

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office

24 FEB 1926

Date of writing Report 29. 1. 1926 When handed in at Local Office 20. 2. 26. 10 Port of GLASGOW.

No. in Survey held at GLASGOW. Date, First Survey 11th Decr 1925 Last Survey 20th Jan'y 1926
Reg. Book.40081. on the S. S. "MARTHARA" Tons { Gross 4999
Net

Built at GLASGOW. By whom built D & W. HENDERSON LTD Yard No. 409. When built 1926.

Owners MESSRS MACLAY & MCINTYRE LTD Port belonging to GLASGOW.

Electric Light Installation fitted by MESSRS HARLAND & WOLFF LTD (GOVAN) Contract No. 409. When fitted 1926.

System of Distribution

Two wire

Pressure of supply for Lighting 110 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 no

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 Starboard side of 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 Starboard side of 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 -

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, 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 Generator

controlled by D.P. switch and D.P. fuses. Each outgoing circuit controlled by a D.P. switch and D.P. fuses.

Instruments on main switchboard one ammeter one voltmeter - 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 Two lamps and

two switches (single pole) across mains, mid point of lamps earthed.

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.



© 2019

Lloyd's Register
Foundation

1/2W218-0170

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	10	110	90	450	Induced 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.				
1	MAIN GENERATOR...	4	.048	19	.072	90	25	Rubber	Lead Covered.
	AUXILIARY GENERATOR								
	EMERGENCY GENERATOR								
	ROTARY TRANSFORMER...								
	AUXILIARY SWITCHBOARDS								
	ENGINE ROOM <i>Lighting</i>	1 per foot	.0048	4	.029	15.4	20	Rubber	Lead Cov. & Braided
	BOILER ROOM	1 per foot							
	WIRELESS (1/2 H. D.)	4	.0048	4	.029			Rubber	V.L. & Braided.
	SEARCHLIGHT		.002	3	.029	9	320	"	V.L. & Braided.
2	MASTHEAD LIGHTS		.002	3	.029	9	96	"	Lead Covered.
2	SIDE LIGHTS		.002	3	.029	3	32	"	"
2	COMPASS LIGHTS		.002	3	.029	6	616	"	"
1	POOP LIGHTS <i>(Lighting)</i>		.002	3	.029	2.8	52	"	V.L. & Braided.
8	CARGO LIGHTS <i>(5 1/2 inch)</i>		.002	3	.029			"	"
	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								
	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.

FOR HARLAND AND WOLFF, LIMITED,

John Dickenson, Electrical Engineers.
Managing Director.

Date *16/2/26*

COMPASSES.

Distance between electric generators or motors and standard compass *104 ft.*

Distance between electric generators or motors and steering compass *98 ft.*

The nearest cables to the compasses are as follows:—

A cable carrying *4* Ampères *6* feet from standard compass *6* feet from steering compass.

A cable carrying *.84* Ampères *10* feet from standard compass *6* feet from steering compass.

A cable carrying *.55* Ampères *6* feet from standard compass *4* 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 the* course in the case of the standard compass, and *nil* degrees on *all the* course in the case of the steering compass.

FOR HARLAND AND WOLFF, LIMITED,

John Dickenson, Builder's Signature.
Managing Director.

Date *16/2/26*

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.)

This installation has been fitted on board under special survey. Tested under full working conditions and found satisfactory. The workmanship was found to be good and sound.

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

3/3/26

Total Capacity of Generators *10* Kilowatts

The amount of Fee ... *£10.0.0* : *21/1/26*

Travelling Expenses (if any) £ : *29/1/26*

Committee's Minute *GLASGOW 23 FEB 1926*

Assigned *Elec. Light.*

J. S. Rankin
Surveyor to Lloyd's Register of Shipping.



© 2019

Lloyd's Register
Foundation