

## REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 5454

Port of Harre Date of First Survey 11 march Date of Last Survey 23 October No. of Visits 6  
 No. in Reg. Book on the Iron or Steel Vendemiaire Port belonging to Cardiff  
 Built at Caen By whom Chantiers Naval Français When built 1925  
 Owners Constantis & London Owners' Address   
 Yard No. 37 Electric Light Installation fitted by Chantiers Naval Français When fitted 1925

## DESCRIPTION OF DYNAMO, ENGINE, ETC.

7 KW driven by steam engine

Capacity of Dynamo 64 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 1 prop 24 switches - 1 principal deck part side 28 switches and 1 star side 24 switches - Master accommodation 1 of 14 switches and 1 of 16 switches - Fore castle 1 of 12 switches - 1 chartroom 14 switches - Engine room 1 of 26 switches 1 of 24 switches - Boiler room 1 of 12 switches - Officers 1 of 28 switches  
 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 30% 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. Numbered  
 Are all switches and fuses constructed of incombustible materials and fitted on incombustible bases yes  
 Total number of lights provided for 103 arranged in the following groups :-  
 A Fore castle and officers 68 lights each of 32 candle power requiring a total current of 23 Amperes  
 B Stern 11 lights each of 32 candle power requiring a total current of 4 Amperes  
 C Chartroom 5 lights each of 50 candle power requiring a total current of 2.85 Amperes  
 D Engine and boiler room 29 lights each of 32 candle power requiring a total current of 10 Amperes  
 E T & F lights each of 2 candle power requiring a total current of 14 Amperes  
2 Mast head light with 1 lamps each of 50 candle power requiring a total current of 0.56 Amperes  
2 Side light with 1 lamps each of 50 candle power requiring a total current of 0.56 Amperes  
 Cargo lights of Reflector 4 lamps 32 candle power, whether incandescent or arc lights 0.87 incandescent  
 If arc lights, what protection is provided against fire, sparks, &c.

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

## DESCRIPTION OF CABLES.

Main cable carrying 54 Amperes, comprised of 19 wires, each 13/10 S.W.G. diameter, 25.08 square inches total sectional area  
 Branch cables carrying 10 Amperes, comprised of 7 wires, each 11/10 S.W.G. diameter, 7.14 square inches total sectional area  
 Branch cables carrying 23 Amperes, comprised of 7 wires, each 15/10 S.W.G. diameter, 12.36 square inches total sectional area  
 Leads to lamps carrying 0.35 Amperes, comprised of 1 wires, each 11/10 S.W.G. diameter, 0.95 square inches total sectional area  
 Cargo light cables carrying 0.87 Amperes, comprised of 1 wires, each 11/10 S.W.G. diameter, 0.95 square inches total sectional area

## DESCRIPTION OF INSULATION, PROTECTION, ETC.

Under lead on engine and boiler space and when exposed to weather and moisture Other parts & coats vulcanized rubber, 2 natural rubber rubbers and armoured

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

Boxe 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



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**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 lead armoured

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 Under lead

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

How are cables carried through beams None through bulkheads, &c. lead protection

How are cables carried through decks Steel tubes or glands

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 L

Are any lamps fitted in coal bunkers or spaces which may at times be used for cargo, coals, or baggage None

If so, how are the lamp fittings and cable terminals specially protected L

Where are the main switches and fuses for these lights fitted L

If in the spaces, how are they specially protected L

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 L

How are the returns from the lamps connected to the hull L

Are all the joints with the hull in accessible positions L

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 L

Are any switches, fuses, or joints of cables fitted in the pump room or companion L

How are the lamps specially protected in places liable to the accumulation of vapour or gas L

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 1500 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.

H. Lebonillou

Electrical Engineers

Date 2nd November 1925

**COMPASSES.**

Distance between dynamo or electric motors and standard compass 18 m

Distance between dynamo or electric motors and steering compass 17 m

The nearest cables to the compasses are as follows:—

A cable carrying	Amperes	feet from standard compass	feet from steering compass
3	5 m	4 m	
0.14	0.4	0.4	
0.35	2	2	

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 L course in the case of the standard compass and L degrees on L course in the case of the steering compass.

H. Lebonillou

Builder's Signature.

Date 2nd November 1925

**GENERAL REMARKS.**

This electric installation has been verified, tried and found in good condition

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

Sees 45 840

Paid 14/12/25

W.D. 13/11/25

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI. 18 NOV 1925

FRI. 20 NOV 1925

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