

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 42290

Port of GLASGOW Date of First Survey 29.3.22 Date of Last Survey 13.10.22 No. of Visits 3
 No. in Reg. Book 60057 on the Iron or Steel S.S. FRANCIS STOREY Port belonging to LIVERPOOL
 Built at TROON. By whom MESRS THE AILSA S.B. CO. When built 1922.
 Owners THE BOROUGH OF WALLASEY. Owners' Address
 Yard No. 583 Electric Light Installation fitted by MESRS TELFORD GRIER & M^Y KAY When fitted 1922.

- TOTAL K.W. = 9 -

DESCRIPTION OF DYNAMO, ENGINE, ETC.

One steam driven generating set, consisting of Vertical Single Cylinder Engine direct coupled to Open Protected Type Compound Wound Dynamo.
 Capacity of Dynamo 90 Amperes at 100 Volts, whether continuous or alternating current Continuous
 Where is Dynamo fixed Engine Room (Starboard) Whether single or double wire system is used Double
 Position of Main Switch Board Beside Dynamo having switches to groups six of lights, &c., as below
 Positions of auxiliary switch boards and numbers of switches on each

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 vessel 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 50 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 127 arranged in the following groups :-

A GENERAL SALOON	39	lights each of	30 WATT	candle power requiring a total current of	11.7	Amperes
B FORWARD "	30	lights each of	30 WATT	candle power requiring a total current of	9	Amperes
C GANGWAY LTS	6	lights each of	4 AT 32 2 AT 16	candle power requiring a total current of	5.6	Amperes
D CREW	11	lights each of	16	candle power requiring a total current of	6.16	Amperes
E ENGINE RM.	34	lights each of	16	candle power requiring a total current of	19.6	Amperes
F NAVIGATION	7	" " " " " "	VARIOUS	" " " " " "	5.22	"
ONE Mast head light with	1	lamp of	32	candle power requiring a total current of	1.12	Amperes
TWO Side light with	2	lamps each of	32	candle power requiring a total current of	2.24	Amperes
Cargo lights of				candle power, whether incandescent or arc lights		

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

Where are the switches controlling the masthead and side lights placed

Wheel House

DESCRIPTION OF CABLES.

Main cable carrying	90	Amperes, comprised of	19	wires, each	15	S.W.G. diameter, .075	square inches total sectional area
Branch cables carrying	19.6	Amperes, comprised of	7	wires, each	16	S.W.G. diameter, .0225	square inches total sectional area
Branch cables carrying	6.16	Amperes, comprised of	7	wires, each	20	S.W.G. diameter, .007	square inches total sectional area
Leads to lamps carrying	2	Amperes, comprised of	1	wires, each	16	S.W.G. diameter, .003	square inches total sectional area
Cargo light cables carrying	-	Amperes, comprised of	-	wires, each	-	S.W.G. diameter, -	square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Vulcanized India Rubber Insulation protected with lead covering

Joints in cables, how made, insulated, and protected

None

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 no

How are the cables led through the ship, and how protected Clipped to beams and bulkheads and protected where necessary in steel tubing

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 tubing

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat

Steel tubing

What special protection has been provided for the cables near boiler casings

Steel tubing

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

Steel tubing where necessary

How are cables carried through beams

Lead Bushes

through bulkheads, &c.

Watertight Glands

How are cables carried through decks

Watertight Deck Tubes

Are any cables run through coal bunkers

No

or cargo spaces

No

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

No

If so, how are they protected

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

—

Cargo light cables, whether portable or permanently fixed

None

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

—

Is the installation supplied with a voltmeter

Yes

and with an amperemeter

Yes

fixed on Switchboard

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.

Electrical Engineers

Date

COMPASSES.

Distance between dynamo or electric motors and standard compass

48 feet

Distance between dynamo or electric motors and steering compass

44 feet

The nearest cables to the compasses are as follows:—

A cable carrying

5.22

Amperes

14

feet from standard compass

5

feet from steering compass

A cable carrying

.28

Amperes

2

feet from standard compass

2

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

Yes

The maximum deviation due to electric currents, etc., was found to be

Nil

degrees on

any

course in the case of the

standard compass and

degrees on

course in the case of the steering compass.

AILSA SHIPBUILDING CO., LIMITED.

Secretary.

Builder's Signature.

Date 12-12-22

GENERAL REMARKS.

This installation has been fitted on board under special survey. Tested under full working conditions & found satisfactory. It is submitted that this vessel is eligible for THE RECORD.

FAK - 29-0-0
Exp. 10-6

1/12/22
Pd 17/11/22

THE RECORD.

Elect. Light
A. Rankin

27/12/22

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

GLASGOW 19 DEC 1922

Elect. Light



Lloyd's Register Foundation

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.