

No. 7901

DESCRIPTION OF DYNAMO, ENGINE, ETC.

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

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

the cut outs of non-oxidizable metal Yes and constructed to fuse at an excess of 100 per cent over the normal current

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

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

total number of lights provided for 2171 arranged in the following groups :—

DESCRIPTION OF CABLES.

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Main cable carrying	740	Amperes, comprised of	291	wires, each	.092" L.S.G. diameter, 1.195 square inches total sectional area
Branch cables carrying	200	Amperes, comprised of	37	wires, each	.092" L.S.G. diameter, .25 square inches total sectional area
Branch cables carrying	400	Amperes, comprised of	61	wires, each	.118" L.S.G. diameter, .644 square inches total sectional area
Feeds to lamps carrying	2.4	Amperes, comprised of	3	wires, each	.036" L.S.G. diameter, .003 square inches total sectional area
Argo light cables carrying	4.8	Amperes, comprised of	90	wires, each	.0076" L.S.G. diameter, .004 square inches total sectional area

SCRIPTION OF INSULATION, PROTECTION, ETC.

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The cables throughout are of 2500 sq. grade C. H. D. standard, the conductor is covered with 1 layer of pure rubber, 2 coats of vulcanising rubber, 1 layer of prepared tape, the whole vulcanised together and braided overall. In slack spaces & galleys the cables are protected with lead covering & steel armouring, & braided overall. Soldered using resin as a flux, insulated with pure rubber and prepared tapes, and protected by strong wood casing.

Are all the joints of cables thoroughly soldered, resin only having been used as a flux ☒ 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 In strong wood casing throughout accommodation

~~Lead covering & steel armouring & braided overall in decky spaces & galleys, and by~~
solid drawn steel tubes where exposed to weather.

WS'13 - OLS's

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 Solid drawn Steel Tubes

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat Lead covered steel armoured and braided overall

What special protection has been provided for the cables near boiler casings Lead covered, steel armoured and braided overall

What special protection has been provided for the cables in engine room Lead covered steel armoured and braided overall

How are cables carried through beams In fibre lances through bulkheads, &c. all W.T. in W.T. glands, otherwise in fibre lances

How are cables carried through decks S.I. deck pipes lashed with fibre

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 Strong wood casing and Steel girders

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

If so, how are the lamp fittings and cable terminals specially protected Strong C.T. fittings with C.T. guards

Where are the main switches and cut outs for these lights fitted Switch Box in Passage outside Store Rooms

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 Permanently outside cargo hatches How fixed In wood casing to Cargo couplers outside hatches

In vessels fitted on the single wire system, how is the dynamo terminal fixed to the hull of vessel By earth plate thru machine bedplate

How are the returns from the lamps connected to the hull sweated to 3/8 turned brass sea-terded screws

Are all the joints with the hull in accessible positions Yes

The installation is supplied with voltmeters and amperemeters fixed on Switchboards

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 2500 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.

L. Johnston



Electrical Engineers

Date

COMPASSES.

Distance between dynamo or electric motors and standard compass

82 feet to nearest motor
90 feet to nearest motor

Distance between dynamo or electric motors and steering compass

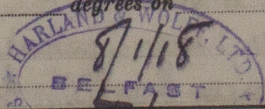
The nearest cables to the compasses are as follows:—

A cable carrying	Amperes	feet from standard compass	feet from steering compass
<u>32.1</u>	<u>10</u>	<u>15</u>	<u>15</u>
<u>100</u>	<u>82</u>	<u>90</u>	<u>90</u>
<u>100</u>	<u>82</u>	<u>90</u>	<u>90</u>

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.

L. Johnston



Builder's Signature.

Date

GENERAL REMARKS.

This installation is of good description, and has been fitted in accordance with the Rules

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

J.W.D.
19.1.18.

R. F. Pennington

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

Committee's Minute

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.