

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 132

Port of WEST HARTLEPOOL Date of First Survey 2nd April Date of Last Survey 19th April No. of Visits 9
 No. in Reg. Book bl/143 on the Iron or Steel S/S Grof Serenyi, Bela Port belonging to Sume
 Built at West Hartlepool By whom Messrs W. Gray & Co. Ltd. When built 1907
 Owners Atlantic Lengerhajyasi Reszvény Társasag Owners' Address Buda-Pest.
 Yard No. 743 Electric Light Installation fitted by Messrs Clarke Chapman & Co. Ltd. When fitted 1907

DESCRIPTION OF DYNAMO, ENGINE, ETC.

One single cylinder double acting open type vertical Engine direct coupled to a continuous current compound wound dynamo
 Capacity of Dynamo 150 Amperes at 65 Volts, whether continuous or alternating current Continuous
 Where is Dynamo fixed Engine Room, Bottom platform Whether single or double wire system is used Double wire
 Position of Main Switch Board Near dynamo having switches to groups A. B. C. D. E of lights, &c., as below
 Positions of auxiliary switch boards and numbers of switches on each Each light & groups of lights fitted with switches as required

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 50 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, slate & asbestos

Total number of lights provided for 91 arranged in the following groups :-

A	<u>15</u>	lights each of	<u>16</u>	candle power requiring a total current of	<u>13.8</u>	Amperes
B	<u>32</u>	lights each of	<u>16</u>	candle power requiring a total current of	<u>29.5</u>	Amperes
C	<u>31</u>	lights each of	<u>16</u>	candle power requiring a total current of	<u>28.6</u>	Amperes
D	<u>13</u>	lights each of	<u>16</u>	candle power requiring a total current of	<u>12</u>	Amperes
E	<u>20" Searchlight</u>	lights each of	<u>20,000</u>	candle power requiring a total current of	<u>60</u>	Amperes
	<u>2</u>	Mast head light with <u>1</u> lamps each of	<u>32</u>	candle power requiring a total current of	<u>3.4</u>	Amperes
	<u>2</u>	Side light with <u>1</u> lamps each of	<u>32</u>	candle power requiring a total current of	<u>3.4</u>	Amperes
	<u>6</u>	Cargo lights of each <u>6-16</u>		candle power, whether incandescent or arc lights	<u>Incandescent</u>	

If arc lights, what protection is provided against fire, sparks, &c. 2-15 ampere Arc lamps totally enclosed in clear glass lanterns.
 Where are the switches controlling the masthead and side lights placed in wheelhouse

DESCRIPTION OF CABLES.

Main cable carrying	<u>150</u>	Amperes, comprised of	<u>34</u>	wires, each	<u>15</u>	L.S.G. diameter, <u>.15000</u> square inches total sectional area
Branch cables carrying	<u>24</u>	Amperes, comprised of	<u>4</u>	wires, each	<u>14</u>	L.S.G. diameter, <u>.03459</u> square inches total sectional area
Branch cables carrying	<u>12</u>	Amperes, comprised of	<u>4</u>	wires, each	<u>18</u>	L.S.G. diameter, <u>.01246</u> square inches total sectional area
Leads to lamps carrying	<u>.9</u>	Amperes, comprised of	<u>1</u>	wires, each	<u>18</u>	L.S.G. diameter, <u>.00181</u> square inches total sectional area
Cargo light cables carrying	<u>5.5</u>	Amperes, comprised of	<u>176</u>	wires, each	<u>38</u>	L.S.G. diameter, <u>.00504</u> square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Lead covered in dia-rubber taped & braided, lead covered over all, & where exposed steel armoured over the lead covering
 Joints in cables, how made, insulated, and protected no joints except mechanical ones.
 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, 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 Lead covered & steel armoured clipped to underside of deck with wrought iron & brass clips.



DESCRIPTION OF INSULATION, PROTECTION, ETC.—continued.

Are they in places always accessible no

What special protection has been provided for the cables in open alleyways or where exposed to weather or moisture Lead covered and Steel armoured

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat Lead covered 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 in lead bushes through bulkheads, &c. in watertight glands

How are cables carried through decks in galvanized iron watertight deck tubes

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 Lead covered and Steel 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 cut outs for these lights fitted —

If in the spaces, how are they specially protected —

Are any switches or cut outs fitted in bunkers —

Cargo light cables, whether portable or permanently fixed Portable How fixed in watertight C.I. Con. Boxes

In vessels fitted on the single wire system, how is the dynamo terminal fixed to the hull of vessel Double wire system

How are the returns from the lamps connected to the hull —

Are all the joints with the hull in accessible positions —

The installation is now supplied with a voltmeter and also an amperemeter, fixed on Switchboard.

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.

Robert Scope Electrical Engineers Date April 30th 1907

COMPASSES.

Distance between dynamo or electric motors and standard compass 88 feet.

Distance between dynamo or electric motors and steering compass 80 "

The nearest cables to the compasses are as follows:—

A cable carrying <u>.9</u> Amperes	<u>12</u> feet from standard compass	<u>6</u> feet from steering compass
A cable carrying <u>.9</u> Amperes	<u>6</u> feet from standard compass	<u>12</u> 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 Yes

The maximum deviation due to electric currents, etc., was found to be nil degrees on all course in the case of the standard compass and nil degrees on all course in the case of the steering compass.

Geo Jones Builder's Signature. Date May 3/1907

GENERAL REMARKS.

The fitting of the wires is as stated in this report throughout

The vessel and appears to be in accordance with the Committee's

Requirements.

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

Committee's Minute It is submitted that the Record Elec. Light be noted in the Reg. Book.

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

REPORT FORM No. 15.—5m.34.



7.5.07