

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

100-21 AUG. 1923

Received at London Office

Date of writing Report 19 When handed in at Local Office 18/8/19 Port of NEWCASTLE-ON-TYNE

No. in Survey held at South Shields Date, First Survey 4th July Last Survey 8th August 1923
Reg. Book. Supt. (Number of Visits.....)

39005 on the Florence Cooke Tons { Gross Net 206

Built at South Shields By whom built Apples (1919) Ltd. Yard No. When built 1923

Owners Cooke's Explosives Ltd. Port belonging to Sunderland.

Electric Light Installation fitted by Messrs Campbell & Sherwood & Co Contract No. When fitted 1923

System of Distribution Double wire system

Pressure of supply for Lighting 65 volts, Heating _____ volts, Power _____ volts.

Direct or Alternating Current, Lighting Direct Power

If alternating current system, state frequency of periods per second _____

Has the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on or off yes

Generators, do they comply with the requirements regarding overload yes, are they compound wound yes

are they over compounded 5 per cent. yes, if not compound wound state distance between each generator _____

Where more than one generator is fitted are they arranged to run in parallel _____, is an adjustable regulating resistance fitted in series with each shunt field _____

Are all terminals accessible and clearly marked yes, are they so spaced or shielded that they cannot be accidentally earthed, or short circuited yes Are the lubricating arrangements of the generators as per Rule yes

Position of Generators On platform in engine room

is the ventilation in way of the generators satisfactory yes, are they clear of all inflammable material yes

if situated near unprotected woodwork or other combustible material, state distance of same horizontally from or vertically above the generators _____ and _____, are the generators protected from mechanical injury and damage from water, steam or oil yes

are their axis of rotation fore and aft yes

Earthing, are the bedplates and frames of the generating plant efficiently earthed yes are the prime movers and their respective generators in metallic contact yes

Main Switch Boards, where placed In engine room starboard side

If the generators and main switchboard are not placed in the same compartment, is each generator provided with a fuse on each insulated pole as near as possible to the terminals of the generator, additional to that provided on the main switchboard _____

Switchboards, are they placed in accessible positions, free from inflammable gases and acid fumes yes

are they protected from mechanical injury and damage from water, steam or oil yes, if situated near unprotected woodwork or other combustible material, state distance of same horizontally from or vertically above the switchboards _____ and _____, are they constructed wholly of durable, incombustible non-absorbent materials yes, is all insulation of high dielectric strength and of permanently high insulation resistance yes, if semi-insulating material is used, are all conducting parts connected to one pole insulated from the slab with mica or micanite and the slab similarly insulated from its framework yes, and is the frame effectively earthed yes

Are the following fittings as per Rule, viz.:— spacing or shielding of live parts

yes, accessibility of all parts yes, absence of fuses on back of board yes, proportion of omnibus bars yes

yes, individual fuses to voltmeter, pilot or earth lamp yes, connections of switches yes

Main Switchgear, description of switchgear for each generator and each outgoing circuit, and arrangement of equalizer switches Double pole switch

fuses on dynamo mains, on each outgoing circuit single pole switch + double pole fuses.

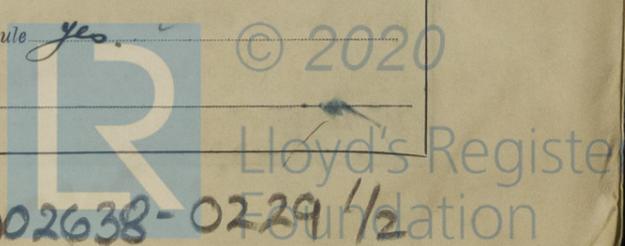
Instruments on main switchboard 1 ammeters, 1 voltmeters, _____ synchronising device for paralleling purposes.

Earth Testing, state what means are provided at the main switchboard for indicating the state of the insulation of the system earth lamps

connected to earth through double pole switches + fuses

Switches, Circuit Breakers and Fusible Cut-outs, do these comply with the requirements of the Rules. yes

Section and Distribution Boards, is the construction, protection, insulation, material, and position of these as per rule yes



Insulation of Cables, state type of cables, single or twin single are the cables insulated and protected as per Tables III or ~~IV~~ of the Rules. yes ✓

Fall of Pressure, state maximum between bus bars and any point of the installation under maximum load 3.75

Cable Sockets and other connections, are the ends of all cables having a sectional area of 0.007 square inch and above provided with soldering sockets yes ✓

Paper Insulated Cables. If cables are paper covered, is the dielectric at the exposed ends of the conductor protected from moisture by being suitably sealed with insulating compound _____

Cable Runs, are the cables fixed as far as possible in accessible positions not exposed to drip or accumulation of water or oil, or to high temperature from boilers, steam pipes, uptakes or other hot objects, or to avoidable risk of mechanical damage. Cables in engine room, stokehold & fidley are lead covered in pipe. Tram cables are protected by pipe along deck where exposed.

