

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office 10 SEP 1928

Date of writing Report 6. 9. 1928 When handed in at Local Office 7. 9. 1928 Port of Rouen

No. in Survey held at Rouen. Date, First Survey 7 May Last Survey 21st Sept. 1928
Reg. Book. (Number of Visits... 9)

on the S/S "Stahite"

Built at Rouen Grand Quevilly By whom built Chantiers de Normandie Yard No. N^o 5 When built 1928

Owners Companhia Nacional de Navegacao Costeira Port belonging to Rio de Janeiro

Electric Light Installation fitted by Chantiers de Normandie Contract No. N^o 5 When fitted 1928

System of Distribution Double wire insulated

Pressure of supply for Lighting 110 volts, Heating 2 volts, Power 110 volts.

Direct or Alternating Current, Lighting Direct Power Direct

If alternating current system, state frequency of periods per second 2

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 compound wound yes.

are they over compounded 5 per cent. yes, if not compound wound state distance between each generator 2

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

Are all terminals accessible, clearly marked, and furnished with sockets yes, are they so spaced or shielded that they cannot be accidentally earthed, short circuited, or touched yes

Position of Generators In the Engine Room, are the lubricating arrangements of the generators as per Rule yes

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 no combustible material and at proximity, 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. are the prime movers and their respective generators in metallic contact yes

Main Switch Boards, where placed In the Engine Room

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 2

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 no combustible material at proximity

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

if semi-insulating material is used, are all conducting parts insulated from the slab 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, accessibility of all parts yes, absence of fuses on back of board yes, proportion of omnibus bars good, 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

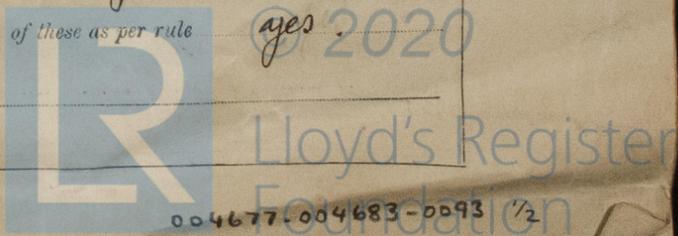
A double pole circuit breaker with overload and ~~and~~ reversed current trips and a single pole equalizer switch interlocked with the circuit breaker

Instruments on main switchboard Two ammeters Two voltmeters Two 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 Lamps each pole

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 of these as per rule yes



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

Fall of Pressure, state maximum between bus bars and any point of the installation under maximum load Five 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 none

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, uplakes 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 Supports by perforated plates in engine room Boiler room weather decks and cargo holds protected in holds by sheet iron plating
If cables are run in wood casings, are the casings and caps secured by screws yes, are the cap screws of brass yes, are the cables run in separate grooves no. 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 joint boxes in brasses

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

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 copper wire 0.0045 sq inch
are their connections made as per Rule yes

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 on boat deck placed controlled from a switchboard on Boat deck placed driven by paraffin engine

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 none

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 none

are any fittings placed in spaces where inflammable or explosive dust or gases are liable to be present, if so, how are they protected none
X, how are the cables led

where are the controlling switches situated none

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

Arc Lamps, other than searchlight lamps, No. of None, are their live parts insulated from the frame or case X, are their fittings as per Rule X

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 and lubricating arrangements as per Rule yes, are the motors placed in well-ventilated compartments in which inflammable gases cannot accumulate and clear of all inflammable material yes
are they protected from mechanical injury and damage from water, steam or oil yes are their axes of rotation fore and aft yes
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 yes, if not of this type, state distance of the combustible material horizontally or vertically above the motors X and X

Control Gear and Resistances, are the 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 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 X

