

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 5359

Port of Kobe Date of First Survey 16-6-26 Date of Last Survey 9-7-26 No. of Visits 3
 No. in Reg. Book on the ~~Iron~~ Steel Motorship "SWELL MARK" Port belonging to Kobe
 Built at Yokohama By whom Kobe Steel Works, Yokohama, Japan When built 1916
 Owners Empire Shipping Co. Owners' Address Tokyo
 Yard No. 121 Electric Light Installation fitted by Newton, Jannett, England Yokohama, Japan When fitted 1926

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Petrol and/or Paraffin single cylinder Engine coupled to a direct current dynamo.

Capacity of Dynamo 1 1/2 Kw Amperes at 100 Volts, whether continuous or alternating current Continuous

Where is Dynamo fixed Engine Room

Position of Main Switch Board - do - having switches to groups A-B-C of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each ✓

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 ✓ and at each position where a cable is branched or reduced in size ✓ and to each lamp circuit Yes

If vessel 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 25% per cent over the normal current

Are all cut outs 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 ✓

Are all switches and cut-outs constructed of incombustible materials and fitted on incombustible bases Yes

Total number of lights provided for 23 arranged in the following groups:—

(See also tables)
 A Stemlight 1 lights each of 32 candle power requiring a total current of .4 Amperes
 B Accommodation 14 lights each of 16 candle power requiring a total current of 2.8 Amperes
 C Engine Room 5 lights each of 16 candle power requiring a total current of 1.0 Amperes
 D lights each of candle power requiring a total current of Amperes
 E lights each of candle power requiring a total current of Amperes
 A [1 Mast head light with 1 lamps each of 32 candle power requiring a total current of .4 Amperes
 [2 Side light with 1 lamps each of 32 candle power requiring a total current of .8 Amperes
 1 Cargo lights of 200 candle power, whether incandescent or arc lights 1.0

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

Where are the switches controlling the masthead and side lights placed Chart Room

DESCRIPTION OF CABLES.

Main cable carrying 21 Amperes, comprised of 7 wires, each 18 L.S.G. diameter, .0114 square inches total sectional area

Branch cables carrying 6 Amperes, comprised of 1 wires, each 16 L.S.G. diameter, .0032 square inches total sectional area

Branch cables carrying Amperes, comprised of wires, each L.S.G. diameter, square inches total sectional area

Leads to lamps carrying 3.5 Amperes, comprised of 1 wires, each 18 L.S.G. diameter, .0018 square inches total sectional area

Cargo light cables carrying 3.5 Amperes, comprised of 1 wires, each 18 L.S.G. diameter, .0018 square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Lead covered & armoured

Joints in cables, how made, insulated, and protected Junction boxes

Are all the joints of cables thoroughly soldered, resin only having been used as a flux ✓ 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 no

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 Lead case & armoured

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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

Assumed

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

- do -

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

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

Assumed

How are cables carried through beams

through bulkheads, &c.

Glands

How are cables carried through decks

Glands

Are any cables run through coal bunkers or cargo spaces Yes. or spaces which may be used for carrying cargo, stores, or baggage

If so, how are they protected

Assumed

Are any lamps fitted in coal bunkers or spaces which may at times be used for cargo, coals, or baggage

✓

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

Socket

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

✓

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 installation is supplied with a voltmeter and an amperemeter, fixed

The copper used is guaranteed to have a conductivity of per cent. that of pure copper.

Insulation of cables is guaranteed to have a resistance of not less than 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.

Electrical Engineers

Date

COMPASSES.

Distance between dynamo or electric motors and standard compass

15/16

Distance between dynamo or electric motors and steering compass

The nearest cables to the compasses are as follows:—

(Cable to compass lamp)

A cable carrying 2 Amperes

Amperes

1

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.

This installation has been fitted on board in accordance with the Rules, tried under working conditions & found satisfactory.

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

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

Committee's Minute

31. 3 SEP. 1920

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

