

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 3653.

Port of Middlesbrough Date of First Survey 24th July Date of Last Survey Augth 1903 No. of Visits five
 No. in on the Iron or Steel S.S. Carol 1st Port belonging to Dunkirk
 Reg. Book 8 Supp. Built at Middlesbrough By whom Mr R. Dixon & Co Ltd When built 1903-8
 Owners L Dreyfus & Co Owners' Address Paris
 Yard No. 500 Electric Light Installation fitted by Messrs J H Holmes & Co When fitted Aug/93

DESCRIPTION OF DYNAMO, ENGINE, ETC.

One 5-1/2" x 5" Foster engine anti expansion for 75 lbs per sq in
coupled to one No 10 dynamo frame with compound wound by J H Holmes & Co
 Capacity of Dynamo 40 Amperes at 65 Volts, whether continuous or alternating current continuous
 Where is Dynamo fixed new dynamo in engine room
 Position of Main Switch Board new dynamo having switches to groups A & B of lights, &c., as below
 Positions of auxiliary switch boards and numbers of switches on each 1-4 way of box for A: 1-4 way of box for B
aft.

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 no

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

Total number of lights provided for 37 arranged in the following groups:—

A <u>Fore</u>	<u>21</u> lights each of	<u>16</u>	candle power requiring a total current of	<u>19</u>	Amperes
B <u>Aft</u>	<u>16</u> lights each of	"	candle power requiring a total current of	<u>16</u>	Amperes
C	lights each of		candle power requiring a total current of		Amperes
D	lights each of		candle power requiring a total current of		Amperes
E	lights each of		candle power requiring a total current of		Amperes
	Mast head light with	lamps each of	candle power requiring a total current of		Amperes
	Side light with	lamps each of	candle power requiring a total current of		Amperes
	<u>5</u> Cargo lights of	<u>6 x 16</u>	candle power, whether incandescent or arc lights	<u>incand</u>	

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

Where are the switches controlling the masthead and side lights placed

DESCRIPTION OF CABLES.

Main cable carrying	<u>34</u> Amperes, comprised of	<u>19</u> wires, each	<u>18</u>	L.S.G. diameter, <u>.034</u> square inches total sectional area
Branch cables carrying	<u>19</u> Amperes, comprised of	<u>7</u> wires, each	<u>16</u>	L.S.G. diameter, <u>.0223</u> square inches total sectional area
Branch cables carrying	<u>16</u> Amperes, comprised of	<u>7</u> wires, each	<u>17</u>	L.S.G. diameter, <u>.0170</u> square inches total sectional area
Leads to lamps carrying	<u>9</u> Amperes, comprised of	<u>3</u> wires, each	<u>22</u>	L.S.G. diameter, <u>.0018</u> square inches total sectional area
Cargo light cables carrying	<u>6</u> Amperes, comprised of	<u>7</u> wires, each	<u>20</u>	L.S.G. diameter, <u>.0072</u> square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Tule & taped & braided

Joints in cables, how made, insulated, and protected

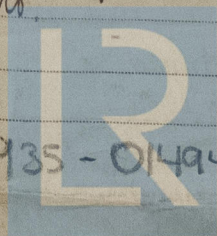
spliced soldered and insulated and protected by approved rubber tape &c

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

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

Iron pipes



© 2021

Lloyd's Register Foundation

014935 - 014945 - 0212

DESCRIPTION OF INSULATION, PROTECTION, ETC.—continued.

Are they in places always accessible *yes when cargo is out.*

What special protection has been provided for the cables in open alleyways or where exposed to weather or moisture *iron pipes*

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

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

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

How are cables carried through beams *iron pipe* through bulkheads, &c.

How are cables carried through decks *iron pipe*

Are any cables run through coal bunkers *yes* or cargo spaces *iron pipe* or spaces which may be used for carrying cargo, stores, or baggage

If so, how are they protected *iron pipe*

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 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

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 installation is supplied with a voltmeter and *not* an amperemeter, fixed *on main bd.*

The copper used is guaranteed to have a conductivity of *98* 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.

FOR J. H. HOLMES & CO

J. Sambidge

Electrical Engineers

Date *5-10-03*

JH

COMPASSES.

Distance between dynamo or electric motors and standard compass *46'-0"*

Distance between dynamo or electric motors and steering compass *40'-0"*

The nearest cables to the compasses are as follows:—

A cable carrying	Amperes	feet from standard compass	feet from steering compass
<i>22</i>	<i>20</i>	<i>16</i>	
<i>12</i>	<i>17</i>	<i>14</i>	

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.

Builder's Signature. Date

GENERAL REMARKS.

This installation is for cargo purposes only, and has been fitted under special survey. The materials & workmanship are good and efficient. R. D. Skilston

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

Committee's Minute

It is submitted that this installation appears to be satisfactory.

Lloyd's Register Foundation

16.10.03

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.