

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office

1 SEP 1926

Date of writing Report 1-6-26 When handed in at Local Office 30-8-26 Port of GLASGOW.

No. in Survey held at
Reg. Book.

GREENOCK.

Date, First Survey 4 May

Last Survey 3rd June 1926

(Number of Visits 4)

40089 on the

S. S. "MARSLEW"

Tons

Gross 4542

Net 2881

Built at

PORT GLASGOW.

By whom built

LITHGOW & LTD

Yard No.

780

When built

1926.

Owners

THE WALMAR S. S. CO LTD

Port belonging to

LONDON.

Electric Light Installation fitted by MESSRS W. BENNETT & CO

Contract No. 780 When fitted 1926.

System of Distribution

Two wire

D.C. ✓

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

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

Main

Platform

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

on Bulkhead 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

—

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

no fuses

, proportion of omnibus

bars Insulated, 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

100 amp fuse 100 amps with 6 sub switches & fuses of 25 ampere capacity each

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

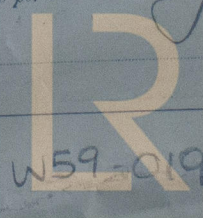
lamps are supplied.

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



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W59-0193 (1/2)

Insulation of Cables, state type of cables, single or twin Twins 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 Not 2.5 Volts

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 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 Wire armour & clipped to under side of deck

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

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 Lead

Earthing Connections, state what earthing connections are fitted and their respective sectional areas Earth Bonding clips + 4/18 cable, 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 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, are separate screens provided for the use of oil and electric side lights yes, are separate oil lanterns provided for the mast head lights 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 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, how are the cables led —

where are the controlling switches situated —

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

Are 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 yes

If portable lamps for use in dangerous spaces are 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	8	110	73.	350.	Vertical 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. Ampères.	Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	MAIN GENERATOR...	2	0.0600	19	0.064	483	24	V.I.R. Braided Iron Tubing	
	AUXILIARY GENERATOR	—	—	—	—	—	—	—	
	EMERGENCY GENERATOR	—	—	—	—	—	—	—	
	ROTARY TRANSFORMER...	—	—	—	—	—	—	—	
	AUXILIARY SWITCHBOARDS...	—	—	—	—	—	—	—	
	ENGINE ROOM	2	0.020	3	0.029	3.0	200.0	V.I.R. Lead	
	BOILER ROOM	2	0.020	3	0.029	3.0	100.0	do	
	Forecastle	2	0.040	4	0.036	6.0	300	V.I.R. Lead	
	Saloon	2	0.040	4	0.036	11.0	200	do	
	Navigation	2	0.040	4	0.036	11.0	200	do	
	Midships	2	0.040	4	0.036	11.0	100	do	
	Wireless	2	0.040	4	0.036	5.0	200	do	
	WIRELESS	—	—	—	—	—	—	—	
	SEARCHLIGHT	2	0.020	3	0.029	1.5	—	—	
	MASTHEAD LIGHT...	2	0.020	3	0.029	1.5	60	V.I.R. Lead	
	SIDE LIGHTS...	2	0.020	3	0.029	1.5	30	—	
	COMPASS LIGHTS	2	0.020	3	0.029	1.5	30	—	
	POOP LIGHTS	2	0.020	3	0.029	1.5	200	V.I.R. Lead	
	CARGO LIGHTS	2	0.020	3	0.029	1.5	200	—	
	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	—	—	—	—	—	—	—	
	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.

Walter Bennett Ltd
Walter Bennett Director

Electrical Engineers.

Date *28th August 1926*

COMPASSES.

Distance between electric generators or motors and standard compass *approx. 200 ft*

Distance between electric generators or motors and steering compass

The nearest cables to the compasses are as follows:—

A cable carrying *5* Amperes *1* feet from standard compass *1* feet from steering compass.

A cable carrying *5* Amperes *3* feet from standard compass *3* feet from steering compass.

A cable carrying _____ Amperes _____ 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 _____ degrees on _____ course in the case of the standard

compass, and _____ degrees on _____ course in the case of the steering compass.

LITHGOWS LIMITED.

G. J. Allan

Director & Secretary

Builder's Signature.

Date *28 Aug/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. Elec. light.

J. W. D.
1/9/26

Total Capacity of Generators *8* Kilowatts

The amount of Fee ... £ *50.00* *CLPK*

Travelling Expenses (if any) £ *10/6* *28/6/26*

Committee's Minute *GLASGOW 31 AUG 1926*

Assigned *Elec Light* *WMA*

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



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