

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office 18 JUL 1929

Date of writing Report 19 When handed in at Local Office 6.7.29 Port of WEST HARTLEPOOL
10.7.29 Date, First Survey 12 April 1929 Last Survey 31 May 1929
(Number of Visits 16) 5th June.

No. in Survey held at West Hartlepool. Reg. Book. Supt. 89602. on the S.S. "City of Dieppe" Tons { Gross 7445. Net 4690

Built at West Hartlepool. By whom built W. Gray & Co. Ltd. Yard No. 1000 When built 1929.

Owners Ellerman Lines Ltd. Port belonging to Glasgow. Contract No. 1000 When fitted 1929.

Electric Light Installation fitted by Chatke Chatman & Co. Ltd.

System of Distribution Double wire system. Pressure of supply for Lighting 110 volts, Heating 110 volts, Power 110 rolls.

Direct or Alternating Current, Lighting Direct. 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 rating? 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? No.

series with each shunt field? Yes. Are all terminals accessible, clearly marked, and furnished with sockets? Yes.

Are the lubricating arrangements of the generators as per Rule? Yes. Position of Generators Engine Room lower platform, Engine Room near starboard side.

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? Yes.

and are the generators protected from mechanical injury and damage from water, steam or oil? Yes.

are their axes of rotation fore and aft? Yes. Earthing, are the bedplates and frames of the generating plant efficiently earthed? Yes.

their respective generators in metallic contact? Yes. Main Switch Boards, where placed? Engine Room lower platform near dynamo, Engine Room near dynamo.

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? Yes.

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? Yes.

and are they constructed wholly of durable, non-ignitable non-absorbent materials? Yes, is all insulation of high dielectric strength and of permanently high insulation resistance? Yes.

with mica or micanite or other non-hygroscopic insulating material, and the slab similarly insulated from its framework? Yes, and is the frame effectively earthed? Yes.

Are the fittings as per Rule regarding:— spacing or shielding of live parts? Yes, proportion of omnibus bars? Yes.

accessibility of all parts? Yes, absence of fuses on back of board? Yes, combs of switches? Yes.

individual fuses to voltmeter, pilot or earth lamp? Yes. Main Switchgear, description of switchgear for each generator and each outgoing circuit, and arrangement of equalizing devices? Double pole switches, Double pole switches in each outgoing circuit, also Double pole change over switches for Engine Room plant.

Instruments on main switchboard 2 ammeters 2 voltmeters — chronising device for paralleling purposes. Earth Testing, state what means are provided at the main switchboard for indicating the state of the insulation of system? Earth lamps coupled to earth through switches & fuses.

Switches, Circuit Breakers and Fusible Cut-outs, do these comply with the requirements of the Rules? Yes. Joint Boxes Section and Distribution Boards, is the construction, protection, insulation, material, and position these as per rule? Yes.



Cables: Single, twin, concentric, or multicore *single* are the cables insulated and protected as per Tables IV and V of the Rules *Yes*

Fall of Pressure, state maximum between bus bars and any point of the installation under maximum load *2.6 Volts*

Cable Sockets and other connections, are the ends of all cables having a sectional area of 0.04 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 *Yes*

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 *Yes*

Support and Protection of Cables, state how the cables are supported and protected *Lead Armoured in Engine Room lead covered in Cabin etc, lead armoured Braided in Cargo spaces clipped to main bulkhead*

If cables are run in rood 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 VIII *Yes*

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

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 Partitions, 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 *lead*

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 *Yes*

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*

Secondary Batteries, are they constructed and fitted as per Rule *Yes*

Fittings, are all fittings on weather deck, 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 *Yes*, are any fittings placed in spaces where inflammable or explosive dust or gases are liable to be present, if so, how are they protected *Yes*, how are the cables led *Yes*, where are the controlling switches situated *Yes*

Searchlight Lamps, No. of *2*, whether fixed or portable *Yes*, are their fittings as per Rule *Yes*

Are Lamps, other than searchlight lamps, of *2*, are their live parts insulated from the frame or case *Yes*, are their fittings as per Rule *Yes*

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

Control Gear and Resistances, are generator field and motor speed regulators, starters and controllers constructed and fitted as per Rule *Yes*

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

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

If portable lamps for use in dangerous space supplied, are they of a type approved by the Home Office *Yes*

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.	22	110	200	300	Single Cylinder		
AUXILIARY	2.	20	110	180	300	Steam Engines		
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.				
1.	MAIN GENERATOR...	2	.24650	37	.093	200	30	Pure rubber	Lead covered
2.	EQUALISER CONNECTIONS								
	AUXILIARY GENERATOR	2	.19440	37	.093	180	40	"	"
	EMERGENCY GENERATOR								
	ROTARY TRANSFORMER...								
	AUXILIARY SWITCHBOARDS								
3.	ENGINE ROOM	2	.02214	7	.064	12.9	50	"	Lead Armoured & Braided
	BOILER ROOM								
4	ACCOMMODATION	2	.01462	7	.052	18.2	260	"	"
5	Engines	2	.01462	7	.052	17.5	120	"	"
6	Crew etc	2	.00701	7	.036	5.6	350	"	"
	Cargo.	2	.03960	19	.052	47	120	"	"
7	WIRELESS	2	.00701	7	.036	15	120	Pure rubber	Lead Armoured & Braided
	SEARCHLIGHT								
8	MASTHEAD LIGHT	2	.00194	3	.029	.3	280	"	Inim fibres
9	SIDE LIGHTS	2	.00194	3	.029	.3	120	"	Lead covered
10	COMPASS LIGHTS	2	.00194	3	.029	.3	12	"	Lead covered
11	POOR LIGHTS	2	.00194	3	.029	.3	350	"	L.A.S. Braided
12	CARGO LIGHTS	2	.00455	16	.038	1.8	100	"	Braided Compounded
	ARC LAMPS								
	HEATERS								

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						50		
	WINCHES, FORWARD								
	WINCHES, AFT								
	STEERING GEAR								
	(a) MOTOR GENERATOR								
	(b) MAIN MOTOR								
	WORKSHOP MOTOR								
	VENTILATING FANS	6.	.02214	7	.064	35	260	Pure rubber	L.A.S. Braided
	Refrigerating	1.	.02214	7	.064	20	80	"	"
	Indu								

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 for Clarke, Chapman & Co., Ltd.

W. Taylor Director. Electrical Engineers. Date *2nd July 29.*

COMPASSES.

Distance between electric generators or motors and standard compass *120 ft*
 Distance between electric generators or motors and steering compass *114 ft*
 The nearest cables to the compasses are as follows:
 A cable carrying *.5* Ampères *12* feet from standard compass *6* feet from steering compass.
 A cable carrying *.5* Ampères *6* feet from standard compass *12* 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 *nie* degrees on *see* course in the case of the standard compass, and *nie* degrees on *see* course in the case of the steering compass.

For William Gray & Co., Limited,
H. S. Simpson Builder's Signature. Date *4th July 29.*
 General Manager.

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 electric wireless.

The installation examined under full working conditions and found satisfactory.

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

TRM
23.7.29

Total Capacity of Generators *62* Kilowatts.

The amount of Fee ... £ *28* : *14* : *13.6.19.29*

Travelling Expenses (if any) £ : *11.7.19.29*

W. T. Badger & R. D. Philston
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned *Elec. Lt.*

Im. 228.—Transfer. (The Surveys are requested not to write on or below the space for Committee's Minute.)



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