

TUE SEP 23 1919

Received at London Office

## REPORT ON ELECTRIC LIGHTING INSTALLATION. No.

Name of **KOBE.**Date of First Survey **17<sup>th</sup> May**Date of Last Survey **14<sup>th</sup> July**No. of Visits **6.**

on the Iron or Steel

**S.S. KAMIKI MARU.**

Port belonging to

**TOBA, JAPAN.**

Built at

**TOBA.**

By whom

**TOBA Ship Yard**

When built

**July 1919****Sawada Leikoku Steamship Co**

Owners' Address

**Kobe**

Electric Light Installation fitted by

**Toba Ship Yard**When fitted **July 1919**

## DESCRIPTION OF DYNAMO, ENGINE, ETC.

Direct current open type compound generator which is directly coupled with high speed engine.

Volts, whether continuous or alternating current **continuous**

Whether single or double wire system is used **double wire system**

of lights, &c., as below

we have no auxiliary switches.

are fitted on main switch board to the cables of main circuit **one set** and on each auxiliary switch board to the cables of auxiliary

circuits **five sets** and at each position where a cable is branched or reduced in size **no** and to each lamp circuit **fuse wire**

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**

the fuses of non-oxidisable metal **yes** and constructed to fuse at an excess of **150** per cent over the normal current

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**

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

number of lights provided for electric lighting arranged in the following groups:—

Wangsten lamp 61 lights each of	16	candle power requiring a total current of	13	Amperes
Wangsten lamp 13 lights each of	10	candle power requiring a total current of	3	Amperes
Carbon lamp 38 lights each of	16	candle power requiring a total current of	15	Amperes
Carbon lamp 1 lights each of	32	candle power requiring a total current of	8	Amperes
Carbon lamp 3 lights each of	5	candle power requiring a total current of	5	Amperes
Mast head light with 4 lamps each of	2 Nitia 300 watt 2 carbon 32	candle power requiring a total current of	7	Amperes
Side light with 2 lamps each of	32	candle power requiring a total current of	1.6	Amperes
Cargo lights of	16	candle power, whether incandescent or arc lights	incandescent	

lights, what protection is provided against fire, sparks, &c. **no arc lamp.**

are the switches controlling the masthead and side lights placed **In the chart room.**

## DESCRIPTION OF CABLES.

cable carrying	66	Amperes, comprised of S.W.G. $\frac{60}{20}$ wires, each	36 mil S.W.G. diameter, .06	square inches total sectional area
each cables carrying	2.1	Amperes, comprised of S.W.G. $\frac{19}{20}$ wires, each	36 mil S.W.G. diameter, .019	square inches total sectional area
each cables carrying	33	Amperes, comprised of S.W.G. $\frac{30}{20}$ wires, each	36 mil S.W.G. diameter, .033	square inches total sectional area
to lamps carrying	2	Amperes, comprised of S.W.G. $\frac{18}{18}$ wires, each	48 mil S.W.G. diameter, .0018	square inches total sectional area
to light cables carrying	3.5	Amperes, comprised of S.W.G. $\frac{16}{16}$ wires, each	65 mil S.W.G. diameter, .003	square inches total sectional area

## DESCRIPTION OF INSULATION, PROTECTION, ETC.

To perfect the insulation of all the cables, they are lead covered and perfectly protected, inserting to the steel tubes.

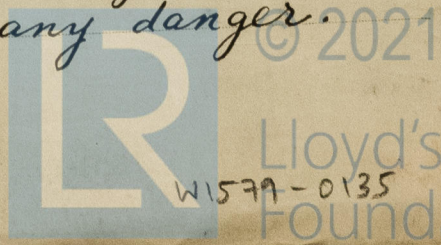
are the cables, how made, insulated, and protected **Joints in branches are made in properly constructed water tight junction box.**

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 joint.**

are the cables led through the ship, and how protected **The cable, led through the ship, are enclosed in steel tubes protected from any danger.**



Lloyd's Register  
Foundation

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 Lead covered wires or cables which are protected by tubes are used in such places.

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

What special protection has been provided for the cables near boiler casings By lead covered fitting

What special protection has been provided for the cables in engine room By lead covered fitting

How are cables carried through beams By lead tube through bulkheads, &c. by pipe.

How are cables carried through decks By water tight pipe.

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 By lead covered fitting.

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

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

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, and with an amperemeter, fixed

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.

R. Inoue Electrical Engineers Date July 1919

COMPASSES.

Distance between dynamo or electric motors and standard compass over 60 feet

Distance between dynamo or electric motors and steering compass over 60 feet

The nearest cables to the compasses are as follows:—

A cable carrying	Amperes	feet from standard compass	feet from steering compass
.4	1		
.45		3	

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

The maximum deviation due to electric currents, etc., was found to be no degrees on course in the case of the standard compass and no degrees on course in the case of the steering compass.

THE TEIKOKU STEAMSHIP CO., LTD

Builder's Signature. Date 18th Aug. 1919.

GENERAL REMARKS.

The Installation has been fitted in accordance with the Rules & Regulations, and worked satisfactorily on trial.

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

Alexander Watt.  
Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI SEP 26 1919



© 2021

Lloyd's Register Foundation

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.