

MON 8-JAN. 1917

Received at London Office

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 15322

Port of West Hartlepool Date of First Survey And Date of Last Survey While Building No. of Visits 19
 No. in Reg. Book on the Iron or Steel Penworthhall Port belonging to West Hartlepool
 Built at West Hartlepool By whom Miss J. B. S. S. L. M. When built 1916
 Owners West Hartlepool Steam Nav. Co. Owners' Address West Hartlepool
 Yard No. 556 Electric Light Installation fitted by Falconer, Brown & Co. When fitted 1916

DESCRIPTION OF DYNAMO, ENGINE, ETC.

7 1/2" x 6" Open type engine direct coupled to
compound wound dynamo
 Capacity of Dynamo 143 Amperes at 100 Volts, whether continuous or alternating current Continuous
 Where is Dynamo fixed Starting Platform Whether single or double wire system is used Single
 Position of Main Switch Board New dynamo having switches to groups A. B. C. of lights, &c., as below
 Positions of auxiliary two boards and numbers of two switches on each 1 x 3 + 1 x 5 Way Masthead Bulbroom
1 x 9 Way in Wheelhouse, 1 x 3 Way in Paint room, 1 x 7 Way in Engine Room
1 x 3 + 1 x 5 Way in Messroom, 1 x 7 Way in Passage aft, 1 x 3 Way 4th Eng. Bulk
 If fuses 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 cessel is wired on the double wire system are fuses fitted to both flow and return wires or cables of all circuits including lamp circuits yes
 Are the fuses of non-oxidizable metal yes and constructed to fuse at an excess of 25 per cent over the normal current
 Are all fuses 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 fuses constructed of incombustible materials and fitted on incombustible bases yes

Total number of lights provided for 135 arranged in the following groups:—
 A Masthead 2 54 lights each of 16 candle power requiring a total current of 32.4 Amperes
 B Eng. room 2 31 lights each of 16 candle power requiring a total current of 18.6 Amperes
 C Eng. Off. 2 50 lights each of 16 candle power requiring a total current of 30 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
2 Mast head lights with 1 lamp each of 32 candle power requiring a total current of 2.4 Amperes
2 Side lights with 1 lamp each of 32 candle power requiring a total current of 2.4 Amperes
4 Cargo lights of 5 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 Wheelhouse

DESCRIPTION OF CABLES.

Main cable carrying 143 Amperes, comprised of 37 wires, each 15 S.W.G. diameter, .149 square inches total sectional area
 Branch cables carrying 32.4 Amperes, comprised of 19 wires, each 18 S.W.G. diameter, .034 square inches total sectional area
 Branch cables carrying 20 Amperes, comprised of 19 wires, each 18 S.W.G. diameter, .034 square inches total sectional area
 Leads to lamps carrying 6 Amperes, comprised of 1 wires, each 18 S.W.G. diameter, .0018 square inches total sectional area
 Cargo light cables carrying 3 Amperes, comprised of 3 wires, each 20 S.W.G. diameter, .0032 square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Tinned copper, Pure Para rubber, Mho rubber taped & braided

Joints in cables, how made, insulated, and protected

Are all the joints of cables thoroughly soldered, and the flux used not containing acids or other corrosive substances 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 noHow are the cables led through the ship, and how protected In iron tube

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DESCRIPTION OF INSULATION, PROTECTION, ETC.—continued.

Are they in places always accessible

Generally

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

Unarmoured - Braided

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

" " "

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

" " "

How are cables carried through beams

Fibre bushes

through bulkheads, &c.

W. J. glands ✓

How are cables carried through decks

Dark holes ✓

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

Yes

Yes

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 fuses for these lights fitted

If in the spaces, how are they specially protected

Are any switches or fuses fitted in bunkers

No

Cargo light cables, whether portable or permanently fixed

Portable

How fixed

W. J. sockets

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

Is the installation supplied with a voltmeter

Yes

and with an amperemeter

Yes

fixed in Main board

VESSELS BUILT FOR CARRYING PETROLEUM.

In vessels built for carrying petroleum, are all switches and fuses fitted in positions not liable to the accumulation of petroleum vapour or gas

Are any switches, fuses, 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 not less than that of the Engineering Standards Committee's standard, and the wires are protected by tinning from the sulphur compounds present in the insulating material.

Insulation of cables is guaranteed to have a resistance of not less than 600 megohms per statute mile at 60° Fahrenheit after 24 hours' immersion in water, the test being made after one minute's electrification at not less than 500 volts and while the cable is still immersed.

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.

Falconer, Crow & Co.

Electrical Engineers

Date Dec. 14. 1916

COMPASSES.

Distance between dynamo or electric motors and standard compass

96 ft.

Distance between dynamo or electric motors and steering compass

96 ft.

The nearest cables to the compasses are as follows:—

A cable carrying	Amperes	feet from standard compass	feet from steering compass
12.6	12	16	
6	1	1	

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

no degrees on

any course in the case of the

standard compass and

any course in the case of the steering compass.

FOR IRVINE'S SHIP BUILDING & DRY DOCK CO. LIMITED.

Builder's Signature.

Builder's Signature.

Date

31st Dec. 1916

GENERAL REMARKS.

The above installation has been carried out in accordance with the Requirements of the Rules & worked efficiently rendering this vessel eligible in my opinion to have the record of "Electric Light" in the Register Book.

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

SWD. 8/1/17

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

Committee's Minute



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