

REPORT ON ELECTRIC LIGHTING INSTALLATION.

No. 12904

Report of Rotterdam Date of First Survey 12.4.23 Date of Last Survey 26.4.23 No. of Visits 3
 No. in on the Iron or Steel 86 10 Port belonging to London
 1. Book Built at Rotterdam By whom Burginkhout Machinefab. Scheepsw. When built 1923
 Owners James Hedging, Towing & Transport Comp. Owners' Address London
 rd No. 74 Electric Light Installation fitted by W. M. Hoos, Co., Rotterdam When fitted 1923

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Steamdynamo, type Spillingwerke.

Capacity of Dynamo 35 Amperes at 110 Volts, whether continuous or alternating current continuous
 Where is Dynamo fixed Engine room Whether single or double wire system is used double wire system
 Position of Main Switch Board near steamdynamo having switches to groups 8 of lights, &c., as below
 Positions of auxiliary switch boards and numbers of switches on each None

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 100 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 5 x 32, 6 x 50, 1 x 300 arranged in the following groups:—

A	<u>Engine room</u>	lights each of <u>all</u>	candle power requiring a total current of <u>22</u>	Amperes
B		lights each of	candle power requiring a total current of	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
	Mast head light with	lamps each of	candle power requiring a total current of	Amperes
	Side light with	lamps each of	candle power requiring a total current of	Amperes
	<u>2</u> Cargo lights of <u>5 x 50</u>		candle power, whether incandescent or are lights	

If arc lights, what protection is provided against fire, sparks, &c. None

Where are the switches controlling the masthead and side lights placed

DESCRIPTION OF CABLES.

Main cable carrying	<u>25</u>	Amperes, comprised of	<u>7</u>	wires, each	<u>17</u>	S.W.G. diameter, <u>0.0170</u>	square inches total sectional area
Branch cables carrying	<u>4</u>	Amperes, comprised of	<u>7</u>	wires, each	<u>24</u>	S.W.G. diameter, <u>0.0026</u>	square inches total sectional area
Branch cables carrying		Amperes, comprised of		wires, each		S.W.G. diameter,	square inches total sectional area
Leads to lamps carrying	<u>1</u>	Amperes, comprised of	<u>1</u>	wires, each	<u>16</u>	S.W.G. diameter, <u>0.00320</u>	square inches total sectional area
Cargo light cables carrying	<u>2.5</u>	Amperes, comprised of	<u>48</u>	wires, each	<u>0.2</u>	S.W.G. diameter, <u>0.0040</u>	square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Vulcanized India rubber, lead covered, and iron armoured.

Joints in cables, how made, insulated, and protected Joints are made in copper boxes, watertight fitted

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 None

How are the cables led through the ship, and how protected Cables in Engine room, hold and on deck, lead covered and iron armoured; Cabins are only lead covered



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DESCRIPTION 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

Screw steel tubes

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

through bulkheads, &c.

How are cables carried through decks

steel tubes

Are any cables run through coal bunkers or cargo spaces 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

None

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

portable

How fixed

water-tight plugs

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 one Voltmeter, and with an amperemeter one Amperemeter, fixed on main 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.

ELECTROTECHNICAL BUREAU
W. N. HOOS & Co.

W. N. Hoos & Co.

Electrical Engineers

Date 27th of June 1923

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

Nil

degrees on

course in the case of the

standard compass and

degrees on

course in the case of the steering compass.

BURROUGHS'S MACHINEFABRIK & SCHIEPSEWERF.

Builder's Signature.

Date

GENERAL REMARKS.

This installation has been fitted in accordance with the Rules and was found in a good working when tried, and I am of opinion that same merits the Committee's approval

It is submitted that this vessel is eligible for THE RECORD.

Elec. light.

FEE 60.00

paid 20/7/23

Committee's Minute

FRI. JUL 27 1923

TUES. 13 JAN 1925

Surveyor to Lloyd's Register of Shipping.



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