

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 28184

Port of Sunderland Date of First Survey Sep 27 '21 Date of Last Survey Oct 11 '21 No. of Visits 6
 No. in on the ~~Steel~~ Steel Scorer Steamer "ZELO" Port belonging to Newcastle on Tyne
 Reg. Book 36029 Built at Sunderland By whom J. P. Austin & Son Ltd. When built 1921
 Owners Pelton S.S. Co. Limited Owners' Address Milburn House, Newcastle on Tyne
 Yard No. 293 Electric Light Installation fitted by Clarke Chapman & Co. Ltd. When fitted 1921

DESCRIPTION OF DYNAMO, ENGINE, ETC.

One single cylinder double acting open type vertical engine direct coupled to a continuous current compound wound dynamo
 Capacity of Dynamo 100 Amperes at 100 Volts, whether continuous or alternating current continuous
 Where is Dynamo fixed In Engine Room upper platform Whether single or double wire system is used Double
 Position of Main Switch Board Near Dynamo having switches to groups A B C D of lights, &c., as below
 Positions of auxiliary switch boards and numbers of switches on each Each light & group of lights provided 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 slate & porcelain

Total number of lights provided for 105 arranged in the following groups:—

A Above Main	42 lights each of	16	candle power requiring a total current of	23.6	Amperes
B Engine Room	42 lights each of	16	candle power requiring a total current of	23.6	Amperes
C Engine Room	21 lights each of	16	candle power requiring a total current of	11.7	Amperes
D Wheel	lights each of	.	candle power requiring a total current of	2.5	Amperes
E	lights each of	.	candle power requiring a total current of	.	Amperes
2 Mast head light with	1 lamp each of	32	candle power requiring a total current of	2.2	Amperes
2 Side light with	1 lamp each of	32	candle power requiring a total current of	2.2	Amperes
4 Cargo lights of		6-16	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	100 Amperes, comprised of	37 wires, each	16 S.W.G. diameter, .117	square inches total sectional area
Branch cables carrying	23.6 Amperes, comprised of	7 wires, each	16 S.W.G. diameter, .022	square inches total sectional area
Branch cables carrying	11.7 Amperes, comprised of	7 wires, each	20 S.W.G. diameter, .0070	square inches total sectional area
Leads to lamps carrying	1.1 Amperes, comprised of	1 wires, each	18 S.W.G. diameter, .0019	square inches total sectional area
Cargo light cables carrying	3.3 Amperes, comprised of	168 wires, each	38 S.W.G. diameter, .0050	square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Vulcanized india rubber lapped & braided & lead covered where exposed steel armored cable.

Joints in cables, how made, insulated, and protected No joints except mechanical ones

Are all the joints of cables thoroughly soldered, and the flux used not containing acids or other corrosive substances Yes 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 Lead covered & armored cables run through bulkhead & clipped to underside of deck with sling galvanneal iron clips

