

## REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 132

Port of WEST HARTLEPOOL Date of First Survey 2<sup>nd</sup> April Date of Last Survey 29<sup>th</sup> April No. of Visits 9  
 No. in on the Iron or Steel S/S Gróf Serényi. Béla Port belonging to Turme  
 Reg. Book blank Built at West Hartlepool By whom Messrs W. Gray & Co. Ltd When built 1907  
 Owners Atlantic Lengerhajzási Részvénytársaság 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.

The 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 & group 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 & rubber

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.

Insulated 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 30<sup>th</sup> 1904

COMPASSES.

Director.

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

Managing Director.

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.

Name as 'Szerenyi'  
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James Lorne

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.

Lloyd's Register  
Foundation

7.5.04

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.