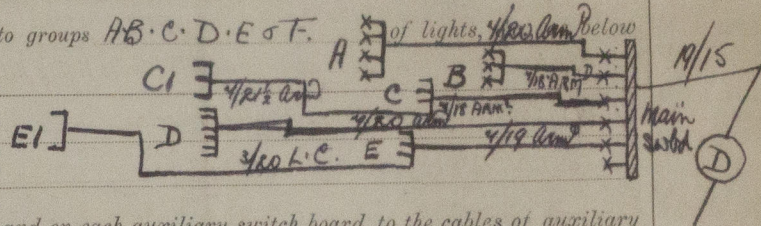


REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 18427

Port of *Hull* Date of First Survey *17th Sept* Date of Last Survey *17th Oct* No. of Visits *10*
 No. in Reg. Book *99* on the *Iron or Steel* *S. S. "Ban Hong King"* Port belonging to *Singapore*
 Built at *Montrose* By whom *Montrose S. B. Co.* When built *1906*
 Owners *Howard & Co. Ltd. & Pollock & Co. Ltd.* Owners' Address
 Yard No. *32* Electric Light Installation fitted by *J. H. Holmes & Co.* When fitted *1906*

DESCRIPTION OF DYNAMO, ENGINE, ETC.

One 6" x 5" open type engine 100 lbs per sq inch coupled to a 10/1 compound wound dynamo by J. H. Holmes & Co.
 Capacity of Dynamo *45* Amperes at *100* Volts, whether continuous or alternating current *continuous*
 Where is Dynamo fixed *Eng. Room starboard side Bottom Platform* Whether, single or double wire system is used *D.W.S.*
 Position of Main Switch Board *Near Dynamo* having switches to groups *A B C D E F* of lights, *Headlamp Below*
 Positions of auxiliary switch boards and numbers of switches on each
 A - *SA. OF. FORE. ROOM WITH 2 SWs for engine* E - *AWAY. fusebox in mess Rm for Officers*
 B - *2 top engine room for cargo with 2 SWs* E - *2 " " " " " "*
 C - *2 " " " " " "* F - *6 in Chart Room with 2 SWs for Masts & Sides*
 D - *2 " " " " " "*



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
Yes 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 *98* arranged in the following groups:—

A	Engines Boilers	15 lights each of	16	candle power requiring a total current of	8.4	Amperes
B	Cargoes	18 lights each of	16	candle power requiring a total current of	10.08	Amperes
C	Saloon & Ford	23 lights each of	16	candle power requiring a total current of	12.88	Amperes
D	Aft	14 lights each of	16	candle power requiring a total current of	9.52	Amperes
E	Engines Officers	15 lights each of	16	candle power requiring a total current of	8.4	Amperes
F	Navigation	10 lights each of	16	candle power requiring a total current of	5.28	Amperes
	2 Mast head lights with	1 lamp each of	32	candle power requiring a total current of	1.92	Amperes
	2 Side lights with	1 lamp each of	32	candle power requiring a total current of	1.92	Amperes
	3 Cargo lights of	6 x 16		candle power, whether incandescent or arc lights	incandescent	

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

Where are the switches controlling the masthead and side lights placed

Chart House

DESCRIPTION OF CABLES.

Main cable carrying *45* Amperes, comprised of *19* wires, each *15* L.S.G. diameter, *.0465* square inches total sectional area
 Branch cables carrying *10.8* Amperes, comprised of *4* wires, each *18* L.S.G. diameter, *.0125* square inches total sectional area
 Branch cables carrying *5.28* Amperes, comprised of *4* wires, each *19* L.S.G. diameter, *.0084* square inches total sectional area
 Leads to lamps carrying *.56* Amperes, comprised of *one* wire, *1918* L.S.G. diameter, *.0018* square inches total sectional area
 Cargo light cables carrying *3.36* Amperes, comprised of *108* wires, each *38* L.S.G. diameter, *.0032* square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Cables are insulated with pure rubber vulc. taped & where run in cabins &c further protected with lead covering where run elsewhere the cables are protected with galv. iron wire armouring Braided overall.

Joints in cables, how made, insulated, and protected

Spliced soldered insulated with approved rubber & protective tapes

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

no made in bunkers, cargo spaces, or spaces which may at any time be used for carrying cargo, stores, or baggage *no*

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 *Fore aft clipped up under main*

Deck Starboard side

DESCRIPTION OF INSULATION, PROTECTION, ETC.—continued.

Are they in places always accessible Yes when cargo out.
What special protection has been provided for the cables in open alleyways or where exposed to weather or moisture Armoured wire

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 insulating Bushes through bulkheads, &c. stuffing Boxes

How are cables carried through decks Deck tubes

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 Armouring of special strength to your requirements Bdr

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 Brass guards over WY glasses

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

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 also an amperemeter, fixed Main Swbd.

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 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.

H. Roberts. Esq. Electrical Engineers Date Nov 19/06.

COMPASSES.

Distance between dynamo or electric motors and standard compass about 64 ft.

Distance between dynamo or electric motors and steering compass " 54 ft.

The nearest cables to the compasses are as follows:—

A cable carrying	Amperes	feet from standard compass	feet from steering compass
5.28	16	10	
12.88	30	22	
3.36	32	24	

Have the compasses been adjusted with and without the electric installation at work at full power No

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 vessel having been fitted with an Electric Light Installation, is eligible in my opinion to have same noted in Register Book, when survey completed as per full letter to Secretary 19.10.06. James Barclay.

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

Committee's Minute

It is submitted that this vessel is eligible for the Record Elec. Light

Lloyd's Register Foundation

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.