

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 9355

Port of Belfast Date of First Survey 17th April Date of Last Survey 1st June No. of Visits 10
 No. in on the Iron or Steel 88 "Ervington Court" Port belonging to London
 Reg. Book Built at Belfast By whom Worham & Clark & Co Ltd When built 1925
 Owners Bank Line Ltd Owners' Address London
 Yard No. 416 Electric Light Installation fitted by Sunderland Forge Engineering Co Ltd When fitted 1925

DESCRIPTION OF DYNAMO, ENGINE, ETC.

1- 15 K.W. OPEN TYPE. COMPOUND WOUND MULTIPOLAR DYNAMO DIRECT COUPLED TO OPEN TYPE.

STEAM ENGINE WITH GOVERNOR ON CRANK SHAFT.

Capacity of Dynamo 136 Amperes at 110 Volts, whether continuous or alternating current CONTINUOUS

Where is Dynamo fixed IN MAIN ENG. ROOM. Whether single or double wire system is used DOUBLE

Position of Main Switch Board IN MAIN ENG. ROOM. having switches to groups 6 of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each

Saloon Accom. 4

ENGINE ROOM 4

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 YES

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

Are the cut outs of non-oxidizable metal YES and constructed to fuse at an excess of 100 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 161 arranged in the following groups:—

A NAVIG. SALON 2. FORD ⁵³ lights each of 5-100 WATTS EACH. candle power requiring a total current of 12.4 Amperes

B ENGINEERS & OFFICERS ³⁰ lights each of 16 candle power requiring a total current of 8.2 Amperes

C ENGINE ROOM ³⁰ lights each of 16 candle power requiring a total current of 9.5 Amperes

D CARGO CLUSTERS ⁴⁸ lights each of 16 candle power requiring a total current of 24 Amperes

E PROJECTOR ^{lights each of} — candle power requiring a total current of 40 Amperes

F WIRELESS ^{lights each of} — candle power requiring a total current of 13.7 Amperes

2 Mast head light with 1 lamp each of 100 WATTS ^{EACH} candle power requiring a total current of .91 Amperes

2 Side light with 1 lamp each of 100 WATTS ^{EACH} candle power requiring a total current of .91 Amperes

8-6 LIGHT Cargo lights of 16 candle power, whether incandescent or arc lights INCANDESCENT

If are 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 136 Amperes, comprised of 37 wires, each .072 L.S.G. diameter, .15 square inches total sectional area

Branch cables carrying 24 Amperes, comprised of 19 wires, each .052 L.S.G. diameter, .04 square inches total sectional area

Branch cables carrying 17.8 Amperes, comprised of 7 wires, each .064 L.S.G. diameter, .0225 square inches total sectional area

Leads to lamps carrying 1.4 Amperes, comprised of 3 wires, each .029 L.S.G. diameter, .002 square inches total sectional area

Cargo light cables carrying 3 Amperes, comprised of 3 wires, each .036 L.S.G. diameter, .003 square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

TINNED COPPER CONDUCTORS INSULATED WITH PURE AND VULCANIZED INDIA RUBBER. TAPED. BRAIDED.

AND THE WHOLE VULCANIZED TOGETHER AND FINISHED IN ACCOMMODATION. LEAD COVERED AND BRAIDED.

IN MACHINERY SPACES LEAD COVERED. ARMoured AND BRAIDED

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 — 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 NONE

How are the cables led through the ship, and how protected LEAD COVERED AND BRAIDED RUN ON WOOD GROUNDS IN ACCOMMODATION

LEAD COVERED ARMoured & BRAIDED RUN ON STEEL PLATING IN TWEEN DECKS

008541 - 008549 - 0117

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 LEAD COVERED
ARMORED & BRAIDED

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat LEAD COVERED ARMORED & BRAIDED

What special protection has been provided for the cables near boiler casings LEAD COVERED ARMORED & BRAIDED

What special protection has been provided for the cables in engine room LEAD COVERED ARMORED & BRAIDED

How are cables carried through beams IN HOLES GUSHED WITH FIBRE through bulkheads, &c. IN W/T PACKING, G/LANDS

How are cables carried through decks IN OIL TUBES MADE W/T

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 CABLES RUN IN GALVANIZED WROUGHT 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 cut outs for these lights fitted ~~~~~

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 W/T CONNECTION BOXES

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 YES supplied with a voltmeter and YES an amperemeter, fixed ON MAIN SWITCHBOARD

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 600 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.

P.Pro The Sunderland Forge & Eng Co.Ltd.

Y. Thompson

Electrical Engineers

Date 30th May 1925.

COMPASSES.

Distance between dynamo or electric motors and standard compass 104 FEET

Distance between dynamo or electric motors and steering compass 96 FEET

The nearest cables to the compasses are as follows:—

| A cable carrying | Amperes | feet from standard compass | feet from steering compass |
|------------------|---------|----------------------------|----------------------------|
| 2 | 3 | 3 | 3 |
| 5 | 10 | 5 | 5 |
| ~~~~~ | ✓ | ✓ | ✓ |

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 all course in the case of the standard compass and no degrees on all course in the case of the steering compass.

WORKMAN, CLARK & CO., LIMITED

W. A. Workman
ASSISTANT SECRETARY.

Builder's Signature.

Date 3-6-25.

GENERAL REMARKS.

This installation is well fitted & in accordance with the Rules & was tried under working conditions on full load

It is submitted that

this vessel is eligible for

THE RECORD Light 8/6/25

William Butler

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

Committee's Minute

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.