

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 3005

Port of Melford Date of First Survey 5 Feb Date of Last Survey 5 July No. of Visits 2
 No. in Reg. Book 22382 ~~64275~~ on the ~~Iron~~ or Steel S.T. Lewis Roadley Port belonging to Cochrane & Sons L^d
 Built at Selby By whom Cochrane & Sons L^d When built 1917
 Owners _____ Owners' Address _____
 Yard No. _____ Electric Light Installation fitted by _____ When fitted 1921

DESCRIPTION OF DYNAMO, ENGINE, ETC.

1 Kw Steam Generating Set Engine Robey Single Cyl^d Dynamo Electromotors S^r Openshaw
Compound Wound Controversial Rating

Capacity of Dynamo 10 Amperes at 100 Volts, whether continuous or alternating current Continuous
 Where is Dynamo fixed Engine Room Whether single or double wire system is used Double Wire
 Position of Main Switch Board Engine Room having switches to groups Two in no of lights, &c., as below
 Positions of auxiliary switch boards and numbers of switches on each none.

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 cessel 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 37 arranged in the following groups:—

A	21	lights each of (metalic) of 16 candle power requiring a total current of	4.2	Amperes
B	2	lights each of (Carbon) " 16 candle power requiring a total current of	1.2	Amperes
C		lights each of " " candle power requiring a total current of		Amperes
D	6	lights each of (metalic) " 32 candle power requiring a total current of	2.4	Amperes
E	2	lights each of (Carbon) " 32 candle power requiring a total current of	2.4	Amperes
B	3	Mast head lights with One lamp each of (Carbon) " 16 candle power requiring a total current of	1.8	Amperes
	2	Side lights with One lamp each of (Carbon) " 16+32 candle power requiring a total current of	1.8	Amperes
	1	Stem Cargo lights of (metalic) of 16 candle power, whether incandescent or arc lights.	.2	"

If arc lights, what protection is provided against fire, sparks, &c. no arc lights fitted.
 Where are the switches controlling the masthead and side lights placed Wheel House.

DESCRIPTION OF CABLES.

Main cable carrying 10 Amperes, comprised of 3 wires, each 18 S.W.G. diameter, .00532 square inches total sectional area
 Branch cables carrying 7 Amperes, comprised of 3 wires, each 18 S.W.G. diameter, " square inches total sectional area
 Branch cables carrying 3 Amperes, comprised of 3 wires, each 18 S.W.G. diameter, " square inches total sectional area
 Leads to lamps carrying ✓ Amperes, comprised of 1 wire, each .044 inch S.W.G. diameter, .0015 square inches total sectional area
 Cargo light cables carrying ✓ Amperes, comprised of ✓ wires, each ✓ S.W.G. diameter, ✓ square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

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 none 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 Clipped to Bulkheads; with lead sheathing Run in conduit through bunkers.

DESCRIPTION OF INSULATION, PROTECTION, ETC.—continued.

Are they in places always accessible Yes, except in bunkers when full

What special protection has been provided for the cables in open alleyways or where exposed to weather or moisture Lead Sheathing

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

What special protection has been provided for the cables near boiler casings none near casings

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

How are cables carried through beams Holes lead bushed through bulkheads, &c. Water tight glands

How are cables carried through decks Water tight deck pipes

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

If so, how are they protected Cable run in conduit pipe thro' bunkers, otherwise lead sheathing

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

If so, how are the lamp fittings and cable terminals specially protected Glass shade & metal guard for lamp; no terminals exposed.

Where are the main switches and fuses for these lights fitted Switches in fish hold, fuses in galley.

If in the spaces, how are they specially protected Fitted near hatchway, close under deck.

Are any switches or fuses fitted in bunkers no

Cargo light cables, whether portable or permanently fixed none 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 in Engine Room.

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. Yes.

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

Electrical Engineers Date _____

COMPASSES.

Distance between dynamo or electric motors and standard compass 48 feet

Distance between dynamo or electric motors and steering compass 40 feet.

The nearest cables to the compasses are as follows:—

A cable carrying	<u>0.2</u>	Amperes	<u>10</u>	feet from standard compass	<u>2</u>	feet from steering compass
A cable carrying	<u>7</u>	Amperes	<u>16</u>	feet from standard compass	<u>5</u>	feet from steering compass
A cable carrying	<input checked="" type="checkbox"/>	Amperes	<input checked="" type="checkbox"/>	feet from standard compass	<input checked="" type="checkbox"/>	feet from steering compass

Have the compasses been adjusted with and without the electric installation at work at full power no

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.

Builder's Signature. Date _____

GENERAL REMARKS.

All wiring, switches, fuses, guards & fittings are of Admiralty Standard Pattern.

It is mounted in this vessel is electric light
Reel
27/17/21

JW Johnston
Surveyor to Lloyd's Register of Shipping.

Committee's Minute _____

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

