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REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 1940

Port of Trieste Date of First Survey 14.5.08 Date of Last Survey 14.7.08 No. of Visits 9
 No. in Reg. Book Sup 58 on the ~~Iron~~ Steel S S "Praga" Port belonging to Trieste
 Built at Trieste By whom Lloyd Austriaco When built 1908
 Owners Lloyd Austriaco Owners' Address Lloyd Austriaco
 Yard No. 112 Electric Light Installation fitted by Lloyd Arsenal When fitted 1908

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Two Dynamos direct-coupled to two Compound Engines made by M. Paul one Dynamo of 30 kW. the other of 20 kW.

Capacity of Dynamo 300 - 200 Amperes at 100 Volts, whether continuous or alternating current continuous

Where is Dynamo fixed Starboard side in Engine Room Whether single or double wire system is used double

Position of Main Switch Board Engine Room having switches to groups 10 of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each 9 switches, 1 Auxiliary switch board fitted in Engine Room with 5 switches, 1 Auxiliary switch board for Holds, tween decks and ventilating fans, with 4 switches in Engine Room in line with Spar Deck.

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 100 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 None

Are all switches and cut-outs constructed of incombustible materials and fitted on incombustible bases Yes

Total number of lights provided for 506 arranged in the following groups:—

A	I class	<u>92</u>	lights each of	<u>10-16</u>	candle power requiring a total current of	<u>33</u>	Amperes
B	Eng. Room	<u>45</u>	lights each of	<u>10-16</u>	candle power requiring a total current of	<u>18</u>	Amperes
C	Deck	<u>49</u>	lights each of	<u>10-16</u>	candle power requiring a total current of	<u>21</u>	Amperes
D	Saloon	<u>37</u>	lights each of	<u>10</u>	candle power requiring a total current of	<u>18</u>	Amperes
E	Masthead	<u>55</u>	lights each of	<u>10</u>	candle power requiring a total current of	<u>23</u>	Amperes
F	Alleyway	<u>68</u>	lights each of	<u>10-25</u>	candle power requiring a total current of	<u>4</u>	Amperes
G	Sanitary etc	<u>16</u>	lights each of	<u>10</u>	candle power requiring a total current of	<u>16</u>	Amperes
H	Fan circuit	<u>45</u>	lights each of	<u>10</u>	candle power requiring a total current of	<u>46</u>	Amperes
I	5 Mast head light with	<u>5</u>	lamps each of	<u>16</u>	candle power requiring a total current of	} <u>To be included above</u>	
J	2 Side light with	<u>2</u>	lamps each of	<u>25</u>	candle power requiring a total current of	}	
K	4 Cargo lights of	<u>10 lamps each of</u>	<u>10</u>	candle power, whether incandescent or arc lights	<u>incandescent</u>		

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

Where are the switches controlling the masthead and side lights placed in the Wheelhouse

DESCRIPTION OF CABLES.

A	Main cable carrying	<u>243</u>	Amperes, comprised of	<u>225</u>	wires, each	<u>0.04"</u>	L.S.G. diameter,	<u>0.38</u>	square inches total sectional area
B	Branch cables carrying	<u>18</u>	Amperes, comprised of	<u>12</u>	wires, each	<u>0.06</u>	L.S.G. diameter,	<u>0.25</u>	square inches total sectional area
C	Branch cables carrying	<u>44</u>	Amperes, comprised of	<u>12</u>	wires, each	<u>0.051</u>	L.S.G. diameter,	<u>0.54</u>	square inches total sectional area
D	Leads to lamps carrying	<u>21</u>	Amperes, comprised of	<u>12</u>	wires, each	<u>0.052</u>	L.S.G. diameter,	<u>0.39</u>	square inches total sectional area
E	Cargo light cables carrying	<u>16</u>	Amperes, comprised of	<u>4</u>	wires, each	<u>0.052</u>	L.S.G. diameter,	<u>0.15</u>	square inches total sectional area
F		<u>46</u>		<u>19</u>	wires, each	<u>0.051</u>	L.S.G. diameter,	<u>0.39</u>	square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Tinned copper wire with a layer of vulcanized india rubber afterwards fitted with a layer watertight tape, spun over with cotton and protected with a braided covering

Joints in cables, how made, insulated, and protected All joints soldered, insulated with tape and made waterproof with insulating tape

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 Bergmanns steel pipes in exposed parts of the vessel and Engine & Boiler Rooms, hard wood casings elsewhere.



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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 Steel pipes and made watertight

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

What special protection has been provided for the cables near boiler casings The same pipes as above

What special protection has been provided for the cables in engine room Pipes and cast iron boxes

How are cables carried through beams Hardwood bushes & stuffing boxes through bulkheads, &c. stuffing boxes

How are cables carried through decks Bergmanns steel pipes and wood bushes

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 protected with galvanized armouing

Are any lamps fitted in coal bunkers or spaces which may at times be used for cargo, coals, or baggage Yes

If so, how are the lamp fittings and cable terminals specially protected The lamps protected in iron gratings & thick glass

Where are the main switches and cut outs for these lights fitted In Engine Room

If in the spaces, how are they specially protected ✓

Are any switches or cut outs fitted in bunkers No

Cargo light cables, whether portable or permanently fixed Portable How fixed screwed joints

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

The installation is ✓ supplied with a voltmeter and ✓ an amperemeter, fixed

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 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.

W. W. W. R. Electrical Engineers Date 17/8/05

COMPASSES.

Distance between dynamo or electric motors and standard compass 100 feet

Distance between dynamo or electric motors and steering compass 150 feet

The nearest cables to the compasses are as follows:—

A cable carrying	<u>0.35</u>	Amperes	<u>for</u>	<u>feet</u> from standard compass	<u>feet</u> from steering compass
A cable carrying		Amperes		<u>feet</u> from standard compass	<u>feet</u> from steering compass
A cable carrying		Amperes		<u>feet</u> from standard compass	<u>feet</u> 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 ✓ course in the case of the standard compass and ✓ degrees on ✓ course in the case of the steering compass.

W. W. W. R. Builder's Signature. Date 17/8/05

GENERAL REMARKS. The installation has been supplied by the International Elektricitat Gesellschafft of Vienna and fitted on the vessel by the Lloyd Arsenale, the material and workmanship being good

Charles R. Hughes
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. 13-2m, S.A.