

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 11848

Port of *Antwerp* Date of First Survey *18-10-21* Date of Last Survey *6-1-22* No. of Visits *eight*
 No. in on the Iron or Steel *Twin S.S. "Elisabethville"* Port belonging to *Antwerp*
 Reg. Book *14849* Built at *Hoboken* By whom *St. Co. John Lockerill* When built *1921*
 Owners *C. Belge Maritime du Congo* Owners' Address *67 Rempart St. Catherine Antwerp*
 Yard No. *562* Electric Light Installation fitted by *Charlier Naval John Lockerill* When fitted *1921*

DESCRIPTION OF DYNAMO, ENGINE, ETC. *Emergency set for lighting purposes in public rooms, corridors & engine rooms.*
except one standard 21 HP. type Parsons stationary set comprising 3 cylinder engine for hardiffin fuel
coupled to compound wound generator open protected type.

Capacity of Dynamo *9.1* Amperes at *100* Volts, ~~whether~~ continuous ~~or~~ *alternating* current
 Where is Dynamo fixed *on boat deck, inside steel house* ~~Whether single or~~ double wire system is used
 Position of Main Switch Board *near dynamo* having switches to groups *A. B. C. D. E.* of lights, &c., as below
 Positions of auxiliary switch boards and numbers of switches on each *15 switchboards having from 3 to 8 switches*
each & situated inside corridors & passages or engine room
 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 *85* 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 *245* arranged in the following groups :-

A	<i>52</i>	lights each of	<i>30</i>	candle power requiring a total current of	<i>15</i>	Amperes
B	<i>86</i>	lights each of	<i>30</i>	candle power requiring a total current of	<i>26</i>	Amperes
C	<i>wireless</i>	lights each of	<i>—</i>	candle power requiring a total current of	<i>—</i>	Amperes
D	<i>65</i>	lights each of	<i>30</i>	candle power requiring a total current of	<i>20</i>	Amperes
E	<i>42</i>	lights each of	<i>30</i>	candle power requiring a total current of	<i>13</i>	Amperes
	<i>2</i>	Mast head lights with <i>1</i> lamp each of	<i>32</i>	candle power requiring a total current of	<i>1</i>	Amperes
	<i>2</i>	Side lights with <i>1</i> lamp each of	<i>32</i>	candle power requiring a total current of	<i>1</i>	Amperes

Cargo lights of *see sheet No 1 Group B* candle power, whether incandescent or arc lights

If arc lights, what protection is provided against fire, sparks, &c.
no arc lights

Where are the switches controlling the masthead and side lights placed

DESCRIPTION OF CABLES.

Main cable carrying *74* Amperes, comprised of *19* wires, each *14* S.W.G. diameter, *.0976* square inches total sectional area
 Branch cables carrying *26* Amperes, comprised of *19* wires, each *17* S.W.G. diameter, *.0478* square inches total sectional area
 Branch cables carrying *13. 20* Amperes, comprised of *7* wires, each *16* S.W.G. diameter, *.0229* square inches total sectional area
 Leads to lamps carrying *30* Amperes, comprised of *3* wires, each *21* S.W.G. diameter, *.0025* 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
See sheet No 1.

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

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

How are the cables led through the ship, and how protected

DESCRIPTION OF INSULATION, PROTECTION, ETC.—continued.

Are they in places always accessible

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

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

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

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

How are cables carried through beams through bulkheads, &c.

How are cables carried through decks

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

If so, how are they protected

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

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

Cargo light cables, whether portable or permanently fixed 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, and with an amperemeter, fixed

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.

Electrical Engineers Date

COMPASSES.

Distance between dynamo or electric motors and standard compass 112 feet

Distance between dynamo or electric motors and steering compass 112 feet

The nearest cables to the compasses are as follows:—

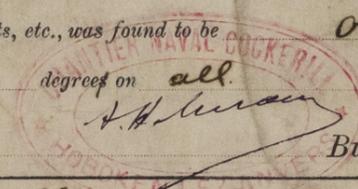
A cable carrying Amperes feet from standard compass feet from steering compass

A cable carrying 100 Amperes sheet feet from standard compass No 1 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 one degrees on all courses in the case of the standard compass and one degrees on all courses in the case of the steering compass.



Builder's Signature. Date 10-11-1921

GENERAL REMARKS. This installation has been fitted and tried under my supervision, the materials and workmanship are good, and eligible in my opinion to be recorded "Electric Light" and "Wires" in the Register Book (see also sheet N:1).

TRYS RECORD Elec. Light. 2/11/22. 3/2/22.

J. R. Peabody Surveyor to Lloyd's Register of Shipping.

Committee's Minute

TUE 7 FEB. 1922

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

22.11.20 - Transfer.

