

FRI. OCT. 13 1922

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 12555

Port of *Rotterdam* Date of First Survey *9 Aug* Date of Last Survey *29 Sept* No. of Visits *6*
 No. in on the Iron or Steel *M.S. "Dordrecht"* Port belonging to *Rotterdam*
 Reg. Book Built at *Rotterdam* By whom *Burgerhout's Hach. fab.* When built *1922*
 Owners *Phs. v. Ommeren* Owners' Address *Rotterdam*
 Yard No. *258* Electric Light Installation fitted by *A. de Hoop R'dam* When fitted *1922*

DESCRIPTION OF DYNAMO, ENGINE, ETC.

3 direct current dynamo's, compound wound, direct coupled to Bolinder motor 325 revs. 25 K.W. 1 dynamo shunt wound d.c. to Bol. motor 600 revs. 2.5 K.W.
 Capacity of Dynamos *3 x 113, 6, 1 x 22, 7* Amperes at *220 & 110* Volts, whether continuous or alternating current *continuous*
 Where is Dynamo fixed *in Motorroom* Whether single or double wire system is used *three wire*
 Position of Main Switch Board *near dynamo's* having switches to groups *20* of lights, &c., as below
 Positions of auxiliary switch boards and numbers of switches on each
See wiring diagram No 2452

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

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, porcelain*

Total number of lights provided for *198* arranged in the following groups:—

A	lights each of		candle power requiring a total current of	Amperes
B	lights each of		candle power requiring a total current of	Amperes
C	lights each of	<i>See diagram No 2452</i>	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</i>	Mast head light with <i>1</i> lamps each of	<i>32</i>	candle power requiring a total current of	<i>2</i> Amperes
<i>2</i>	Side light with <i>1</i> lamps each of	<i>32</i>	candle power requiring a total current of	<i>2</i> Amperes
<i>12</i>	Cargo lights of	<i>6 x 16</i>	candle power, whether incandescent or are lights	<i>incandescent</i>

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

Where are the switches controlling the masthead and side lights placed *in Charroom*

DESCRIPTION OF CABLES.

Main cable carrying	Amperes, comprised of	wires, each	S.W.G. diameter,	square inches total sectional area
Branch cables carrying	Amperes, comprised of	wires, each	S.W.G. diameter,	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	Amperes, comprised of	wires, each	S.W.G. diameter,	square inches total sectional area
Cargo light cables carrying	Amperes, comprised of	wires, each	S.W.G. diameter,	square inches total sectional area

See diagram No 2452

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Vulcanised rubber insulated, lead covered, in screwed iron tubes & paper insulated, lead covered, steel armoured.
 Joints in cables, how made, insulated, and protected
No joints

Are all the joints of cables thoroughly soldered, and the flux used not containing acids or other corrosive substances *—* 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 *No*

How are the cables led through the ship, and how protected *Power cables lead covered, steel armoured, other cables rubber insulated in iron tubes, watertight fitted. Salvon's Off. lead covered cable only*

DESCRIPTION OF INSULATION, PROTECTION

Are they in places always accessible

What special protection has been provided for the cables in places where exposure to moisture or other sources of heat

screwed iron tubes

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

same

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

same

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

same

How are cables carried through beams

also in iron tubes

through bulkheads, &c.

same water tight

How are cables carried through decks

water tight

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

by tubes and plates

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

No

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

yes

and with an amperemeter

yes

fixed *Main on board*

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.

M. J. J. J.

Electrical Engineers

Date *22 Sept 1912*

COMPASSES.

Distance between dynamo or electric motors and standard compass

22 ft

Distance between dynamo or electric motors and steering compass

32 ft

The nearest cables to the compasses are as follows:—

A cable carrying	Amperes	feet from standard compass	feet from steering compass
<i>2.1</i>	<i>1</i>	<i>5</i>	
<i>2.1</i>	<i>5</i>	<i>1</i>	
<i>A cable carrying</i>	<i>Amperes</i>	<i>feet from standard compass</i>	<i>feet from steering compass</i>

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 *nihil* degrees on *every* course in the case of the standard compass and *nihil* degrees on *every* course in the case of the steering compass.

P.P. BURGERHOUT'S MACHINEFABRIEK & SCHEEPWERF

J. J. J.

Builder's Signature.

Date *10 Feb 22*

GENERAL REMARKS.

The installation has been fitted in accordance with the Society's Rules has run satisfactorily during a trial and meets in my opinion the approval of the Committee

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

27/10/12

Cond

A. Pijls

Surveyor to Lloyd's Register of Shipping.

Committee's Minute



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