

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 27.

Port of Port Arthur, Ont. Date of First Survey 17/ 5 / 18 Date of Last Survey 16/ 7 / 18 No. of Visits 12
 No. in on the ~~11111~~ Steel single screw steamer "Warosiris" Port belonging to Port Arthur, Ontario.
 reg. Book Built at Port Arthur, Ontario. By whom Port Arthur Shipbldg. Limited. When built 1918.
 owners Imperial Munition Board. Owners' Address Ottawa, Ontario.
 Card No. 20. Electric Light Installation fitted by Builders. When fitted 1918.

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Generator built by Enberg's Electrical & Mechanical Works St. Joseph, Michigan, U. S. A.
 direct connected to Simplex engine built by same Co.
 Capacity of Dynamo 65 Amperes at 115 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 fifteen of lights, &c., as below
 Positions of auxiliary switch boards and numbers of switches on each port & starboard midship side cabins, forward
and after cabins, deck forward and aft, engine and boiler rooms.

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 25 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
 Are all switches and fuses constructed of incombustible materials and fitted on incombustible bases yes.

Total number of lights provided for 162 arranged in the following groups:—
 A Forward Cabin 6 lights each of 60 Watts power requiring a total current of 3.0 Amperes
 B Deck Lights 16 lights each of 60 Watts power requiring a total current of 8.0 Amperes
 C Port Cabin 41 lights each of 60 Watts power requiring a total current of 20.5 Amperes
 D Starboard Cabin 27 lights each of 60 Watts power requiring a total current of 13.5 Amperes
 E After Cabin 24 lights each of 60 Watts power requiring a total current of 12.0 Amperes
 Engine & Boiler Rooms 43 lights each of 60 Watts power requiring a total current of 17.5 "
 One Mast head light with 2 lamps each of 120 Watts power requiring a total current of 2.0 Amperes
 " Stern Light 2 " " " 120 Watts power requiring a total current of 2.0 "
 2 Side light with 2 lamps each of 120 Watts power requiring a total current of 4.0 Amperes
 Four Clusters Cargo lights of 4 lights each 60 Watts power, whether incandescent or arc lights incandescent.

If arc lights, what protection is provided against fire, sparks, &c. 82.5.

Where are the switches controlling the masthead and side lights placed telltale in pilot house.

DESCRIPTION OF CABLES.

	Amperes, comprised of	wires, each	B & S. diameter,	Cir. Mil.	square inches total sectional area
Main cable carrying	90	7	10 3/16 11/16	66370	1.0615
Branch cables carrying	20	2	10 3/16 11/16	10380	0.0176
Branch cables carrying	20	2	10 3/16 11/16	10380	0.0176
Leads to lamps carrying	14	2	14 3/16 11/16	4170	0.00642
Cargo light cables carrying	4	2	14 3/16 11/16	4107	0.00642

DESCRIPTION OF INSULATION, PROTECTION, ETC.

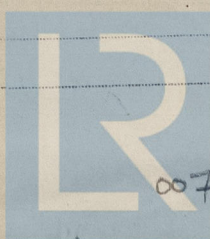
Vulcanized rubber, double braided, led through galvanized iron conduit. In cabins wood
 mouldings. All cables to specifications & tests of the National Board of Fire Underwriters.

Joints in cables, how made, insulated, and protected soldered, rubbered and friction taped, painted with insulation
paint and in Iron boxes where iron conduit is used.

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 no.

How are the cables led through the ship, and how protected galvanized iron conduit.



© 2021

Lloyd's Register
 Foundation

007301-007311-0086

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 Conduits & W.T.Fittings.

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

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

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

How are cables carried through beams in conduits. through bulkheads, &c. in conduits & W.T.fittings.

How are cables carried through decks in conduits with W. T. fittings.

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 Galvanized steel conduit W.T. screwed to beam.

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

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 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.

Port Arthur Shipbuilding Co. Limited.

General Manager

Electrical Engineers

Date July 18/18

COMPASSES.

Distance between dynamo or electric motors and standard compass about 45 feet.

Distance between dynamo or electric motors and steering compass " 35 "

The nearest cables to the compasses are as follows:—

A cable carrying .5 Amperes 8 feet from standard compass 8 feet from steering compass

A cable carrying 4 Amperes 8 feet from standard compass 6 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.

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.

Port Arthur Shipbuilding Co. Limited.

General Manager

Builder's Signature.

Date July 18/18.

GENERAL REMARKS.

The above installation has been fitted in a satisfactory manner and proved satisfactory.

It is understood that a search light and wireless will be fitted at a later date.

It is submitted that
this vessel is eligible for
THE RECORD. ELEC. LIGHT.

Robert Lewis

Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE. 20. AUG. 1913



© 2021

Lloyd's Register
Foundation

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.