

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 6571

Port of *Falmouth*. Date of First Survey *July 19th* Date of Last Survey *Aug 20th*. No. of Visits *3*
 No. in Reg. Book on the ~~1~~ Steel *SS "THEYDON."* Port belonging to *FALMOUTH.*
 Built at *Falmouth.* By whom *Cox & Co (Engineers) Ltd* When built *1926*
 Owners *Falmouth Dock & Engineering Co.* Owners Address *Falmouth, Cornwall.*
 Yard No. *190* Electric Light Installation fitted by *Cox & Co (Engineers) Ltd* When fitted *1926.*

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Compound wound dynamo made by Electromotors Ltd direct coupled to a Robey Steam Engine

Capacity of Dynamo *10* Amperes at *100* Volts, whether continuous or alternating current *Continuous*

Where is Dynamo fixed *after end of Engine Room*

Position of Main Switch Board *aft Engine Rm. Bulkhead* having switches to groups *four* of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each *Fore'sle 1. Wheelhouse 1. aft 1. Navigation 1.*

If ~~are~~ *fuses* are fitted on main switch board to the cables of main circuit *yes* and on each auxiliary switch boards 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 ~~are~~ *fuses* fitted to both flow and return wires or cables of all circuits including lamp circuits *yes*

Are the ~~are~~ *fuses* 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 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 *12* arranged in the following groups:—

A	<i>8</i> lights each of <i>25</i> candle power requiring a total current of <i>2.4</i> Amperes
B	<i>4</i> lights each of <i>80</i> candle power requiring a total current of <i>3.2</i> Amperes
C	lights each of candle power requiring a total current of 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
<i>2 Mast head light with 1 lamps each of 80 candle power requiring a total current of } Included above Amperes</i>	
<i>2 Side light with 1 lamps each of 80 candle power requiring a total current of } in group B. Amperes</i>	
Cargo lights of candle power, whether incandescent or are lights	

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

Where are the switches controlling the masthead and side lights placed *Fore'sle Companion*

DESCRIPTION OF CABLES.

Main cable carrying *5.6* Amperes, comprised of *7* wires, each *20* L.S.G. diameter, *.007* square inches total sectional area
 Branch cables carrying Amperes, comprised of wires, each L.S.G. diameter, square inches total sectional area
 Branch cables carrying Amperes, comprised of wires, each L.S.G. diameter, square inches total sectional area
 Leads to lamps carrying *2.4* Amperes, comprised of *3* wires, each *22* L.S.G. diameter, *.002* square inches total sectional area
 Cargo light cables carrying Amperes, comprised of wires, each L.S.G. diameter, square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

vulcanized india rubber lead covered & armoured. 2500 (megohm grade)

Joints in cables, how made, insulated, and protected *none.*

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 *yes*

How are the cables led through the ship, and how protected *Steel & brass clips to bulk heads & decks.*



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 conduit

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

armoured

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

armoured

How are cables carried through beams

drilled holes

through bulkheads, &c.

watertight glands

How are cables carried through decks

tubes with watertight glands

Are any cables run through coal bunkers

yes

or cargo spaces

no

or spaces which may be used for carrying cargo, stores, or baggage

no

If so, how are they protected

armoured

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 cut outs for these lights fitted

✓

If in the spaces, how are they specially protected

✓

Are any switches or cut outs fitted in bunkers

✓

Cargo light cables, whether portable or permanently fixed

✓

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

✓

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 installation is

✓

supplied with a voltmeter and

✓

an amperemeter, fixed

✓

The copper used is guaranteed to have a conductivity of

7500

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.

COX & CO. (ENGINEERS) LTD.

Electrical Engineers

Date

COMPASSES.

Distance between dynamo or electric motors and standard compass

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

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

GENERAL REMARKS.

The electric lighting installation of this vessel has been fitted in accordance with the Requirements of the Rules & has been found satisfactory under full working conditions. It is eligible in my opinion to have the 1st Record of Electric Light. 16 Moffett

Fee £5-0-0

App'd 24/3/26

THE RECORD Electric Light

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

31/3/26

Committee's Minute