

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 11350

Port of *Southampton* Date of First Survey *25/7/22* Date of Last Survey *22/8/22* No. of Visits *6*
 No. in Reg. Book on the *Iron* Steel *S.S. Robia (Muresc)* Port belonging to
 Built at *Portsmouth* By whom *H. M. Dockyard* When built *1922*
 Owners *Anglo Saxon Petroleum Co. Ltd.* Owners' Address
 Yard No. *4* Electric Light Installation fitted by *H. M. Dockyard, Portsmouth* When fitted *1922*

DESCRIPTION OF DYNAMO, ENGINE, ETC. diameter
 One type vertical engine with cylinder *8" x 6"* stroke direct coupled to open type dynamo
 capable of *12 1/2* k.w. output: manufactured *The Sunderland Forge & Eng. Co.* Dynamo No. *32194* 320 rpm. compound
 Capacity of Dynamo *4 1/2* k.w. 45 Amperes at 100 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 *A.B.C.D.* of lights, &c., as below
 Positions of ~~XXXXXXXXXXXX~~ distributing boxes and numbers of switches on each *B.1 & B.2 in steering compartment B.3 & B.4 in*
dynamo space, C.1 & C.2 in Bridge Dk. passage port, C.3 & C.4 in Bridge Dk. Passage Starboard,
D.1 in wheel house, D.2 in crew space passage. 6 in No.D.P. switches controlling D.B's B.1 & B.2
B.3 & B.4, C.1 & C.2, C.3 & C.4, D.1 & D.2. distributing box
 If fuses are fitted on main switch board to the cables of main circuit Yes ☒ and on each ~~XXXXXXXXXXXX~~ 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 ---- per cent over the normal current
 Are all fuses fitted in easily accessible positions Yes ☒ Are the fuses of standard dimensions Yes ☒ Zed Type 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 ----
 Are all switches and fuses constructed of incombustible materials and fitted on incombustible bases Yes ☒
 Total number of lights provided for 213 (including portables & clusters arranged in the following groups:—
 (& Suez Canal Lights)
 A Nil (W/T Circuits) lights each of { 10 lamps of 16 } candle power requiring a total current of { 16.4 } Amperes
 B 93 lights each of { 1 lamp of 8 } candle power requiring a total current of { 16.3 } 23.1 Amperes
 C 55 lights each of { 2 lamps of 25 } candle power requiring a total current of { 10.6 } 11.2 Amperes
 D 31 lights each of { 1 lamp of 32 } candle power requiring a total current of { 1.25 } 9.5 Amperes
 { 4 lamps of 16 }
 { 21 lamps of 15 }
 { 4 lamps of 8 }
 2 Mast head light each 1 lamp of 32 candle power requiring a total current of 2.5 Amperes
 2 Side light each 1 lamp of 32 candle power requiring a total current of 2.5 Amperes
 4 Cargo lights of 6 - 16 c.p. Lamps-96 candle power, whether incandescent or arc lights incandescent

If arc lights, what protection is provided against fire, sparks, &c. Nil

Where are the switches controlling the masthead and side lights placed Wheel House.

DESCRIPTION OF CABLES.

Main cable carrying W/T 80.44 Amperes, comprised of 37 wires, each .072 S.W.G. diameter, .1500 square inches total sectional area
 Branch cables carrying { W/T } 30.6 Amperes, comprised of { 7 } wires, each { .064 } S.W.G. diameter, { .0225 } square inches total sectional area
 { 27.88 }
 Branch cables carrying 17.18 Amperes, comprised of 19 wires, each .064 S.W.G. diameter, .0600 square inches total sectional area
 & fans
 Leads to lamps carrying { .6 } Amperes, comprised of 1 wires, each .044 S.W.G. diameter, .0015 square inches total sectional area
 { 2.3 }
 Cargo light cables carrying 3.8 Amperes, comprised of 1 wires, each .044 S.W.G. diameter, .0015 square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

1. Lead cased vulcanised India Rubber. 2 & 3. Steel armoured lead V.I.R. ☒
 4 & 5 Jute covered armoured lead V.I.R. 6 & 7. Lead cased V.I.R.

Joints in cables, how made, insulated, and protected None.

Are all the joints of cables thoroughly soldered, and the flux used not containing acids or other corrosive substances --- 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 ---

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 Through W/T Bulkhead glands, Conduit piping.

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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 Conduit piping and armoured cable

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat Conduit piping.

What special protection has been provided for the cables near boiler casings conduit piping

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

How are cables carried through beams holes leaded through bulkheads, &c. W/T Bulkhead glands

How are cables carried through decks W/T deck glands

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

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 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

Cargo light cables, whether portable or permanently fixed Portable How fixed priced up

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 at Switchboard

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 Yes.

Are any switches, fuses, or joints of cables fitted in the pump room or companion No.

How are the lamps specially protected in places liable to the accumulation of vapour or gas Conduit piping (Switch taken to passages)

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.

S. Steel Electrical Engineer Date 5/10/22.

COMPASSES.

Distance between dynamo ~~and standard compass~~ 220 feet

Distance between dynamo ~~and steering compass~~ 216 feet

The nearest cables to the compasses are as follows:—

| | | | | | | |
|-------------------|-----|---------|----|----------------------------------|----|----------------------------------|
| pair of | | | | | | |
| A cables carrying | .4 | Amperes | 9 | feet from standard compass | 6 | feet from steering compass |
| pair of | 1.5 | Amperes | | feet from standard compass | 3½ | feet from steering compass |
| pair of | .6 | Amperes | on | from standard compass | on | from steering compass |

Have the compasses been adjusted with and without the electric installation at work at full power 20

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.

M. G. G.
Captain of Dockyard
J.S.X. 22

Builder's Signature. Date

GENERAL REMARKS.

This installation has been fitted on board in accordance with the requirements of the Rules and has been tried under full working conditions. This vessel is eligible in my opinion for the notation "Electric Light" and "Wireless" Fee £16-0-0

It is submitted that this vessel is eligible for THE RECORD. Elec. Light. A.D. 1/11/22

L. Young
Surveyor to Lloyd's Register of Shipping.

Committee's Minute

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN



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