

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 2293

Port of Kobe. Date of First Survey 25th April Date of Last Survey 3rd June No. of Visits Six.
 No. in Reg. Book on the Iron or Steel Single Screw Steamer "Taibu Maru" Port belonging to Aikafusaki.
 Built at Yamashima By whom Hata Iron Works. Ltd When built 1918.
 Owners Mechida Kisen Kabushiki Kaisha Owners' Address _____
 Yard No. 926 Electric Light Installation fitted by Hata Iron Works Ltd. When fitted 1918.

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Multipolar, compound wound direct driven dynamo

Capacity of Dynamo 15 Kw. ^{50 Amps} Amperes at 100. Volts, whether continuous or alternating current A. Current.

Where is Dynamo fixed On a platform of E.R. Whether single or double wire system is used Double.

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

Positions of auxiliary switch boards and numbers of switches on each

Engine room one. Crews quarters one. Officers rooms two
Signal lights and wireless one.

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 _____

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.

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

Total number of lights provided for 42 + 2 arcs arranged in the following groups:—

A	<u>E.R. room.</u>	<u>33</u> lights each of <u>16</u> candle power requiring a total current of <u>17.49</u> Amperes
B	<u>Officers room</u>	<u>48</u> lights each of <u>16</u> candle power requiring a total current of <u>25.5</u> Amperes
C	<u>Crews quarters</u>	<u>12</u> lights each of <u>16</u> candle power requiring a total current of <u>6.36</u> Amperes
D	<u>Wireless room</u>	lights each of _____ candle power requiring a total current of <u>48</u> Amperes
E	<u>Chart room</u>	<u>2</u> lights each of <u>16</u> and <u>32</u> candle power requiring a total current of <u>1.59</u> Amperes
	Mast head light with <u>2</u> lamps each of <u>32</u> candle power requiring a total current of <u>2.12</u> Amperes	
	Side light with <u>2</u> lamps each of <u>32</u> candle power requiring a total current of <u>2.12</u> Amperes	

Cargo lights of 7x5 + 3x1 @ 16 candle power, whether incandescent or arc lights, Both.

If arc lights, what protection is provided against fire, sparks, &c. 2 arc lamps for cargo work.

Where are the switches controlling the masthead and side lights placed at bridge deck

DESCRIPTION OF CABLES.

Main cable carrying 180 Amperes, comprised of Lead covered wires, each 50/18 S.W.G. diameter, 0.15 square inches total sectional area
 Branch cables carrying 17.49 Amperes, comprised of do wires, each 7/16 S.W.G. diameter, 0.024 square inches total sectional area
 Branch cables carrying 25.5 Amperes, comprised of armoured wires, each 7/16 S.W.G. diameter, 0.024 square inches total sectional area
 Leads to lamps carrying 53 Amperes, comprised of do wires, each 1/18 S.W.G. diameter, 0.003 square inches total sectional area
 Cargo light cables carrying 28.4 Amperes, comprised of do wires, each 19/18 S.W.G. diameter, 0.035 square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Officers' and Crews quarters: Lead covered wire. Wood covers.
Engine and boiler room space and cargo hatch. Armoured wire through galv'd pipes.

Joints in cables, how made, insulated, and protected

Cast iron or porcelain bot.

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 No.

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 Carried through Calmanges Iron pipes.

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat Armoured wires are used

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 Armoured wires are used also lead wires led through Calmange pipes

How are cables carried through beams lead sheet ferrules through bulkheads, &c. flange nut and packing complete.

How are cables carried through decks through Calmange pipe with flange fitted to deck

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

If so, how are they protected Armoured wire is used or wires carried in Calmange pipes

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 no

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 no

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, and with an amperemeter Yes, fixed at South Head

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 no

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 no

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 0.5 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.

E. T. Trenchard Electrical Engineers Date _____

COMPASSES.

Distance between dynamo or electric motors and standard compass Above 90'-0"

Distance between dynamo or electric motors and steering compass _____

The nearest cables to the compasses are as follows:—

A cable carrying <u>53</u> Amperes	<u>7'-10"</u> 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 _____

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.

The installation has been fitted in accordance with the requirements of the Rules and worked satisfactorily on trial.

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

R. B. Patechetov
Surveyor to Lloyd's Register of Shipping.

Committee's Minute _____

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