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

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 ...	2	65	110	590	500	Steam Engine		
AUXILIARY ...	none							
EMERGENCY ...	1	8	110	66.5	770	Paraffin Engine		
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. Ampères.	Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	MAIN GENERATOR...	2	666 ^m	127	26/10	590	10 ^m	Rubber	Lead covered and armoured
	EQUALISER CONNECTIONS ...	1	349	61	27/10	295	5 ^m	-	-
	AUXILIARY GENERATOR ...					none			
	EMERGENCY GENERATOR ...	2	38.2	19	16/10	66.5	16	Rubber	-
	ROTARY TRANSFORMER ...					none			
	AUXILIARY SWITCHBOARDS ...					None			
	ENGINE ROOM ...	2	7.92	7	12/10	32.5	15	-	-
	BOILER ROOM ...								
	ACCOMMODATION ...								
	Emergency lighting (inside) 2	2	7.92	7	12/10	24.5	30	-	-
	Emergency lighting (outside) 2	2	6.65	7	11/10	25.5	36	-	-
	Navigation lights 2	2	5.65	7	11/10	5.5	65	-	-
	Cargo lights and mast lights 2	2	14.1	7	16/10	21.6	18	-	-
	Intermediate Passengers & Stewards 2	2	14.1	7	16/10	25.1	20	-	-
	Crew & Third class 2	2	14.1	7	16/10	19.5	90	-	-
	Sub-distribution board 2	2	25.2	19	13/10	60.7	26	-	-
	Sub-distribution board 2	2	65.0	37	15/10	108	50 ^m	-	-
	WIRELESS ...	2	25.2	19	13/10	70	60	-	-
	SEARCHLIGHT ...	2	10.8	7	14/10	20	70	-	-
	MASTHEAD LIGHT ...	2	1.0	1	11/10	0.9	120	-	-
	SIDE LIGHTS ...	2	1.0	1	11/10	0.9	35	-	-
	COMPASS LIGHTS ...	2	1.0	1	11/10	0.3	6	-	-
	POOP LIGHTS ...	2	1.0	1	11/10	0.3	120	-	-
	CARGO LIGHTS ...	2	2.69	7	7/10	1.7	10	-	-
	ARC LAMPS ...								
	HEATERS ...								

MOTOR CONDUCTORS.

Ref. No.	DESCRIPTION.	No. of Motors.	Effective Area of each Conductor. Sq. Ins.	COMPOSITION OF STRAND.		Total Maximum Current. Ampères.	Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	BALLAST PUMP ...	X							
	MAIN BILGE LINE PUMPS ...	X							
	GENERAL SERVICE PUMP ...	X							
	EMERGENCY BILGE PUMP ...		m ²						
	SANITARY PUMP ...	1	14.1	7	16/10	40	35 ^m	Rubber	Lead covered & armoured
	CIRC. SEA WATER PUMPS ...	X							
	CIRC. FRESH WATER PUMPS ...	X							
	AIR COMPRESSOR ...	X							
	FRESH WATER PUMP ...	1	3.52	7	8/10	20	10	-	-
	ENGINE TURNING GEAR ...	X							
	ENGINE REVERSING GEAR ...	X							
	LUBRICATING OIL PUMPS ...	X							
	OIL FUEL TRANSFER PUMP ...	X							
	WINDLASS ...	X							
	WINCHES, FORWARD ...	X							
	WINCHES, AFT ...	X							
	STEERING GEAR ...	X							
	(a) MOTOR GENERATOR ...	X							
	(b) MAIN MOTOR ...	1	12.8	37	21/10	160	75	-	-
	WORKSHOP MOTOR ...	1	10.8	7	14/10	35	30	-	-
	VENTILATING FANS ...								
	Brine Battery fan	1	19.8	7	14/10	53	28	-	-
	Sanitary Fans	4	1.13	1	12/10	4	75	-	-
	Galley Fan	1	1.13	1	12/10	6.6	35	-	-
	Engine & Boiler Fan	6	19.8	7	14/10	50	20	-	-
	#1 sub-distribution board	3	14.1	7	16/10	42	65	-	-
	#2 sub-distribution board	7	38.2	19	16/10	60	40	-	-

All Conductors are of annealed copper conforming to British Standard Specification No. 7.

yes

The Insulated Conductors are guaranteed to withstand the immersion and resistance tests specified in the Rules. yes

The foregoing is a correct description.

yes

Electrical Engineers.

Date

COMPASSES.

Distance between electric generators or motors and standard compass

50m

Distance between electric generators or motors and steering compass

54m

The nearest cables to the compasses are as follows:—

A cable carrying 5.5 Ampères 2m feet from standard compass 90m feet from steering compass.

A cable carrying 2.1 Ampères 2m feet from standard compass 90m feet from steering compass.

A cable carrying 2 Ampères 2 feet from standard compass 1 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 none degrees on none course in the case of the standard

compass, and none degrees on none course in the case of the steering compass.

Builder's Signature.

Date

Is this installation a duplicate of a previous case no If so, state name of vessel 2

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

This electric lighting installation has been examined during erection on board, the workmanship is good. Actual has been made & the result found satisfactory. This installation merit in my opinion the favourable consideration of the Committee for to be classed.

It is submitted that this record is classed for THE RECORD.

Elec. Light

J.S.M. 11/9/28.

J.S.M.

Total Capacity of Generators 130 Kilowatts.

The amount of Fee ... 1A £ 2360 : When applied for, 18.8.1928

Travelling Expenses (if any) £ included in Mchng Rpt. When received, 21.8.1928

J. Hambleton
Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 14 SEP 1928

Assigned

Elec. Light

Im. 1.27.—Transfers (The Surveyors are requested not to write on or below the space for Committee's Minute.)



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