

REPORT ON

of Newcastle
on the Iron or Steel
Book Built at Newcastle on Tyne
Electric Light Installation fitted by

DESCRIPTION OF DYNAMO, ENGINE, ETC.
Single cylinder direct acting vertical
compound dynamo

Capacity of Dynamo 125 Amperes at
Where is Dynamo fixed Engine Room

Position of Main Switch Board Engine Room having switches to groups four of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each Distributing board wiring, one board in Forward, one aft, one engine room, one in saloon

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 Standard and to each lamp circuit 52 per cent

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 Standard 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 Instruction to Engineer

Are all switches and cut-outs constructed of incombustible materials and fitted on incombustible bases Yes

Total number of lights provided for 152 arranged in the following groups :-

A	31 lights each of 16 CP	candle power requiring a total current of 15 Amperes
B	19 lights each of "	candle power requiring a total current of 9.5 Amperes
C	46 lights each of "	candle power requiring a total current of 23 Amperes
D	56 lights each of "	candle power requiring a total current of 28 Amperes
E	lights each of "	candle power requiring a total current of Amperes
	2 Mast head light with 1 lamps each of 32 CP	candle power requiring a total current of about one Amperes
	2 Side light with 1 lamps each of 32 CP	candle power requiring a total current of one Amperes
	6-6 light Cargo lights of 16 CP	candle power, whether incandescent or arc lights 36 lights in all

If arc lights, what protection is provided against fire, sparks, &c. No arc lamps

Where are the switches controlling the masthead and side lights placed main switch board in engine room

DESCRIPTION OF CABLES.

Main cable carrying	124 Amperes, comprised of 19 wires, each 13 L.S.G. diameter,	.1249 square inches total sectional area
Cables carrying	15 Amperes, comprised of 2 wires, each 14 L.S.G. diameter,	.01406 square inches total sectional area
Cables carrying	9.5 Amperes, comprised of 2 wires, each 18 L.S.G. diameter,	.0125 square inches total sectional area
Cables carrying	23 Amperes, comprised of 4 wires, each 15 L.S.G. diameter,	.02224 square inches total sectional area
Lamps carrying	1.8 Amperes, comprised of 3 wires, each 22 L.S.G. diameter,	.0018 square inches total sectional area
Cables carrying	3 Amperes, comprised of 2 wires, each 22 L.S.G. diameter,	.0042 square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Rubber, then vulcanised rubber, IR coated tape the whole sheathed in pairs in working places further protected by an armoring of galvanized wire
How made, insulated, and protected None

Are all joints in accessible positions, none being

W476-0090



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moisture. removed cables
 other sources of heat none near
 used tape over wire about lignite platform
 through bulkheads, &c. Water tight glands
 which may be used for carrying cargo, stores, or baggage
 cargo, coals or baggage ho

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

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

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 one an amperemeter, fixed on mainboard

The copper used is guaranteed to have a conductivity of 100 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.

Ernest Scott & Mountain Ltd.
 Electrical Engineers

Electrical Engineers

Date Feb 27 1905

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

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

standard compass and nil degrees on any course in the case of the steering compass.

FOR THE NORTHUMBERLAND SHIPBUILDING COMPANY, LIMITED.

Rowland Strang
 Managing Director.

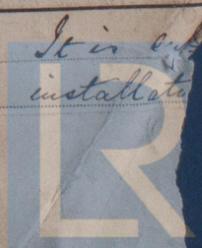
Builder's Signature.

Date 20th February

GENERAL REMARKS.

This installation as far as seen appears to be fitted in accordance with the requirements of the Rules.
J. Y. Fundlay
 Surveyor to Lloyd's Register of British and Foreign Shipping

Committee's Minute



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REPORT FORM No. 13.