

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 666

Port of Nantes Date of First Survey 5th April 1911 Date of Last Survey 21st Aug. 1912 No. of Visits 148
 No. in Reg. Book 156 on the ~~Iron~~ Steel S.S. "Saint Joseph" Port belonging to Bordeaux
 Built at Saint Nazaire By whom Ateliers & Chantiers de la Loire When built 1912
 Owners Cie. Navale de l'Océanie Owners' Address 77 Rue de Lille, Paris
 Yard No. 208 Electric Light Installation fitted by Ateliers & Chantiers de la Loire When fitted 1912

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Dynamo is compound latest patent of S. Labour. Single cylinder steam motor from Boult & Laroche.

Capacity of Dynamo 69 Amperes at 80 Volts, whether continuous or alternating current continuous

Where is Dynamo fixed in Engine Room Whether single or double wire system is used double

Position of Main Switch Board near Dynamo having switches to groups a, b, c, d of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each Auxiliary switch-board in wheel-house above Chart Room with 8 switches

If cut outs 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 cessel is wired on the double wire system are cut outs fitted to both flow and return wires or cables of all circuits including lamp circuits yes

Are the cut outs of non-oxidizable metal Yes and constructed to fuse at an excess of 50 per cent over the normal current

Are all cut outs fitted in easily accessible positions Yes Are the fuses of standard dimensions Yes If ~~any~~ 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 cut-outs constructed of incombustible materials and fitted on incombustible bases yes.

Total number of lights provided for 100 arranged in the following groups :-

| | | | | | |
|--------------------------------|---|------------------------------------|--|--------------|---------|
| A Crew Space | 11 lights each of | 16 | candle power requiring a total current of | 7.7 | Amperes |
| B Officers quarters | 31 lights each of | 16 | candle power requiring a total current of | 21.1 | Amperes |
| C Machinery space | 20 lights each of | 16 | candle power requiring a total current of | 14.0 | Amperes |
| D Masthead Side & Cargo lights | 38 lights each of | { 34 of 16 3 of 32 1 of 50 } | candle power requiring a total current of | 30.1 | Amperes |
| E | lights each of | | candle power requiring a total current of | | Amperes |
| | 2 Mast head light, with 2 lamps each of | 32 | candle power requiring a total current of | 2.8 | Amperes |
| | One Side light with one lamp each of | 32 | candle power requiring a total current of | 3.57 | Amperes |
| | 5 Cargo lights of (each) | 16 | candle power, whether incandescent or are lights | incandescent | |

If are lights, what protection is provided against fire, sparks, &c. ✓

Where are the switches controlling the masthead and side lights placed in Wheel-house above Chart-Room

DESCRIPTION OF CABLES.

| | | | | | | |
|-----------------------------|----------------------------|----------------|-------------|------------------|-------------------------------|----------------------|
| Main cable carrying | 69 Amperes, comprised of | 37 wires, each | 19/10 mill. | L.S.G. diameter, | 65 ² square inches | total sectional area |
| Branch cables carrying | 12 Amperes, comprised of | 7 wires, each | 12/10 | L.S.G. diameter, | 7 ² square inches | total sectional area |
| Branch cables carrying | 14 Amperes, comprised of | 7 wires, each | 13/10 | L.S.G. diameter, | 9 ² square inches | total sectional area |
| Leads to lamps carrying | 6/10 Amperes, comprised of | 1 wires, each | 12/10 | L.S.G. diameter, | 1 ² square inches | total sectional area |
| Cargo light cables carrying | 3 Amperes, comprised of | 32 wires, each | 4/10 | L.S.G. diameter, | 3 ² square inches | total sectional area |

DESCRIPTION OF INSULATION, PROTECTION, ETC.

All cables insulated at least equal to Rule requirements, and lead-covered throughout.

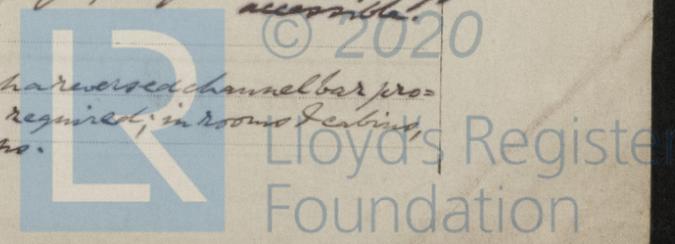
Joints in cables, how made, insulated, and protected joints made in properly constructed watertight junction boxes. There is only one soldered joint, carefully insulated and protected.

Are all the joints of cables thoroughly soldered, resin only having been used as a flux 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 all joints are always accessible.

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 in two decks under beams through reversed channel bar properly closed in; in Engine & Boiler Rooms through wood & steel casings as required; in rooms & cabins, the cables are unencased, but are lead-covered & secured by screwed clips.

German Reg. 19 m/ 2.5-16-75



DESCRIPTION OF INSULATION, PROTECTION, ETC.—continued.

Are they in places always accessible *Yes, except in two decks where they are strongly protected against damage*

What special protection has been provided for the cables in open alleyways or where exposed to weather or moisture *Lead covered & fitted in metal tubes*

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat *none required*

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

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

How are cables carried through beams *through hard wood fittings* through bulkheads, &c. *through watertight screw glands.*

How are cables carried through decks *through metal tubes*

Are any cables run through coal bunkers *No.* or cargo spaces *two decks only* or spaces which may be used for carrying cargo, stores, or baggage *two decks only*

If so, how are they protected *they pass through a reversed channel bar under beams, properly closed in.*

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 cut outs for these lights fitted

If in the spaces, how are they specially protected

Are any switches or cut outs fitted in bunkers

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

The installation is _____ supplied with a voltmeter and _____ an amperemeter, fixed *on main switchboard*

VESSELS BUILT FOR CARRYING PETROLEUM.

In vessels built for carrying petroleum, are all switches and cut-outs fitted in positions not liable to the accumulation of petroleum vapour or gas

Are any switches, cut outs, 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 *98* per cent. that of pure copper.

Insulation of cables is guaranteed to have a resistance of not less than *600* megohms per statute mile after 24 hours' immersion in seawater.

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.

M. Leuchow

Electrical Engineers

Date *5th Sept. 1912*

COMPASSES.

Distance between dynamo or electric motors and standard compass *50 metres*

Distance between dynamo or electric motors and steering compass *30 metres*

The nearest cables to the compasses are as follows:— *The compasses are lighted electrically*

A cable carrying _____ Amperes _____ feet from standard compass _____ 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*

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

M. Leuchow

Builder's Signature.

Date *5th Sept. 1912*

GENERAL REMARKS.

The above installation has been fitted equal to Rule requirements, and is in good safe-working condition. The workmanship is of the best description throughout.

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

J.W.D. 10/9/12

L. Kerr.
Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.



Lloyd's Register Foundation