

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 425

Port of Seattle Wash. Date of First Survey July 16/18 Date of Last Survey Sept 27/18 No. of Visits 8
 No. in Reg. Book on the Iron or Steel Wood Twin Screw M.S. Challenger Port belonging to Melbourns
 Built at Olympia Washington By whom Stearn Shipyard Corporation When built 1915
 Owners Commonwealth Government Owners' Address Australian House Strand London
 Yard No. Electric Light Installation fitted by Stearn Shipyard Corporation When fitted 1915

DESCRIPTION OF DYNAMO, ENGINE, ETC.

1 Dynamo 8 K.W. M.P. Compound wound Wire Connected to a 7" x 6 Engelgo Vertical Engine Type M.P. 6

Capacity of Dynamo 70 Amperes at 110 Volts, whether continuous or alternating current Wire

Where is Dynamo fixed Port Side of engine room Whether single or double wire system is used Double

Position of Main Switch Board Port Side engine room having switches to groups A B C D E F G 7 circuit of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each 2 Panel board of 4 switches each in

Officers quarters port side Windlass room 4 switches Tank rooms 4 switches
Forecastle 3 junction boxes fixed

* 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 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 25% 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 230 arranged in the following groups: - A B C D E F G

A Midship house 38 lights each of 25 Watts candle power requiring a total current of 8.7 Amperes

B Tank room 41 lights each of 25 Watts candle power requiring a total current of 9.31 Amperes

C Peep Deck 55 lights each of 25 Watts candle power requiring a total current of 12.5 Amperes

D Bridge deck 62 lights each of 25 " candle power requiring a total current of 15.0 Amperes

E Forecastle 29 lights each of 25 " candle power requiring a total current of 6.5 Amperes

2 Mast head light with 1 lamps each of 25 Watts candle power requiring a total current of 2.5 Amperes

2 Side light with 1 lamps each of 25 " candle power requiring a total current of 2.5 Amperes

12 Cargo lights of 5 - 25 watt lamp candle power, whether incandescent or arc lights Incandescent

If arc lights, what protection is provided against fire, sparks, &c. None used

Where are the switches controlling the masthead and side lights placed Located in wheel house

DESCRIPTION OF CABLES.

Main cable carrying 75 Amperes, comprised of 7 wires, each .0973 S.W.G. diameter, 5212.8 square inches total sectional area

Branch cables carrying None Amperes, comprised of None wires, each None S.W.G. diameter, None square inches total sectional area

Branch cables carrying None Amperes, comprised of None wires, each None S.W.G. diameter, None square inches total sectional area

Leads to lamps carrying 6 Amperes, comprised of 1 wires, each .064 S.W.G. diameter, 322.58 square inches total sectional area

Cargo light cables carrying 5 Amperes, comprised of 1 wires, each .064 S.W.G. diameter, 322.58 square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Double braid rubber insulation run in metal
Conduit

Joints in cables, how made, insulated, and protected Soldered Taped and painted with P & B Electric paint

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 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 Galvanized iron Conduit



© 2021
 W592-0150
 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 Metal Conduit

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

What special protection has been provided for the cables near boiler casings Asbestos Covered wire in metal Conduit

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

How are cables carried through beams Run in Conduit through bulkheads, &c. Conduit with lock nut & washer

How are cables carried through decks Conduit and stuffing boxes

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 Metal Conduit run in 2" wood Boxes

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 none

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 None

Cargo light cables, whether portable or permanently fixed portable How fixed Receptacles on hatch Combing

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 on 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 Steam light-globes

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. yes

Insulation of cables is guaranteed to have a resistance of not less than 1500 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.

Electrical Engineers

Date

COMPASSES.

Distance between dynamo or electric motors and standard compass 112 ft.

Distance between dynamo or electric motors and steering compass 100 "

The nearest cables to the compasses are as follows:—

A cable carrying	<u>1/2</u>	Amperes	<u>11</u>	feet from standard compass	<u>10</u>	feet from steering compass
A cable carrying	<u>1</u>	Amperes	<u>15</u>	feet from standard compass	<u>15</u>	feet from steering compass
A cable carrying	<u>1/2</u>	Amperes	<u>8</u>	feet from standard compass	<u>8</u>	feet from steering compass

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 nil degrees on Various course in the case of the standard compass and nil degrees on Various course in the case of the steering compass.

Loay Shipyards Corporation
L. Meeo, Acting Manager

Builder's Signature.

Date

GENERAL REMARKS.

The Electric Lighting installation of good quality and workmanship tested under working conditions and found satisfactory. Eligible in my opinion to be noted in the Register Book

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

J.W.D.
23/11/18.

L. Nosworthy

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Elec. light

New York NOV 6 1918



© 2021

Lloyd's Register Foundation

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.