Support and Protection of Cables, state how the cables are supported and protected. Cables in pipe clipped by steel clips to beams, bulkheads & girders.

If cables are run in wood casings, are the casings and caps secured by screws _____, are the cap screws of brass _____, are the cables run in separate grooves _____. If armoured and lead covered cables are secured by metal clips, are the clips spaced as per Table VI yes ✓

Refrigerated Chambers, if lights are fitted, are the cables and fittings in accordance with the special requirements _____

Joints in Cables, state if any, and how made, insulated, and protected none made

Watertight Glands and Deck Tubes, are all cables passing through decks and watertight bulkheads provided with deck tubes or watertight glands yes ✓

Bushes in Beams and Non-watertight Positions, where unarmoured cables pass through beams and non-watertight partitions, are the holes efficiently bushed yes state the material of which the bushes are made fibre ✓

Earthing Connections, state what earthing connections are fitted and their respective sectional areas _____, are their connections made as per Rule _____

Alternative Lighting, are the groups of lights in the propelling machinery space arranged as per Rule yes ✓

Emergency Supply, state position and method of control of the emergency supply and how the generator is driven none fitted

Navigation Lamps, are these separately wired yes ✓, controlled by separate switch and separate fuses yes ✓, are the fuses double pole yes ✓, are the switches and fuses grouped in a position accessible only to the officers on watch yes ✓, has each navigation lamp an automatic indicator as per Rule yes ✓, are separate screens provided for the use of oil and electric side lights yes ✓, are separate oil lanterns provided for the mast head light and side lights yes ✓

Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, watertight yes ✓, are any fittings placed in spaces in which goods are liable to be stacked in close proximity to them; if so, how are they protected _____, are any fittings placed in spaces where inflammable or explosive dust or gases are liable to be present, if so, how are they protected no _____, how are the cables led _____, where are the controlling switches situated _____

Searchlight Lamps, No. of 1 ✓, whether fixed or portable fixed ✓, are their fittings as per Rule yes ✓

Arc Lamps, other than searchlight lamps, No. of _____, are their live parts insulated from the frame or case _____, are their fittings as per Rule _____

Motors, are their working parts readily accessible _____, are the coils self-contained and readily removable for replacement _____, are the brushes, brush holders, terminals and lubricating arrangements as per Rule _____, are the motors placed in well-ventilated compartments in which inflammable gases cannot accumulate and clear of all inflammable material _____, are they protected from mechanical injury and damage from water, steam or oil _____, are their axis of rotation fore and aft _____, if situated near unprotected woodwork or other combustible material, are the motors of the totally enclosed, pipe ventilated, forced draught, drip or flame proof type _____, if not of this type, state distance of the combustible material horizontally or vertically above the motors _____ and _____

Control Gear and Resistances, are the generator field and motor speed regulators, starters and controllers constructed as per Rule _____

Lightning Conductors, where lightning conductors are required, are these fitted as per Rule _____

Ships carrying Oil having a Flash Point less than 150° F. Have the special requirements of the Rules been complied with regarding switches, joint boxes, section and distribution boards, protection of cables, method of distribution, lead of cables, lights and fittings _____

If portable lamps for use in dangerous spaces are supplied, are they of a type approved by the Home Office _____ ✓

PARTICULARS OF GENERATING PLANT.

DESCRIPTION OF GENERATOR.	No. of	RATED AT				DRIVEN BY.	WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE.	
		Kilowatts.	Volts.	Ampères.	Revs. per Min.		Fuel Used.	Flash Point of Fuel.
MAIN ...	1	4675	65	77	450	Single cylinder steam engine		
AUXILIARY ...								
EMERGENCY ...								
ROTARY TRANSFORMER								

LIGHTING AND HEATING CONDUCTORS.

