

MON. APR. 26 1920

Received at London Office

REPORT ON ELECTRIC LIGHTING INSTALLATION. No.

Port of Bristol Date of First Survey 3/3/20 Date of Last Survey 17/4/20 No. of Visits 4
 No. in Reg. Book 137 on the 1 Steel ANNIK Port belonging to Nautis
 Built at Bristol By whom C. Hill & Sons When built 1920
 Owners Compagnie Auxiliaire de Navigation Owners Address C. Hill & Sons When fitted 1920
 Electric Light Installation fitted by C. Hill & Sons

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Enclosed single crank, forced lubrication, direct coupled multipolar compound wound dynamo
 Capacity of Dynamo 75 Amperes at 100 Volts, whether continuous or alternating current Continuous
 Where is Dynamo fixed Top of E. R. Staring engine room
 Position of Main Switch Board du having switches to groups Four circuits of lights, &c., as below
 Positions of auxiliary switch boards and numbers of switches on each E. Room + accommodation with local switching
with local switching

If cut outs 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 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

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 106 arranged in the following groups:—

A	Navigation	lights each of	32	candle power requiring a total current of	5.6	Amperes
B	Cargo	lights each of	16	candle power requiring a total current of	13.4	Amperes
C	Accommodation	lights each of	16	candle power requiring a total current of	17.4	Amperes
D	Engine Room	lights each of	16	candle power requiring a total current of	12.8	Amperes
E		lights each of		candle power requiring a total current of		Amperes
2	Mast head light with	2 lamps each of	32	candle power requiring a total current of	1.1	Amperes
2	Side light with	2 lamps each of	32	candle power requiring a total current of	1.1	Amperes
4	Cargo lights of each		96	candle power, whether incandescent or arc lights	Incandescent	

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

Where are the switches controlling the masthead and side lights placed Bridge

DESCRIPTION OF CABLES.

Main cable carrying	113	Amperes, comprised of	19	wires, each	14	L.S.G. diameter,	.0094	square inches total sectional area
Branch cables carrying	34	Amperes, comprised of	7	wires, each	18	L.S.G. diameter,	.0125	square inches total sectional area
Branch cables carrying	24	Amperes, comprised of	7	wires, each	20	L.S.G. diameter,	.0070	square inches total sectional area
Leads to lamps carrying	7.2	Amperes, comprised of	3	wires, each	22	L.S.G. diameter,	.0018	square inches total sectional area
Cargo light cables carrying	24	Amperes, comprised of	7	wires, each	20	L.S.G. diameter,	.0070	square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Cable Makers Association 600 meg ohm grade, Armoured with G. I. wires & Braided lead covered & armoured & lead covered cables

Joints in cables, how made, insulated, and protected

Porcelain Junction Boxes protected with G. I. covers

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 No

How are the cables led through the ship, and how protected

Through beams, lead washers

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 cables

Lead covered & armoured

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

Lead bushings

through bulkheads, &c.

W. T glands

How are cables carried through decks

Galvanised tubes

Are any cables run through coal bunkers

Yes

or cargo spaces

Yes

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

Yes

If so, how are they protected

G. I. armoured + lead covered cables

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

✓

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

C. I. Plug 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

✓

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

Yes

supplied with a voltmeter and

Yes

an amperemeter, fixed

Switchboard

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
statute mile after 24 hours' immersion in seawater.

600

megohms per

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.

CHARLES HILL & SONS, LTD.

Charles L. Hill

Electrical Engineers

Date

24/4/20

COMPASSES.

Distance between dynamo or electric motor and standard compass

65 feet

Distance between dynamo or electric motors and steering compass

60 feet

The nearest cables to the compasses are as follows:—

A cable carrying

5

Amperes

Lighting

feet from standard compass

and

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.

CHARLES HILL & SONS, LTD.

Charles L. Hill

Builder's Signature

Date

24/4/20

GENERAL REMARKS.

This Electric Light installation is in accordance with the Rules. The Workmanship & Material are good. Installation tried under working conditions. It is submitted that this vessel is eligible for THE RECORD.

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

Committee's Minute

THE MAY 21 1920

MACHINERY CERT.
WRITTEN



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Lloyd's Register
Foundation

THE SURVEYORS ARE REQUESTED TO WRITE ACROSS THIS MARGIN.