

REPORT ON ELECTRIC LIGHTING INSTALLATION.

Received at London Office

DESCRIPTION OF DYNAMO AND ENGINE.—

Capacity of Dynamo R. W. 41 Amperes at 402, 102 Volts, whether continuous or alternating current Continuous

LAMPS.—

A 71 lights each of 71 candle power requiring a total current of 71 Amperes

B *71/2* lights each of *71/2* candle power requiring a total current of *71/2* Amperes

21 lights each of *21* candle power requiring a total current of *21* Amperes

trial lights each of *trial* candle power requiring a total current of *trial* Amperes

lights each of 75 candle power requiring a total current of 75 Amperes

2 Mast head light with 2 lamps each of 50 candle power requiring a total current of .87 Amperes

Side light with 2 lamps each of 50 candle power requiring a total current of .8 Amperes

24 Cargo lights of 150 candle power, whether incandescent or arc lights Incandescent

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

we are lamps

S AND CUT-OUTS—

main Switch Board In the Engine Room having switches to groups _____ of lights as above

There are 19 B. D. Boards N^o 1-6 switches

6-S, N° 3-6S, N° 4 only fuses N° 5 only fuses N° 6-4S N° 7-4S, N° 8 4-S, N° 9-4S,
2-S, N° 11 only fuses. Castanis Rooms 1-B, B. 15 with 14 switches. N° 12

3. $\pi^0 14-4-S$, $\pi^0 15$ only 2 fuses $\pi^0 16-5S$, $\pi^0 17-4-S$, $\pi^0 18-3-S$, $\pi^0 19-4$

are fitted to main circuit. Fuse cutouts are fitted and to each auxiliary circuit. Fuse cutouts are fitted

each position where cable is branched or reduced in size *cut-outs are fitted*

If vessel is wired on the double wire system are cut outs fitted on each wire. *Single wire cutouts are fitted to one wire*

Are the cut outs of non-oxidizable metal Yes and constructed to fuse at an excess of 5% per cent over the normal current

Are all cut outs fitted in easily accessible positions *Yes*

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

How are the lamps specially protected in places liable to the accumulation of vapour or gas *with bulkhead, & well glass fittings*

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

DESCRIPTION OF CABLES.—

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Main cable carrying 92 Amperes, comprised of 14/16 wires, each n^o 16 legal standard wire gauge diameter

Branch cables carrying 48 Amperes, comprised of 14/20 wires, each N^o 20 legal standard wire gauge diameter

Branch cables carrying 24 Amperes, comprised of 7/20 wires, each N^o 20 legal standard wire gauge diameter

Leads to lamps 5070.2 lbs Amperes, comprised of 36/40 Flu wires, each 17-40 legal standard wire gauge diameter

Cargo light cables carrying 1.2 Amperes, comprised of 357/30 wires, each 17.30 legal standard wire gauge diameter

The copper used has 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.

DESCRIPTION OF INSULATION, PROTECTION, &c.—

Cables and wires are lead covered, taped and braided and armoured cables are in use on the vessel.

Joints in cables, how made, insulated, and protected Mechanical protected in brass & teak wood boxes

Are all the joints of cables thoroughly soldered, resin only having been used as a flux all mechanical joints

How are cables led throughout the ship with Stanley clips

What special protection has been provided for the cables in open alleyways with wooden & Stanley's protectors

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

What special protection has been provided for the cables near boiler casings cables run on wooden battens

What special protection has been provided for the cables in engine room Stanley's protectors

How are cables carried through decks through W. T. piping and through bulkheads through bushed holes

Are any cables run through coal bunkers no or cargo spaces no If so, how are they protected

Are any lamps fitted in coal bunkers or spaces which may be used for cargo no

If so, how are they specially protected

Cargo light cables, whether portable or permanently fixed Portable How fixed with flexible to W. T. plug

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

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

Are all the joints with the hull in accessible positions yes

TESTING, &c.—

Has the installation been thoroughly tested to its full capacity during a trial of 2 hours' duration yes

The insulation resistance of the whole installation was not less than ohms

The installation is has 3 supplied with a voltmeter and 3 amperemeter fixed on main boards

General Remarks.—

Main cables have not been renewed, and only general repair work has been carried out.

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.

The Russa Engineering Works Ltd.
For KILBURN & Co.

Managing Agents

Electrical Engineers

Date 19-5-19

COMPASSES.—

Distance between dynamo and standard compass

Distance between dynamo and steering compass

The nearest cables to the compasses are as follows:—

A cable carrying	Amperes	feet from standard compass	feet from steering compass
A cable carrying	Amperes	feet from standard compass	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

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

Thomas M. C. Napier

Surveyor's Signature

Date 4th June 1919



Lloyd's Register Foundation