

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 28988

Port of HULL Date of First Survey 27.10.15 Date of Last Survey 9.11.15 No. of Visits 6
 No. in on the ~~Iron~~ Steel SCREW TRAWLER "RONSO." Port belonging to GRIMSBY.
 Reg. Book Supt. 5 Built at BEVERLEY. By whom COOK, WELTON & GEMMELL. When built 1915
 Owners G. F. SLEIGHT. Owners' Address GRIMSBY.
 Yard No. 329. Electric Light Installation fitted by SIEMENS BROS. DYNAMO WORKS LTD When fitted 1915-11

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Inverted high pressure engine open type coupled direct to Siemens multipole compound wound dynamo.

Capacity of Dynamo 40 Amperes at 100 Volts, whether continuous or alternating current continuous

Where is Dynamo fixed In Engine Room Whether single or double wire system is used double.

Position of Main Switch Board " " Near dynamo 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 and two in wheel house with switches as required.

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 67 arranged in the following groups:—

A	<u>27</u>	lights each of	<u>16</u>	candle power requiring a total current of	<u>16.2</u>	Amperes	
B	<u>3</u>	lights each of	<u>32</u>	candle power requiring a total current of	<u>7.8</u>	Amperes	
C	<u>32</u>	lights each of	<u>16</u>	candle power requiring a total current of	<u>19.2</u>	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	
	<u>3</u>	Mast head light with	<u>1</u>	lamps each of	<u>32</u>	candle power requiring a total current of	} <u>Included in above.</u> Amperes
	<u>2</u>	Side lights with	<u>1</u>	lamps each of	<u>32</u>	candle power requiring a total current of	
		Cargo lights of	<u>Two 6lt & Two 3lt @ 16</u>	candle power, whether incandescent or arc lights	<u>Incandescent</u>		

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

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

DESCRIPTION OF CABLES.

Main cable carrying 43.2 Amperes, comprised of 19 wires, each 17 S.W.G. diameter, .046 square inches total sectional area

Branch cables carrying 19.2 Amperes, comprised of 7 wires, each 18 S.W.G. diameter, .0125 square inches total sectional area

Branch cables carrying 16.2 Amperes, comprised of 7 wires, each 18 S.W.G. diameter, .0125 square inches total sectional area

" " " 7.8 " " " 7 " " 20 " " " .0070 square inches total sectional area

Leads to lamps carrying 3.6 Amperes, comprised of 1 wires, each 18 S.W.G. diameter, .0018 square inches total sectional area

Cargo light cables carrying 3.6 Amperes, comprised of 136 wires, each 40 S.W.G. diameter, .002463 square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

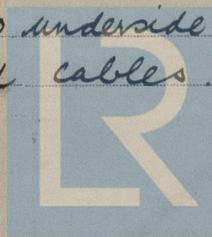
V.I.R. Lead covered and Armoured

Joints in cables, how made, insulated, and protected Jointless System.

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 Through beams clipped to underside of decks and bulkheads with strong galvanised W.I. Clips. armoured cables.



DESCRIPTION OF INSULATION, PROTECTION, ETC.—continued.

Are they in places always accessible *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 *- do - - do -*
 What special protection has been provided for the cables in engine room *- do - - do -*
 How are cables carried through beams *Lead Bushes where not armoured through bulkheads, &c. Watertight Glands.*
 How are cables carried through decks *Wrought Iron deck pipes*
 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.

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 *16.2* Amperes *7* 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 *Yes*
 The maximum deviation due to electric currents, etc., was found to be *nil* degrees on *all* courses in the case of the standard compass and *nil* degrees on *all* courses in the case of the steering compass.

FOR COOK, WELTON & GEMMELL, LTD.

W. Patterson Director

Builder's Signature. Date

GENERAL REMARKS.

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. 4/12/15

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

Committee's Minute

TUE. DEC. - 7. 1915

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.