

# REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 1238

Port of Nantes Date of First Survey 30.8.21 Date of Last Survey 5<sup>th</sup> Oct '21 No. of Visits 7  
 No. 1915/16 on the Steel of Jacques Schiffino (ex Roi Leopold) Port belonging to Algiers  
 Reg. Book 681 Built at Newcastle-on-Tyne By whom W. Johnson & Co When built 1909-1  
 Owners Soc. Algérienne de Nav. pour l'Afrique du Nord Owners' Address Algiers  
 Yard No. \_\_\_\_\_ Electric Light Installation fitted by Joly, Hugget & Peray of Haoro When fitted 1921.

## DESCRIPTION OF DYNAMO, ENGINE, ETC.

Dynamo N<sup>o</sup> 30886, 4 pole, Compound wound direct coupled to single cylinder engine N<sup>o</sup> 30863 -  
 Rev. p. min 450 - made by The Sunderland Forge & Engineering Co. Ltd.

Capacity of Dynamo 46 Amperes at 110 Volts, whether continuous or alternating current Continuous

Where is Dynamo fixed Bottom platform Starboard side of Eng. Room Whether single or double wire system is used double

Position of Main Switch Board On bulkhead at dynamo having switches to groups A, B, C and D of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each A: in E. room for E. B. space. 7 switches.

B: deck circuit. switches in passageways near lights. C: Accommodation circuit. Separate switches for each cabin, fore-castle & passageway lights. D: Navigation, in wheel house. 6 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 100 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 no.

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

Total number of lights provided for 106 arranged in the following groups :-

A	30 fixed + 9 portable lights each of	16	candle power requiring a total current of	8	Amperes
B	8 " + 10 Connection lights each of	16	candle power requiring a total current of	6	Amperes
C	39 " + 14 portable lights each of	16	candle power requiring a total current of	11	Amperes
D	6 " - lights each of 4 of 32 and 2 at 16		candle power requiring a total current of	2	Amperes
E	- lights each of -		candle power requiring a total current of	-	Amperes
	2 Mast head lights with 1 lamp each, of	32	candle power requiring a total current of	-	Amperes
	2 Side lights with 1 lamp each, of	32	candle power requiring a total current of	-	Amperes
	4 clusters for Cargo lights of 6 lamps each, of 16		candle power, whether incandescent or arc lights	Incandescent	

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

Where are the switches controlling the masthead and side lights placed In wheel house on Bridge

## DESCRIPTION OF CABLES.

Main cable carrying	27	Amperes, comprised of	7	wires, each	19/10 m/s S.W.G. diameter,	20	square inches total sectional area
Branch cables carrying	11	Amperes, comprised of	7	wires, each	10/10 m/s S.W.G. diameter,	5.5	square inches total sectional area
Branch cables carrying	8	Amperes, comprised of	7	wires, each	10/10 m/s S.W.G. diameter,	5.5	square inches total sectional area
Leads to lamps carrying	36	Amperes, comprised of	4	wires, each	3/10 m/s S.W.G. diameter,	.8	square inches total sectional area
Cargo light cables carrying	✓	Amperes, comprised of	6	wires, each	3/10 m/s S.W.G. diameter,	1.2	square inches total sectional area

## DESCRIPTION OF INSULATION, PROTECTION, ETC.

Rubber insulated & braided throughout accommodations & laid in grooved wood with wood cover.  
 " " " lead covered throughout remainder of vessel in iron tubing.

Joints in cables, how made, insulated, and protected In Boxes. soldered & covered with rubber & tape

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 From E.R. casing they are lead fore and aft in starboard lower decks, in insulated iron tubing attached to upper deck beams.



DESCRIPTION OF INSULATION, PROTECTION, ETC. continued.

Are they in places always accessible Yes except when two decks are full of cargo.  
What special protection has been provided for the cables in open alleyways or where exposed to weather or moisture Insulated iron tubing

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

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

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

How are cables carried through beams attached to beams. through bulkheads, &c. Jointed iron tubing

How are cables carried through decks Iron tubing.

Are any cables run through coal bunkers No or cargo spaces Yes or spaces which may be used for carrying cargo, stores, or baggage ✓

If so, how are they protected Insulated iron tubing

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 4 portable cable connections at each mast

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 on Main Switch Board.

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

Distance between dynamo or electric motors and steering compass 38<sup>m</sup> 00.

The nearest cables to the compasses are as follows:—

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 To be adjusted before going to sea.

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.

Builder's Signature. Date

GENERAL REMARKS. This vessel has been wired as stated in the report and in accordance with the Rules of the Society. Workmanship is good. The dynamo has been tried under full load & found good. Engine governor working well.

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

Elec. Light. ✓

Geo. A. Paine

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

25/10/21.

Committee's Minute

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

Im. 9.12.—Transfer.



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