No. of Visits 4
 No. in Reg. Book on the Iron or Steel S.S. Rippington Harle Port belonging to London
 Built at Belfast By whom W. R. Man Clark & Co. Ltd When built 1898
 Owners Messrs. Hauldown Bros Owners' Address
 Yard No. 148 Electric Light Installation fitted by Edie Electrical Co. Ltd When fitted 1898

DESCRIPTION OF DYNAMO, ENGINE, ETC. Open fronted vertical inverted double acting cylinders 9 1/2 x 9" coupled direct on same bed plate to Antwerp Dynamo Compound wound and with Gramme Armature

Capacity of Dynamo 400 Amperes at 65 Volts, whether continuous or alternating current Continuous

Where is Dynamo fixed Engine starting platform

Position of Main Switch Board 2 ft from engine having switches to five circuits of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each Saloon pantry 3 switches, Wheel house 10 switches, Engine room top platform 4 switches. Each circuit has a separate return to switchboard

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 Special tin and constructed to fuse at an excess of 25% 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 given to Engineer

Are all switches and cut-outs constructed of incombustible materials and fitted on incombustible bases Slate or porcelain

Total number of lights provided for 274 arranged in the following groups:—

A Engine	40	lights each of	16	candle power requiring a total current of	30	Amperes
B Saloon	40	lights each of	16	candle power requiring a total current of	30	Amperes
C amidships	50	lights each of	16	candle power requiring a total current of	37 1/2	Amperes
D foreship	40	lights each of	16	candle power requiring a total current of	30	Amperes
E aftership	20	lights each of	16	candle power requiring a total current of	15	Amperes
One	Mast head light with	one	lamps each of	16	candle power requiring a total current of	1.75 Amperes
Two	Side light with	one	lamps each of	16	candle power requiring a total current of	1.50 Amperes

Six Cargo lights of 8 lamps 16 candle power, ~~whether~~ incandescent or ~~are~~ lights 36 amperes
3 are lamps of 10 amperes each 30

If are lights, what protection is provided against fire, sparks, &c. a strong opaque globe closed at bottom & wired

Where are the switches controlling the masthead and side lights placed Wheel house of lower bridge

DESCRIPTION OF CABLES.

Main cable carrying 300 Amperes, comprised of 37 wires, each No 12 L.S.G. diameter, 0.221 square inches total sectional area
 Branch cables carrying 60 Amperes, comprised of 19 wires, each No 16 L.S.G. diameter, 0.624 square inches total sectional area
 Branch cables carrying 40 Amperes, comprised of 7 wires, each No 13 L.S.G. diameter, 0.464 square inches total sectional area
 Leads to lamps carrying 1 Amperes, comprised of 1 wires, each No 18 L.S.G. diameter, 0.018 square inches total sectional area

Cargo light cables carrying 8 Amperes, comprised of 270 wires, each No 38 L.S.G. diameter, 0.086 square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC. all wire & cables tinned double cotton covered 3 layers pure & vulcanizing rubber one tape all vulcanized together then braided & compounded. (Ozokerite) Engine room & Cattle spaces Armonid & lead covered

Joints in cables, how made, insulated, and protected all soldered using resin as a flux insulated up to original insulation,

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 all easily gettable

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 all along deck run in cargo space or bunkers, all in castings keeping in forward & after main which are led through galvanized iron pipes under main rail

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 &

Armoured

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

there are no cables in such places

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

Lead covered & from gas pipes

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

Lead covered & braided

How are cables carried through beams

hard wood ferrules through bulkheads, &c.

brass stuffing boxes

How are cables carried through decks

from gas pipes jointed on to deck with flange

Are any cables run through coal bunkers

no

or cargo spaces

no

or spaces which may be used for carrying cargo, stores, or baggage

no

If so, how are they protected

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

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

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

If in the spaces, how are they specially protected

Are any switches or cut outs fitted in bunkers

Cargo light cables, whether portable or permanently fixed

portable

How fixed

brass screw sockets

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

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 a voltmeter and

an amperometer, fixed

on Main Switchboard

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

2,000

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.

GLOBE ELECTRICAL COMPANY.

McGovern J. M. Electrical Engineers

Electrical Engineers

Date 19 October 1898

COMPASSES.

Distance between dynamo or electric motors and standard compass

300 ft

Distance between dynamo or electric motors and steering compass

200 ft

The nearest cables to the compasses are as follows:—

A cable carrying	20	Amperes	30	feet from standard compass	20	feet from steering compass
A cable carrying	7	Amperes	7	feet from standard compass	10	feet from steering compass
A cable carrying	1	Amperes	12	feet from standard compass	9"	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

degrees on

course in the case of the

standard compass and

degrees on

course in the case of the steering compass.

THE WORKMAN, CLARK & CO., LIMITED

Builder's Signature

Builder's Signature

Date

GENERAL REMARKS.

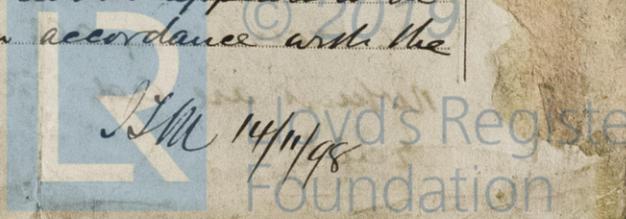
This installation appears to be in accordance with our Rules

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

Committee's Minute

This installation appears to be fitted in accordance with the Rules.

- so all S.A.H.



THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

REPORT FORM No. 1.