

## REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 4958

Port of *Havre* Date of First Survey *23 nov.* Date of Last Survey *2 June* No. of Visits *6*  
 No. in on the Iron or Steel *Capitaine Pierre Allée* Port belonging to *Havre*  
 Reg. Book Built at *Besan* By whom *Chantiers Navals Français* When built *1922*  
 Owners *French Government* Owners' Address *Paris*  
 Yard No. *16* Electric Light Installation fitted by *Shipbuilders* When fitted *1923*

DESCRIPTION OF DYNAMO, ENGINE, ETC. *Dynamo 5 KW**Driven by steam engine*

Capacity of Dynamo *47* ✓ Amperes at *110* ✓ 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 *5* of lights, &c., as below  
 Positions of auxiliary switch boards and numbers of switches on each *Engine room 3 - Crew 4 - officers 4*  
*officers 3 Chartroom 6.*

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 *1 1/2* 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 *X*

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

Total number of lights provided for *143* arranged in the following groups:—

A Engine Room	30	lights each of	16	candle power requiring a total current of	12	Amperes
B Officers	45	lights each of	16	candle power requiring a total current of	15	Amperes
C Crew	30	lights each of	16	candle power requiring a total current of	10	Amperes
D Chartroom	7	lights each of	32	candle power requiring a total current of	11.2	Amperes
E T.S.F.		lights each of		candle power requiring a total current of	13.6	Amperes
Mast head light with	2	lamps each of	32	candle power requiring a total current of	0.8	Amperes
Side light with	2	lamps each of	32 & 50	candle power requiring a total current of	0.8 & 1.05	Amperes
Cargo lights of 4 Reflectors	5 light	16	candle power, whether incandescent or arc lights	<i>incandescent</i>		

If arc lights, what protection is provided against fire, sparks, &c. *none*

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

## DESCRIPTION OF CABLES.

Main cable carrying	47	Amperes, comprised of	19	wires, each	14/10	S.W.G. diameter,	29.8	square inches <sup>mfm</sup> total sectional area
Branch cables carrying	15	Amperes, comprised of	7	wires, each	12/10	S.W.G. diameter,	7.92	square inches total sectional area
Branch cables carrying	1.73	Amperes, comprised of	4	wires, each	12/10	S.W.G. diameter,	1.13	square inches total sectional area
Leads to lamps carrying	0.8	Amperes, comprised of	1	wires, each	12/10	S.W.G. diameter,	1.13	square inches total sectional area
Cargo light cables carrying		Amperes, comprised of	1	wires, each	12/10	S.W.G. diameter,	1.13	square inches total sectional area

## DESCRIPTION OF INSULATION, PROTECTION, ETC.

*2 coats vulcanised rubber - 2 coats natural rubber - rubbers - lead and armoured.*

Joints in cables, how made, insulated, and protected *Bosces insulated*

Are all the joints of cables thoroughly soldered, and the flux used not containing acids or other corrosive substances *no* 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 *no*

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 *Armoured*



© 2021

Lloyd's Register  
Foundation

006552-006563-0100



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 Armoured lead

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

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

What special protection has been provided for the cables in engine room — 5°

How are cables carried through beams Brass glands through bulkheads, &c. Brass glands ✓

How are cables carried through decks Steel tubes ✓

Are any cables run through coal bunkers none or cargo spaces none or spaces which may be used for carrying cargo, stores, or baggage none

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 none

Cargo light cables, whether portable or permanently fixed portable How fixed on deck

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 switches bar

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.

*[Signature]*

Electrical Engineers

Date: 13-6-23

COMPASSES.

Distance between dynamo or electric motors and standard compass 24 m

Distance between dynamo or electric motors and steering compass 32 m

The nearest cables to the compasses are as follows:—

A cable carrying	Amperes	light compass	feet from standard compass	feet from steering compass
<u>0.4</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>

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

The maximum deviation due to electric currents, etc., was found to be none 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.

This electric installation has been verified and found correct.  
A trial has been made and the result found satisfactory.

It is submitted that  
this vessel is eligible for  
THE RECORD. Elec. light.

Tees 360°

Paid 5/10/23

22/6/23

Surveyor to Lloyd's Register of Shipping.

Committee's Minute



© 2021

Lloyd's Register  
Foundation

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.