

## REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 29875

Port of HULL Date of First Survey 6.2.17 Date of Last Survey 16-3-17 No. of Visits 7  
 No. in Reg. Book 38 on the ~~Iron or Steel~~ BREW TRAWLER "RESMILO" Port belonging to GRIMSBY  
 Built at BEVERLY By whom COOK WELTON & GEMMELL When built 1914-3  
 Owners G. F. SLEIGHT Owners' Address GRIMSBY  
 Yard No. 359 Electric Light Installation fitted by SIEMENS BROS. DYNAMO WORKS LTD When fitted 1914-3

## DESCRIPTION OF DYNAMO, ENGINE, ETC.

Inverted high pressure single cylinder engine open type direct coupled, on combination bedplate to Siemens multipolar compound wound dynamo

Capacity of Dynamo 45 Amperes at 100 Volts, whether continuous or alternating current Continuous ✓

Where is Dynamo fixed Engine Room (Starboard Side) Whether single or double wire system is used double ✓

Position of Main Switch Board Engine Room (Starboard Side) having switches to groups 3 of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each Distribution Boxes, in after cabin, engine room Wheelhouse 2, and forward accommodation.

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-oxidisable 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 69 arranged in the following groups:—

A	8	lights each of	$5 \frac{1}{2} \times 32$	candle power requiring a total current of	7.8	Amperes
B	34	lights each of	16	candle power requiring a total current of	20.4	Amperes
C	24	lights each of	16	candle power requiring a total current of	16.2	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 lamp each of	32	candle power requiring a total current of		Amperes
2	Side light with	1 lamp each of	32	candle power requiring a total current of		Amperes
4	Cargo lights of	2 of 6 & 2 of 3 lbs each	16	candle power, whether incandescent or arc lights	Incandescent.	

Included in Circuit A.

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

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

## DESCRIPTION OF CABLES.

Main cable carrying 44.4 Amperes, comprised of 19 wires, each 14 S.W.G. diameter, .046 square inches total sectional area  
 Branch cables carrying 20.4 Amperes, comprised of 7 wires, each 18 S.W.G. diameter, .0125 square inches total sectional area  
 Branch cables carrying 7.8 Amperes, comprised of 3 wires, each 18 S.W.G. diameter, .0053 square inches total sectional area  
 Leads to lamps carrying 3.6 <sup>maximum</sup> Amperes, comprised of 1 wires, each 18 S.W.G. diameter, .00181 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.

Vulcanised India Rubber, lead covered and armoured in engine room etc.

- do - - do - in Accommodation etc

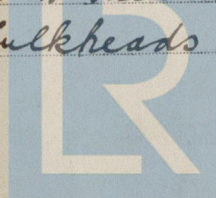
Joints in cables, how made, insulated, and protected

Jointless System with extension boxes.

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 Armoured cables clipped direct to bulkheads & underside of decks. Lead covered cables clipped direct to decks and bulkheads.





DESCRIPTION OF INSULATION, PROTECTION, ETC.—continued.

Are they in places always accessible *yes* *no* ✓

What special protection has been provided for the cables in open alleyways or where exposed to weather or moisture *Lead Covered and Armoured*

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat *Lead Covered and Armoured*

What special protection has been provided for the cables near boiler casings *Lead Covered and Armoured*

What special protection has been provided for the cables in engine room *Lead Covered and Armoured*

How are cables carried through beams *Fibre Baskets* through bulkheads, &c. *Watertight Glands* ✓

How are cables carried through decks *Watertight Decktubes* ✓

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 *Lead Covered and Armoured*

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 —

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.

FOR SIEMENS BROTHERS DYNAMO WORKS LIMITED.

ENGINE DEPARTMENT

Electrical Engineers

Date *13<sup>th</sup> April, 1914.*

COMPASSES.

Distance between dynamo or electric motors and standard compass *about 40 feet.*

Distance between dynamo or electric motors and steering compass

The nearest cables to the compasses are as follows:—

A cable carrying *20.4* Amperes *about 8* feet from standard compass feet from steering compass

A cable carrying *4.8* Amperes *about 8* 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 *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.

COOK, WELTON & GEMMELL, LTD.

*W. Patterson*

Builder's Signature.

Date

*18/4/17*

GENERAL REMARKS.

DIRECTOR

*This vessel has been fitted with an electric light installation as above & the workmanship is good, on completion it was tested under full working conditions & found satisfactory*

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

*Elec. light.*

*J.W.D.*

*23/4/17.*

*Frank A. Stanger.*

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

Committee's Minute

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.



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