Ref. No.	DESCRIPTION.	No. of Conductors.	Effective Area of each Conductor. Sq. Ins.	COMPOSITION OF STRAND.		Total Maximum Current. Amperes.	Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	MAIN GENERATOR...	2	.06	19	.064	77 ✓	10	V.I.R	Lead covered.
	AUXILIARY GENERATOR								
	EMERGENCY GENERATOR								
	ROTARY TRANSFORMER...								
	AUXILIARY SWITCHBOARDS								
	ENGINE ROOM	2	.00701	7	.036	7.2 ✓	4	V.I.R	Lead covered
	BOILER ROOM								
	Midships	2	.00701	7	.036	16.8 ✓	112	do	do
	Forward	2	.00194	3	.029	3.0 ✓	240	do	do
	WIRELESS								
	SEARCHLIGHT	2	.0396	19	.052	50 ✓	120	V.I.R	Lead covered.
	MASTHEAD LIGHT...	2	.00194	3	.029	1.95 ✓	160	V.I.R	do
	SIDE LIGHTS...	2	.00194	3	.029	1.95 ✓	30	V.I.R	do
	COMPASS LIGHTS...	2	.00194	3	.029	4.75 ✓	40	V.I.R	do
	STERN LIGHT	2	.00194	3	.029	1.95 ✓	120	V.I.R.	do
	CARGO LIGHTS	2	.003	70	.0076	2.3 ✓	60	V.I.R	Cable type flexible
	ARC LAMPS								
	HEATERS								

NOTE. Cable for searchlight led into D.P.S. flexible not supplied for use of searchlight.

MOTOR CONDUCTORS.

Ref. No.	DESCRIPTION.	No. of Motors.	Effective Area of each Conductor. Sq. Ins.	COMPOSITION OF STRAND.		Total Maximum Current. Amperes.	Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	BALLAST PUMP ...								
	MAIN BILGE LINE PUMPS ...								
	GENERAL SERVICE PUMP ...								
	EMERGENCY BILGE PUMP ...								
	SANITARY PUMP ...								
	CIRC. SEA WATER PUMPS ...								
	CIRC. FRESH WATER PUMPS								
	AIR COMPRESSOR ...								
	FRESH WATER PUMP ...								
	ENGINE TURNING GEAR ...								
	ENGINE REVERSING GEAR ...								
	LUBRICATING OIL PUMPS ...								
	OIL FUEL TRANSFER PUMP								
	WINDLASS ...								
	WINCHES, FORWARD ...								
	WINCHES, AFT ...								
	STEERING GEAR ...								
	WORKSHOP MOTOR ...								
	VENTILATING FANS ...								

All Conductors are of annealed copper conforming to British Standard Specification No. 7.
 The Insulated Conductors are guaranteed to withstand the immersion and resistance tests specified in the Rules.
 The foregoing is a correct description.

CAMPBELL & ISHERWOOD LTD
 Electrical Engineers.
Thos. Weadu

Date *11th Aug 1923*

COMPASSES.

Distance between electric generators or motors and standard compass *45 feet.*

Distance between electric generators or motors and steering compass

The nearest cables to the compasses are as follows:—

A cable carrying *7.0* Ampères *8.0'* feet from standard compass — feet from steering compass.

A cable carrying Ampères feet from standard compass feet from steering compass.

A cable carrying Ampères 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*

Has the effect of switching on and off circuits, motors and other electro-magnetic apparatus within the vicinity of the compasses been noted *Yes*

The maximum deviation due to electric currents was found to be *nil* degrees on *all* course in the case of the standard compass, and *nil* degrees on *all* course in the case of the steering compass.

For HIPPLES (1919) LIMITED

W. J. Hoopple
 Builder's Signature.

Date *13 Aug 1923*

Is this installation a duplicate of a previous case *No* If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c.)

*The above installation is in accordance with the Society's Rules.
 The vessel is eligible in my opinion for notation des lighth.*

*It is submitted that
 the vessel is eligible for
 THE RECORD. Elec. Light.*

W. T. Budget
 22/8/23

Total Capacity of Generators *4.675* Kilowatts

The amount of Fee ... £ *5 : 0* :
 Travelling Expenses (if any) £ : :
 When applied for, *20/8/23*
 When received, *19*

W. T. Budget
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

Im. 3.22.—Transit.



© 2020

Lloyd's Register
 Foundation