

Rpt. 13.

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 10,205

Port of Grimshy Date of First Survey 22/11/15 Date of Last Survey 21/1/16 No. of Visits 9
 No. in Reg. Book on the Iron or Steel S.T. Prefect Port belonging to Grimshy
 Built at Seely By whom Cochrane & Sons When built 1916
 Owners Anchor P. Fish & Co. Owners' Address Grimshy When fitted 1915
 Yard No. 712 Electric Light Installation fitted by Northern Electrical Co

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Enclosed Steam Engine direct coupled to two pole protected type dynamo
 Capacity of Dynamo 44 Amperes at 65 Volts, whether continuous or alternating current Continuous
 Where is Dynamo fixed Starboard side of Engine Room
 Position of Main Switch Board near dynamo having switches to groups A & (B & C) of lights, &c., as below
 Positions of auxiliary switch boards and numbers of switches on each in wheel house 8 switches

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 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 44 arranged in the following groups :-

A	16	lights each of	16	candle power requiring a total current of	16	Amperes
B	5	lights each of	32	candle power requiring a total current of	30	Amperes
C	23	lights each of	16	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
3	Mast head light with	1	lamps each of	32	candle power requiring a total current of	Included in above Amperes
2	Side light with	1	lamps each of	32	candle power requiring a total current of	" " Amperes
4	Cargo lights of			16	candle power, whether incandescent or arc lights	Incandescent

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

Where are the switches controlling the masthead and side lights placed In wheel house

DESCRIPTION OF CABLES.

Main cable carrying	44	Amperes, comprised of	19	wires, each	16	L.S.G. diameter, .06	square inches total sectional area
Branch cables carrying	30	Amperes, comprised of	7	wires, each	16	L.S.G. diameter, .022	square inches total sectional area
Branch cables carrying		Amperes, comprised of		wires, each		L.S.G. diameter, .0018	square inches total sectional area
Leads to lamps carrying	3	Amperes, comprised of	1	wire, each	18	L.S.G. diameter, .0032	square inches total sectional area
Cargo light cables carrying	4	Amperes, comprised of	110	wires, each	38	L.S.G. diameter, .0032	square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Vulcanized India Rubber, Taped + Braided Cables led through galvanized steel tubing. In Chart Room & Cabin wires are run in wooden casing
 Joints in cables, how made, insulated, and protected None made

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 ✓

How are the cables led through the ship, and how protected In Galvanized Steel Tubes

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 Piping

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 Piping

How are cables carried through decks " through bulkheads, &c. " made watertight

Are any cables run through coal bunkers Yes or cargo spaces " or spaces which may be used for carrying cargo, stores, or baggage "

If so, how are they protected Piping

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

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 " supplied with a voltmeter and " an amperemeter, fixed on Switchboard

The copper used is guaranteed to have a conductivity of 98 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.

The Northern Electrical Co.
Percy Watson

Electrical Engineers

Date 1 Feb'y 1916

COMPASSES.

Distance between dynamo or electric motors and standard compass About 40 ft.

Distance between dynamo or electric motors and steering compass 35 ft.

The nearest cables to the compasses are as follows:—

A cable carrying <u>1</u> Amperes	<u>5</u> feet from standard compass	<u>0</u> feet from steering compass
A cable carrying <u>30</u> Amperes	<u>11</u> feet from standard compass	<u>6</u> feet from steering compass
A cable carrying <u>"</u> Amperes	<u>"</u> feet from standard compass	<u>"</u> 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 Nil degrees on any course in the case of the steering compass.

W.H. Coates Compan Alvin Grimm Builder's Signature Date Jan. 24th 1916

GENERAL REMARKS.

This installation of electric light has been well fitted. The material & workmanship are good. The installation has been tried under full working conditions with satisfactory results.

THE RECORD Elec. light Surve 3/2/16

Committee's Minute

REPORT FORM No. 1.



© 2021

Lloyd's Register Foundation

RE
of writing
No. in
Book.
32
TO
3
ORDER DK.
NET
Surveyed
WB=Cel
total cap
N.B.—Al
If the v
of the tanks
girders, and
Last R
(Periodical Su
cause of Reg
on account
and besides
replacement
the back of
In damage o
declined
REPAIRS,
res
ap
bo
ch
SUMMARY OF
Renewed
Removed
Faird o
PRESENT CON
Decks
Caulking of De
Waterways
Coamings
Beams & Fasten
Outside Plating
Caulking of diti
Rivets
Breasthooks &
Transoms
Frames
Reverse Fram
Floors
Keelsons
Genera
this su
survey
Survey Fee (M
Special Damag
(per Sec
Travelling Exp
Second Surve
Comm
Charac