

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 8678

Port of Leith Date of First Survey 9th Decr. '97 Date of Last Survey 18th March '98 No. of Visits 5
 No. in Reg. Book 428 on the ~~Iron~~ Steel S. S. "Roman" Port belonging to Leith
 Built at Leith By whom Remeg & Ferguson (Lm^d) When built 1897/8
 Owners Geo. Gibson & Co. Owners Address Leith
 Yard No. 153 Electric Light Installation fitted by Messrs. King & Co. of Leith When fitted 1898

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Compound wound dynamo by Thompson & Co. coupled direct to open type double acting engine 7" x 6"

Capacity of Dynamo 65 Amperes at 100 Volts, whether continuous or alternating current continuous

Where is Dynamo fixed In Engine Room

Position of Main Switch Board Do having switches to groups 6 of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each no auxiliary switchboards but an all switch to each lamp

If cut outs are fitted on main switch board to the cables of main circuit yes and on each auxiliary switch boards 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 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 110 lights + 2 arcs arranged in the following groups:—

A aft.	13	lights each of	16	candle power requiring a total current of	5.78	Amperes
B mid	4	lights each of	16	candle power requiring a total current of	5.45	Amperes
C fore	12	lights each of	16	candle power requiring a total current of	7.2	Amperes
D fwd	8	lights each of	16	candle power requiring a total current of	4.8	Amperes
E		lights each of	16	candle power requiring a total current of		Amperes
No Mast head light with		lamps each of		candle power requiring a total current of		Amperes
No Side light with		lamps each of		candle power requiring a total current of		Amperes

2 Cargo lights of 1,400 each candle power, whether incandescent or arc lights arc
 If arc lights, what protection is provided against fire, sparks, &c. enclosed in weather proof lantern with glass sides & bottom

Where are the switches controlling the masthead and side lights placed There are no Masthead or side lights

DESCRIPTION OF CABLES.

Main cable carrying	65	Amperes, comprised of	19	wires, each	15	L.S.G. diameter, .0799 square inches total sectional area
Branch cables carrying	8	Amperes, comprised of	7	wires, each	16	L.S.G. diameter, .0229 square inches total sectional area
Branch cables carrying	5	Amperes, comprised of	7	wires, each	20	L.S.G. diameter, .0072 square inches total sectional area
Leads to lamps carrying	2	Amperes, comprised of	3	wires, each	20	L.S.G. diameter, .0031 square inches total sectional area
Cargo light cables carrying	20	Amperes, comprised of	7	wires, each	16	L.S.G. diameter, .0229 square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

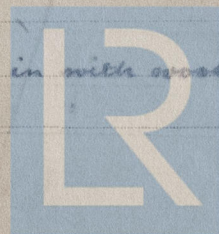
Tinned copper wire insulated with pure rubber, vulcanized rubber india rubber coated tape, provided with tarred flax & coated preservative compound.

Joints in cables, how made, insulated, and protected splined, soldered, covered with prepap rubber slip & prepared waterproof rubber tape

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

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 grooved battens covered in with wood



© 2019

Lloyd's Register
Foundation
LTH567-0049

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 *strong wood casing*

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat *strong lead wood casing*

What special protection has been provided for the cables near boiler casings *no*

What special protection has been provided for the cables in engine room *no*

How are cables carried through beams *hard wood plugs*

through bulkheads, &c. *iron tubes with watertight glands*

How are cables carried through decks *iron tube*

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 *iron piping*

Are any lamps fitted in coal bunkers or spaces which may at times be used for cargo, coals, or baggage *no*

~~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 *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 *Double wire system*

~~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 *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.

Henry C. Leith Electric Works, Electrical Engineers

Date *16th March 1898*

COMPASSES.

Distance between dynamo or electric motors and standard compass

Distance between dynamo or electric motors and steering compass

The nearest cables to the compasses are as follows:—

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

The maximum deviation due to electric currents, &c. to be degrees on course in the case of the standard compass and degrees on course in the case of the steering compass.

*Ramage & Ferguson Ltd
Alex J. Ferguson Secy*

Builder's Signature

Date *7th April, 1898*

GENERAL REMARKS.

The fittings of this installation were examined by me while in progress & carried out to my satisfaction and in accordance with the Rules.—

R. Paulsen

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

Committee's Minute

This installation appears to be satisfactory

Lloyd's Register Foundation

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.