

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 7330

Port of Belfast Date of First Survey 3rd Dec. 1913 Date of Last Survey 9th Jan. 1914 No. of Visits 10
 No. in Reg. Book on the Iron or Steel T.S.S. "Star of Victoria" Port belonging to Belfast.
 Built at Belfast By whom Workman Clark & Co. Ltd. When built 1914.
 Owners Star Line Ltd. (J.P. Carry & Co). Owners' Address London.
 Yard No. 328 Electric Light Installation fitted by Sunderland Forge & Eng. Co. Ltd. When fitted 1914

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Two Multipolar Pallion Dynamos coupled to Workman Clark & Co's open type engines

Capacity of Dynamo each 260 Amperes at 100 Volts, whether continuous or alternating current Continuous ✓
 Where is Dynamo fixed In thrust recess Whether single or double wire system is used double ✓
 Position of Main Switch Board Near Dynamo having switches to groups Nine circuits of lights, &c., as below
 Positions of auxiliary switch boards and numbers of switches on each no Auxiliary board

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-oxidisable metal Timed copper and constructed to fuse at an excess of 100 ✓ 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 All on slate and porcelain bases.

Total number of lights provided for 348-16 c.p. arranged in the following groups:—
362-8 c.p.
 A 106 lights each of 16 candle power requiring a total current of 63.3 Amperes
 B 68 lights each of 16 candle power requiring a total current of 40.8 Amperes
 C 53 lights each of 16 candle power requiring a total current of 31.8 Amperes
 D 121 lights each of 16 candle power requiring a total current of 72.6 Amperes
 E Wireless Telegraphy lights each of 30 candle power requiring a total current of 30 Amperes
2 Mast head light with 1 lamps each of 32 candle power requiring a total current of 2.4 Amperes
2 Side light with 1 lamps each of 32 candle power requiring a total current of 2.4 Amperes
15 Cargo lights of 80 candle power, whether incandescent or arc lights incandescent.

If arc lights, what protection is provided against fire, sparks, &c. ✓
 Where are the switches controlling the masthead and side lights placed In wheelhouse.

DESCRIPTION OF CABLES.

Main cable carrying 260 Amperes, comprised of 37 wires, each .112" S.W.G. diameter, .35 square inches total sectional area
 Branch cables carrying 63.3 Amperes, comprised of 19 wires, each 16 S.W.G. diameter, .060 square inches total sectional area
 Branch cables carrying 31.8 Amperes, comprised of 7 wires, each 18 S.W.G. diameter, .0125 square inches total sectional area
 Leads to lamps carrying 3 Amperes, comprised of 7 wires, each 25 S.W.G. diameter, .0022 square inches total sectional area
 Cargo light cables carrying 3 Amperes, comprised of 114 wires, each 38s S.W.G. diameter, .003 square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Insulated with pure rubber vulcanised rubber, taped, lead covered and braided on lead covered armoured and braided where required. Insulation resistance 2500 megohm.

Joints in cables, how made, insulated, and protected No joints.
 Are all the joints of cables thoroughly soldered, and the flux used not containing acids or other corrosive substances ✓ 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 ✓
 Are there any joints in or branches from the cable leading from dynamo to main switch board ✓
 How are the cables led through the ship, and how protected Clipped up with galvanised iron clips and then cased in with Bituminised wood.

Circuits.
 F. 42-8 c.p. lamps.)
 G. 110-8 c.p.) These are not fitted. Mains and fuse boxes laid in for them only.
 H. 110-8 c.p.)
 I. 100-8 c.p.)

W1005-0028

DESCRIPTION OF INSULATION, PROTECTION, ETC.—continued.

Are they in places always accessible Yes in tween decks

What special protection has been provided for the cables in open alleyways or where exposed to weather or moisture: Braided cables used in these places. Lead covered, and

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

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

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

How are cables carried through beams in Holes pushed with fibre through bulkheads, &c. W.T. Glands.

How are cables carried through decks in Galvanised irondeck pipes.

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 Clipped on wood grounds and boxed over.

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 in Cast iron boxes.

Where are the main switches and fuses for these lights fitted in Engine room.

If in the spaces, how are they specially protected With cast iron covers.

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 /

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 2, and with an amperemeter Yes 2, 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

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 7500 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.

P. PRO THE SUNDERLAND FORGE & ENGINEERING CO., LTD.

Electrical Engineers Date 26/1/14.

COMPASSES.

Distance between dynamo or electric motors and standard compass 290 ft.

Distance between dynamo or electric motors and steering compass 285 ft.

The nearest cables to the compasses are as follows:—

A cable carrying	30	Amperes	115	feet from standard compass	100	feet from steering compass
A cable carrying	10	Amperes	16	feet from standard compass	6	feet from steering compass
A cable carrying	1	Amperes	10	feet from standard compass	6	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 None degrees on all courses in the case of the standard compass and None degrees on all course in the case of the steering compass.

PRO WORKMAN CLARK & CO., LIMITED.

Builder's Signature Date 29th July 1914

GENERAL REMARKS.

This installation is of good description, and has been fitted in accordance with the Rules.

It is submitted that this vessel is eligible for

THE RECORD, Elec. Light

P. J. Beveridge

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

Committee's Minute FRI. FEB. 6 - 1914

TUE. FEB. 10. 1914

TUE. MAR. 28. 1914

FRI. JUN. 26. 1914



EPD

These

Signal Le

Official

1 3 2

No., Date, a

Whether Br

Foreign E

British

Number of

Number of

Rigged

Stern

Build

Galleries

Head

Framework

vessel

Number of

Number of

and their

Total to quarter th

to bottom of

No. of

sets of

Engines.

Desc

Two.

Vert

direct

conca

escha

No. of

Shafts.

Part

Descript

Number

Iron or

Loaded

Under Tonnag

Space or space

Turret or Tur

castle

Bridge space

Poop or Break

Side Houses

Deck Houses

Chart House

Spaces for mac

Section 78 (2

1894

Excess of Hatch

Gross

Deductions, as

Registr

NOTE 1.—The tonn

Deck for

NOTE 2.—The unde

Passag

Tween De

Below Ton

From af

Name of

No. of Owners

Name, Residence

The Star

a

Manager

Dated 13 9

(830) (5,862) Wt. 2898

(81762) 203

WEB FR

FRAMES, In E

No. of Side

FRAMES, In E

FRAMES, In A

No. of Side

Size of Face

LET PLATES

Frames, depth

HEADS.

HEADS

ION ..

ION ..

UDINAL..

Outside Plates

Sluice Valves

TRAKES.

ATE KEEL..

rel. state Brecth

RD or A St

B

C

D

E

F

G

H

J

K

L

M

N

shake

P

Q

R

S

T

U

V

W

OF SH'EST

LONG BR

STRAKE E

Plat Plate

Sheerstr

and thickne

ES

BRIDGE SID

LE SIDES

Deck

r Plate

Deck

Plate

extend

ED FR.

d bul

MASTS...

Yards

Materi

comp

Im. 9.12.—Transfer.