

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 2047

Port of Rohé Date of First Survey 10 May Date of Last Survey 16 June No. of Visits 9
 No. in on the ~~Iron~~ or Steel 18 "Commandant Coris" Port belonging to Marseilles
 Reg. Book Built at Rohé St Kureha Maru By whom Messrs The Mitsui Bishi Dockyard & Eng. Works When built 1917
 Owners Owners' Address
 Yard No. 66 Electric Light Installation fitted by The Mitsui Bishi Dock & Eng. Works When fitted 1917.

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Dynamo D.C. 12 Kw. Compound wound type coupled directly to vertical single cylinder high speed engine.
 Capacity of Dynamo 120 Amperes at 100 Volts, whether continuous or alternating current D.C.
 Where is Dynamo fixed Starboard engine room Whether single or double wire system is used double
 Position of Main Switch Board aft end starboard engine room having switches to groups 5 Circuits of lights, &c., as below
 Positions of auxiliary switch boards and numbers of switches on each 1-6 ways board for engine room, 2- two ways board fitted one each fore & aft ward of the Amid Ship, 3 boards in 1st class pantry where purpose of bridge light circuit, one board each port & starboard on aft amid ship, and one board at forecandle deck
 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 reduced 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
 Are the fuses of non-oxidizable metal Yes tin fuse 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 Yes
 Are all switches and fuses constructed of incombustible materials and fitted on incombustible bases Yes, Fuse terminals mounted to marble base.
 Total number of lights provided for 172 arranged in the following groups:—
 A Forecandle lights each of 279 candle power requiring a total current of 4.99 Amperes
 B Cargo lights each of 1536 candle power requiring a total current of 53.6 Amperes
 C Amid ship lights each of 1460 candle power requiring a total current of 29.6 Amperes
 D Engine lights each of 464 candle power requiring a total current of 16.24 Amperes
 E Radiotelegraph lights each of 3 Kw. candle power requiring a total current of 30.00 Amperes
 Mast head light with 2 lamps each of 32 candle power requiring a total current of 2.24 Amperes
 Side light with 2 lamps each of 32 candle power requiring a total current of 2.24 Amperes
 Cargo lights of As shown Circuit B candle power, whether incandescent or arc lights No
 If arc lights, what protection is provided against fire, sparks, &c. Not arranged.

Where are the switches controlling the masthead and side lights placed One signal indicator board fitted in Chart room and have one switch each respectively.

DESCRIPTION OF CABLES.

Main cable carrying 120 Amperes, comprised of 37 wires, each No 16 S.W.G. diameter, .119 square inches total sectional area
 Branch cables carrying 29 Amperes, comprised of 19 wires, each No 18 S.W.G. diameter, .0344 square inches total sectional area
 Branch cables carrying 4.9 Amperes, comprised of 7 wires, each No 20 S.W.G. diameter, .0071 square inches total sectional area
 Leads to lamps carrying 3 Amperes, comprised of 1 wires, each No 16 S.W.G. diameter, .0032 square inches total sectional area
 Cargo light cables carrying 53 Amperes, comprised of 36 wires, each No 18 S.W.G. diameter, .0651 square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

The cable insulated with pure rubber and 2 coat of vulcanized rubber & wrapped by compound tape & mohair and armored with galvanized iron wire.
 The cables protected with wooden casing or galvanized iron conduit where bunkers or holds.
 Joints in cables, how made, insulated, and protected for jointing of wires is used brass terminal mounted on porcelain base and protected with cast iron box or wooden box.

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 The main & branch cables is led through the ship's casing or beam which clamping with galvanized iron staples.

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 where exposed weather deck, carrying with galvanized iron conduit & carefully fitted to water tight.

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat galvanized iron tube or wooden conduit

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

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

How are cables carried through beams wooden bushing through bulkheads, &c. water tight stuffing box

How are cables carried through decks galvanized iron deck tube

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

If so, how are they protected the cables throughout in cargo spaces are covered with wooden box

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 no

Where are the main switches and fuses for these lights fitted Those cargo lamps, terminals are fitted on bulk head of upper deck near each hatch way.

If in the spaces, how are they specially protected no

Are any switches or fuses fitted in bunkers no

Cargo light cables, whether portable or permanently fixed portable How fixed wall plug system

In vessels fitted on the single wire system, how is the dynamo terminal fixed to the hull of vessel no

How are the returns from the lamps connected to the hull no

Are all the joints with the hull in accessible positions no

Is the installation supplied with a voltmeter Yes, one Voltmeter and with an amperemeter Yes one ammeter, fixed to 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 _____ 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.

A. Iso

Electrical Engineers

Date 1917

COMPASSES.

Distance between dynamo or electric motors and standard compass

30 ft to motor

Distance between dynamo or electric motors and steering compass

35 ft

The nearest cables to the compasses are as follows:—

A cable carrying	Amperes	feet from standard compass	feet from steering compass
<u>1</u>	<u>20</u>	<u>8</u>	<u>8</u>
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

The maximum deviation due to electric currents, etc., was found to be _____ degrees on standard compass and _____ degrees on

course in the case of the steering compass.

MITSUBISHI DOCKYARD & ENGINE WORKS, KOBE.

M. Jones

Builder's Signature.

Date AUG 8 1917

GENERAL REMARKS.

General Manager.

The installation is fitted in accordance with the requirements of the Rules & worked satisfactorily on trial

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

JWD 10/9/17

Arthur Jones

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

TUE 18 SEP 1917

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.



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