

SAT JAN 31 1914

REPORT ON ELECTRIC LIGHTING INSTALLATION.

No. 27145

Port of Hull. Date of First Survey Jan 2nd Date of Last Survey Jan 14/14 No. of Visits 5
 No. in on the Iron or Steel SE K "FILEY." Port belonging to Hull.
 Reg. Book 32 Sup. Built at Beverley By whom Book, Nelson & Scumell When built 1914.
 Owners Hull Ship Fitting & Sec Co Owners' Address _____
 Yard No. _____ Electric Light Installation fitted by Humber Electrical Eng. Co When fitted 1914.

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Direct Coupled Generating Set.
Dynamo Compound board.
 Capacity of Dynamo 65. Amperes at 65. Volts, whether continuous or alternating current Continuous.
 Where is Dynamo fixed Starboard side of E.R. Whether single or double wire system is used Double.
 Position of Main Switch Board Starboard side E.R. having switches to groups 4 of lights, &c., as below
 Positions of auxiliary switch boards and numbers of switches on each The 3 way distributing fuse.
Board Engine room, one 6 way in Galley.

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 ✓ and to each lamp circuit ✓

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 26 arranged in the following groups:—

A	<u>2</u>	lights each of	<u>16</u>	candle power requiring a total current of	<u>2</u>	Amperes
B	<u>12</u>	lights each of	<u>16</u>	candle power requiring a total current of	<u>12</u>	Amperes
C	<u>11</u>	lights each of	<u>16</u>	candle power requiring a total current of	<u>11</u>	Amperes
D	<u>1 Search light</u>	lights each of	<u>✓</u>	candle power requiring a total current of	<u>30</u>	Amperes
E	<u>✓</u>	lights each of	<u>✓</u>	candle power requiring a total current of	<u>✓</u>	Amperes
	<u>1 Mast head light with</u>	<u>1</u> lamps each of	<u>32</u>	candle power requiring a total current of	<u>✓</u>	Amperes
	<u>✓ Side light with</u>	<u>✓</u> lamps each of	<u>✓</u>	candle power requiring a total current of	<u>✓</u>	Amperes
	<u>1 Cargo lights of</u>	<u>6-16</u>		candle power, whether incandescent or arc lights	<u>✓</u>	

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

Where are the switches controlling the masthead and side lights placed Bridge.

DESCRIPTION OF CABLES.

Main cable carrying 65. Amperes, comprised of 19 wires, each 16. S.W.G. diameter, .06 square inches total sectional area
 Branch cables carrying 12. Amperes, comprised of 3 wires, each 10. S.W.G. diameter, .02994 square inches total sectional area
 Branch cables carrying 30. Amperes, comprised of 7 wires, each 16. S.W.G. diameter, .02214 square inches total sectional area
 Leads to lamps carrying 1. Amperes, comprised of 1 wires, each 18. S.W.G. diameter, .00181 square inches total sectional area
 Cargo light cables carrying 6. Amperes, comprised of 1 wires, each 18. S.W.G. diameter, .00181 square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

All wires & cables 600 megohms grade
Henslop make, cabins overheads lead covered, all other
parts of ship lead covered & armoured.

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 No.

How are the cables led through the ship, and how protected clipped up under deck direct to steel or wood work.

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 and armoured.

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

Lead covered and armoured.

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

Holes drilled.

through bulkheads, &c.

M. F. glands.

How are cables carried through decks

Black Pipes.

Are any cables run through coal bunkers

No.

or cargo spaces

Yes.

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

✓

If so, how are they protected

Lead covered & armoured.

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

Plug Connection

How fixed

Slide Switches

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

M. Switch board

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.

THE HUNTER ELECTRICAL ENGINEERING CO.

Electrical Engineers

Date

COMPASSES.

Distance between dynamo or electric motors and standard compass

About 30 feet

Distance between dynamo or electric motors and steering compass

" " "

The nearest cables to the compasses are as follows:—

A cable carrying 5 Amperes To Compass feet from standard compass feet from steering compass

A cable carrying 5 Amperes To Binnacle 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.

FRAZER, WELTON & GEMMELL LTD

W. Gemmell

Builder's Signature.

Date

Jan 27th 1914

GENERAL REMARKS.

This installation of electric light has been well fitted. The materials and workmanship are good. It has been tried under full working conditions.

It is submitted that this vessel is eligible for

THE RECORD Elec. light.

J.W.D. 31/1/14

J. G. MacKillop

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

Committee's Minute

Im 912—Transfer.

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.



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