

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 62568

Port of Newcastle Date of First Survey 6th Jun Date of Last Survey 21st Jun 1912 No. of Visits 6
 No. in on the ~~Iron~~ or Steel S.S. "Port Lincoln" Port belonging to London
 Reg. Book 964 Built at Newcastle By whom Hawthorn Leslie & Co. Ltd When built 1912
 Owners Charles Thomas Milburn Owners' Address 130 Leechurch St. London E.C.
 Yard No. 452 Electric Light Installation fitted by Jahman Bros. Co. When fitted 1912

DESCRIPTION OF DYNAMO, ENGINE, ETC.

2. 9 1/2 H.P. 100 Volt dynamo 250 R.P.M.
 Capacity of Dynamo 144 Amperes at 100 Volts, whether continuous or alternating current Continuous
 Where ~~the~~ ^{are} Dynamos fixed Runs above Hatching Platform Whether single or double wire system is used Double
 Position of Main Switch Board Above Bulkhead near dynamo having switches to groups A, B, C, D, E, F, G, H, I, J, K, L, M, N lights, &c., as below
 Positions of auxiliary switch boards and numbers of switches on each 1+4, 1+6, 2+4, 2+3 Way in Engine Room, 1+4, 1+8 Way in Office Passage, 1+3 Way Books Path, 1+5 Way Rye Pass, 1+5 Way Steer Gun House, 1+3, 1+8, 1+8 Way Pantry, 1+7 Way Chubroom, 1+6 Way Forecastle Passage, 1+9, 1+7, 2+4, 2+3 Way in Engine Room
 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 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 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 Yes
 Are all switches and cut-outs constructed of incombustible materials and fitted on incombustible bases Yes
 Total number of lights provided for 478 x 16 W + 33 Plugs arranged in the following groups:—

Group	Number of lights	Candle power	Amperes
A. Engine Room	24	16	20.16
B. Office Passage	72	"	40.32
C. Forecastle Passage	60	"	44.8
D. Chubroom	48	"	33.6
E. Steer Gun House	16	"	23.52
F. Books Path	12	"	19.2
G. Rye Pass	12	"	19.2
H. Pantry	12	"	19.2
I. Engine Room	12	"	19.2
J. Forecastle Passage	12	"	19.2
K. Chubroom	12	"	19.2
L. Office Passage	12	"	19.2
M. Steer Gun House	12	"	19.2
N. Books Path	12	"	19.2
2 Mast head light with 1 lamp each of	32	"	1.12
2 Side lights with 1 lamp each of	32	"	1.12
12 Cargo lights of 3 + 32		"	Incandescent

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

Where are the switches controlling the masthead and side lights placed Chubroom

DESCRIPTION OF CABLES.

Main cable carrying 144 Amperes, comprised of 19 wires, each 12 L.S.G. diameter, .159 square inches total sectional area
 Branch cables carrying 44.8 Amperes, comprised of 19 wires, each 17 L.S.G. diameter, .046 square inches total sectional area
 Branch cables carrying 40.32 Amperes, comprised of 19 wires, each 17 L.S.G. diameter, .046 square inches total sectional area
 Leads to lamps carrying .56 Amperes, comprised of 1 wires, each 18 L.S.G. diameter, .0018 square inches total sectional area
 Cargo light cables carrying 3.36 Amperes, comprised of 7 wires, each 2 1/2 L.S.G. diameter, .0048 square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

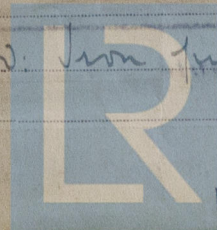
Insulated copper. Pure Paraffin. Vuls rubber taped braided & lead covered

Joints in cables, how made, insulated, and protected As above

Are all the joints of cables thoroughly soldered, resin only having been used as a flux 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 Yes

How are the cables led through the ship, and how protected R cable in Galv. Iron pipe



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DESCRIPTION OF INSULATION, PROTECTION, ETC.—continued.

Are they in places always accessible

Generally

What special protection has been provided for the cables in open alleyways or where exposed to weather or moisture

Lead covered - Amud

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

" " "

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

" " "

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

" " "

How are cables carried through beams

Fibre bushes

through bulkheads, &c.

Slipping beams

How are cables carried through decks

Deck tubes

Are any cables run through coal bunkers

Yes

or cargo spaces

Yes

or spaces which may be used for carrying cargo, stores, or baggage

Yes

If so, how are they protected

Galv. Iron pipe

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

Yes

If so, how are the lamp fittings and cable terminals specially protected

C.I. Fittings in Bunkers. Portables in Iron ducts

Where are the main switches and cut outs for these lights fitted

Eng. Room

If in the spaces, how are they specially protected

—

Are any switches or cut outs fitted in bunkers

No

Cargo light cables, whether portable or permanently fixed

Portable

How fixed

W.I. 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

The installation is

supplied with a voltmeter and

an amperemeter, fixed

on Main Board

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 copper used is guaranteed to have a conductivity of 100 per cent. that of pure copper.

Insulation of cables is guaranteed to have a resistance of not less than 600 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.

Falconer & Co

Electrical Engineers

Date June 29, 1912

COMPASSES.

Distance between dynamo or electric motors and standard compass

140 ft

Distance between dynamo or electric motors and steering compass

136 "

The nearest cables to the compasses are as follows:—

A cable carrying	Amperes	feet from standard compass	feet from steering compass
12.2	15	10	
56	1	1	

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

each

course in the case of the

standard compass and

Nil

degrees on

each

course in the case of the steering compass.

R. & W. HAWTHORN, LESLIE & CO. LIMITED

Builder's Signature.

Date

July 2nd 1912

GENERAL REMARKS.

This installation has been fitted in accordance with the Rules, it has been seen running under full power & in my opinion is eligible to have record of Elec Light. 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



Lloyd's Register Foundation

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.