

16 NOV 1927

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 82032

Port of *Newcastle.* Date of First Survey *27 Oct.* Date of Last Survey *3 Nov.* No. of Visits *4*
 No. in Reg. Book *32486.* on the Iron or Steel *Principele Barbu Stirbei* Port belonging to *Constatinza*
 Built at *Einwarden* By whom *J. Fuchs & Co. A.G.* When built *1912*
 Owners *Steaua Romana Soc. Anon* Owners' Address
 Yard No. Electric Light Installation fitted by When fitted *1912.*

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Dynamo compound wound direct coupled to twin cylinder steam engine.
Dynamo compound wound direct coupled to steam driven turbo (3000 rev).
 Capacity of Dynamo *16 KW. 2.5 KW.* Amperes at *110* Volts, whether continuous or alternating current *Direct*
 Where is Dynamo fixed *Engine room port & starboard side* Whether single or double wire system is used *double.*
 Position of Main Switch Board *Engine room starboard bulkhead* having switches to groups *5* of lights, &c., as below
 Positions of auxiliary switch boards and numbers of switches on each *Distribution box in crew space, saloon passage (1-3 way & 1-6 way O.B.). Chart house 6 way O.B. 1-4 way O.B. in acc. aft.*

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-oxidizable metal *yes* and constructed to fuse at an excess of *50%* 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 *110* arranged in the following groups:—

A	<i>Forward</i>	<i>20</i>	lights each of	<i>30 watts</i>	candle power requiring a total current of	<i>6</i>	Amperes
B	<i>Saloon</i>	<i>40</i>	lights each of	<i>30 watts</i>	candle power requiring a total current of	<i>12.0</i>	Amperes
C	<i>Wireless</i>		lights each of	<i>—</i>	candle power requiring a total current of	<i>16.0</i>	Amperes
D	<i>aft.</i>	<i>30</i>	lights each of	<i>30 watts</i>	candle power requiring a total current of	<i>9.0</i>	Amperes
E	<i>Navigation</i>	<i>20</i>	lights each of <i>5-60W, 6-20W, 6-50W</i>	<i>4-30 watt</i>	candle power requiring a total current of	<i>6.7</i>	Amperes
	<i>2 Mast head light with</i>	<i>1</i>	lamps each of	<i>60 watt</i>	candle power requiring a total current of	<i>.5</i>	Amperes
	<i>2 Side light with</i>	<i>1</i>	lamps each of	<i>60 watt</i>	candle power requiring a total current of	<i>.5</i>	Amperes
	<i>Cargo lights of</i>				candle power, whether incandescent or arc lights		

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

Where are the switches controlling the masthead and side lights placed *In chart house under navigation indicator*

DESCRIPTION OF CABLES.

Main cable carrying	<i>145</i>	Amperes, comprised of	wires, each	S.W.G. diameter,	square inches total sectional area
Branch cables carrying	<i>12.0</i>	Amperes, comprised of	wires, each	S.W.G. diameter,	square inches total sectional area
Branch cables carrying	<i>15.0</i>	Amperes, comprised of	wires, each	S.W.G. diameter,	square inches total sectional area
Leads to lamps carrying	<i>.5</i>	Amperes, comprised of	wires, each	S.W.G. diameter,	square inches total sectional area
Cargo light cables carrying	<i>—</i>	Amperes, comprised of	wires, each	S.W.G. diameter,	square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

All main cables & cables in engine room, bridge & midship accommodation lead covered armoured & braided. Cables forward lead covered & braided.

Joints in cables, how made, insulated, and protected *none made.*

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 *carried in steel pipe where protection is necessary, cables are lead covered armoured & braided.*



© 2021

Lloyd's Register Foundation

W14-0134

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 armoured braided

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat no

What special protection has been provided for the cables near boiler casings no

What special protection has been provided for the cables in engine room no

How are cables carried through beams lead lined holes through bulkheads, &c. waterlight glands.

How are cables carried through decks waterlight deck pipes

Are any cables run through coal bunkers no or cargo spaces no or spaces which may be used for carrying cargo, stores, or baggage no

If so, how are they protected —

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 —

Cargo light cables, whether portable or permanently fixed — 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 (two), and with an amperemeter yes (two), fixed on main board on engine 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.

Electrical Engineers

Date

COMPASSES.

Distance between dynamo or electric motors and standard compass

Distance between dynamo or electric motors and steering compass

The nearest cables to the compasses are as follows:—

A cable carrying	Amperes	feet from standard compass	feet from steering compass
5	8	on the	feet from steering compass
5	on the	8	feet from steering compass
6.7	10	12	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.

Builder's Signature.

Date

GENERAL REMARKS. The above installation as far as could be seen was in accordance with the Society's Rules & was found satisfactory under working conditions

It is submitted that
this vessel is fit for
THE RECORD. Elec. light.

W.T. Badger

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI. 27 JAN 1928



© 2021

Lloyd's Register
Foundation

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.