

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 27908

Port of Sunderland Date of First Survey 17 Aug Date of Last Survey 21 Aug '20 No. of Visits 3
 No. in Reg. Book on the Iron or Steel "Avarville"
 Built at Southampton Port belonging to Barcliff
 Owners Westville Shipping Co. Ltd By whom Wibbles Ltd When built 1920
 Yard No. 175 Electric Light Installation fitted by CAMPBELL & ISHERWOOD LTD. Owners' Address G. H. Allen, 285 Albany Road, Barcliff
 When fitted 9/10/20

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Capacity of Dynamo 4000 Amperes at hundred Volts, whether continuous or alternating current continuous
 Where is Dynamo fixed Engine Room Whether single or double wire system is used Double
 Position of Main Switch Board Engine room having switches to groups three circuits of lights, &c., as below
 Positions of auxiliary switch boards and numbers of switches on each Seven switches, navigation Bd. Chart room, Saloon, 4 way Distribution board, Engineers quarters 4 way distribution board, after quarters, 3 way Dis Board, Engine Room 4 way Dis board.
 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 5% 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 arranged in the following groups:-

A	24	lights each of	sixteen	candle power requiring a total current of	twelve	Amperes
B	33	lights each of	- 5 -	candle power requiring a total current of	seventeen	Amperes
C	16	lights each of	- 5 -	candle power requiring a total current of	eight	Amperes
D	21	lights each of	- 5 -	candle power requiring a total current of	eleven	Amperes
E	12	lights each of	- 5 -	candle power requiring a total current of	six	Amperes
Two		Mast head light with one lamps each of	thirty two	candle power requiring a total current of	two	Amperes
Two		Side light with one lamps each of	- 5 -	candle power requiring a total current of	- 5 -	Amperes
		Four sets Cargo lights of	sixteen	candle power, whether incandescent or arc lights		

If arc lights, what protection is provided against fire, sparks, &c. nil.

Where are the switches controlling the masthead and side lights placed nil. Chart Room.

DESCRIPTION OF CABLES.

Main cable carrying 14 Amperes, comprised of 19 wires, each 18 S.W.G. diameter, .0400 square inches total sectional area
 Branch cables carrying 24 Amperes, comprised of 4 wires, each 20 S.W.G. diameter, .0046 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 2 Amperes, comprised of 1 wires, each 18 S.W.G. diameter, .0015 square inches total sectional area
 Cargo light cables carrying 3 Amperes, comprised of 3 wires, each 20 S.W.G. diameter, .0030 square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Galvanized Steel tubing securely clipped to Bulkhead and Beam.
Lead covered in cabins securely clipped with Brass Pins.

Joints in cables, how made, insulated, and protected nil.

Are all the joints of cables thoroughly soldered, and the flux used not containing acids or other corrosive substances nil. 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 nil.

Are there any joints in or branches from the cable leading from dynamo to main switch board nil.

Are the cables led through the ship, and how protected Steel Tubes. Galvanized.

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 Galvanized steel tubes.

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

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

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

How are cables carried through beams Galva steel tubes. through bulkheads, &c. Do

How are cables carried through decks Do

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

If so, how are they protected Do

Are any lamps fitted in coal bunkers or spaces which may at times be used for cargo, coals, 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 Fixed Permanent Connection Boxes fixed at Bulkhead.

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 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 _____ 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.

COMPASSES.

Distance between dynamo or electric motors and standard compass 80 feet

Distance between dynamo or electric motors and steering compass 80 feet

The nearest cables to the compasses are as follows:—

A cable carrying <u>5</u> Amperes	<u>100 feet</u> from standard compass	<u>Compass</u> <u>10</u> 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 yes _____ degrees on _____ course in the case of the

The maximum deviation due to electric currents, etc., was found to be _____ degrees on _____ course in the case of the steering compass.

For and on behalf of

DIBLES (1913) LIMITED.

Builder's Signature.

Date 7th June 1920

GENERAL REMARKS.

The installation has been satisfactorily fitted in the vessel, tested under full load & found satisfactory.

It is submitted that this vessel is eligible for THE RECORD. Elec Lt. Recd 25/1/21

Ed. W. Ruttan

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN



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