

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 84546.

Port of *Spencer* Date of First Survey 17 AUG 1921 Date of Last Survey 17 AUG 1921 No. of Visits
 No. in Reg. Book on the *Iron or Steel* *S.S. Salcombe Regis* Port belonging to
 Built at *Gulston Broad Lough, Londonderry* By whom *John Blamhus Ltd* When built 1921
 Owners *Harrison Bros & Co. Ltd.* Owners' Address *Cardiff*
 Yard No. 511 Electric Light Installation fitted by *Chippagoulds Ltd.* When fitted 1921

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Robert Steam Engine No. 37022 direct coupled to Electromotor compound wound generator. No. 29412 running at 400 revs. (1 K.W.)
 Capacity of Dynamo 10 Amperes at 100 Volts, whether continuous or alternating current *Continuous*
 Where is Dynamo fixed *Engine room Aft side* Whether single or double wire system is used *Double*
 Position of Main Switch Board *Engine room Port side* having switches to groups *A. B. C. D.* of lights, &c., as below
 Positions of auxiliary switch boards and numbers of switches on each

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-oxidizable metal *Yes* and constructed to fuse at an excess of *50%* 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 *40* arranged in the following groups:—

| | | | | | | |
|---|----|----------------------|----|--------------------------------------------------|--------------|---------|
| A | 20 | lights each of | 28 | candle power requiring a total current of | 6 | Amperes |
| B | 10 | lights each of | 28 | candle power requiring a total current of | 3 | Amperes |
| C | 5 | lights each of | 28 | candle power requiring a total current of | 1.5 | Amperes |
| D | 1 | lights each of | 28 | candle power requiring a total current of | .3 | Amperes |
| E | — | lights each of | — | candle power requiring a total current of | — | Amperes |
| — | — | Mast head light with | — | lamps each of | — | Amperes |
| — | — | Side light with | — | lamps each of | — | Amperes |
| 3 | — | Cargo lights of | — | candle power, whether incandescent or are lights | Incandescent | — |

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

Where are the switches controlling the masthead and side lights placed *Yes*

DESCRIPTION OF CABLES.

Main cable carrying 10 Amperes, comprised of 7 wires, each 18 S.W.G. diameter, .0125 square inches total sectional area
 Branch cables carrying 2 Amperes, comprised of 7 wires, each 20 S.W.G. diameter, .00706 square inches total sectional area
 Branch cables carrying Amperes, comprised of wires, each S.W.G. diameter, square inches total sectional area
 Leads to lamps carrying .3 Amperes, comprised of 1 wires, each 18 S.W.G. diameter, .0018 square inches total sectional area
 Cargo light cables carrying 3 Amperes, comprised of 1 wires, each 18 S.W.G. diameter, .0018 square inches total sectional area

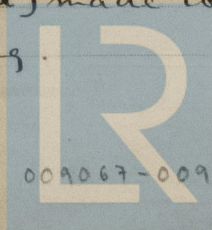
DESCRIPTION OF INSULATION, PROTECTION, ETC.

All main cables & branch mains installed in heavy gauge steel conduit & armoured lead covered. Circuit wiring in single lead covered wire 600 meg. V.I.R. cables used through out.
 Joints in cables, how made, insulated, and protected *None*

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 *None*

How are the cables led through the ship, and how protected *In steel conduit (screwed) made watertight & armoured lead covered & protected by wood casing.*



© 2021

Lloyd's Register Foundation

009067-009073-0429

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 *Steel conduit made thoroughly watertight.*

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat *Away from such sources.*

What special protection has been provided for the cables near boiler casings *Kept at least 2' 6" away measured horizontally.*

What special protection has been provided for the cables in engine room *In steel conduit*

How are cables carried through beams *In conduit or lead bushed for ^{armoured cable} through bulkheads, &c. In steel conduits & watertight flanges.*

How are cables carried through decks *In steel conduit or caulked.*

Are any cables run through coal bunkers *Yes* or cargo spaces *Yes* or spaces which may be used for carrying cargo, stores, or baggage

If so, how are they protected *In steel conduit at sides and kept near top & wood cased.*

Are any lamps fitted in coal bunkers or spaces which may at times be used for cargo, coats, 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 on *Main Switchboard.*

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.

Chipperfield & Co.

Electrical Engineers

Date *29/7/21*

COMPASSES.

Distance between dynamo or electric motors and standard compass *55 ft.*

Distance between dynamo or electric motors and steering compass *55 ft.*

The nearest cables to the compasses are as follows:—

| A cable carrying | Amperes | feet from standard compass | feet from steering compass |
|------------------|---------|-----------------------------|----------------------------|
| <i>.3</i> | | <i>15 light in binnacle</i> | |
| <i>.3</i> | | <i>4 ft. 6"</i> | |
| <i>✓</i> | | <i>✓</i> | |

Have the compasses been adjusted with and without the electric installation at work at full power *✓*

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. *✓*

For and on behalf of John Chamberlain & Co. W. G. Engle

Builder's Signature

Date

29 July 1921

GENERAL REMARKS.

The electric lighting installation has been satisfactorily fitted, tried under working conditions & found satisfactory.

It is submitted that this vessel is eligible for

THE RECORD & Lee Light Bell

*See £5.0.0 applied for 13/8/21 17/8/21
Epps 3.00 pd 9.2.23 W.W.*

A. E. Farmer

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

TUE NOV. 29 1921

TUE FEB 20 1923



© 2021

Lloyd's Register Foundation

THIS MARGIN IS TO BE LEFT OPEN FOR THE SURVEYOR'S USE IN REQUESTING TO WRITE ACROSS THIS MARGIN.