

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Date of writing Report 16-5-31 When handed in at Local Office 10-10-1031 Port of GLASGOW Received at London Office 14 OCT 1931

No. in Survey held at GREENOCK Date, First Survey 9th March Last Survey 8th Sept. 1931
Reg. Book. (Number of Visits 7)

23926 on the M.V. "IMPERIAL TRANSPORT"

Tons { Gross 5022.45
Net 4829.9

Built at GLASGOW By whom built BLYTHSWOOD SHIPBUILDING CO. LTD No. 31 When built 1931

Owners EMPIRE TRANSPORT CO. LTD Port belonging to LONDON

Electric Light Installation fitted by TROUP CURTIS & CO. LTD Contract No. 31 When fitted 1931

Is the Vessel fitted for carrying Petroleum in bulk YES

System of Distribution Two Wire

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

Direct or Alternating Current, Lighting Direct Power 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 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 No, 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 Are the lubricating arrangements of the generators as per Rule Yes

Position of Generators In Engine Room on special platform Port 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 — 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 are the prime movers and their respective generators in metallic contact Yes

Main Switch Boards, where placed In Engine Room adjacent to main Generators.

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, non-ignitable 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 insulated from the slab with mica or micaite or other non-hygroscopic insulating material, and the slab similarly insulated from its framework Sindamyo

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 Yes

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

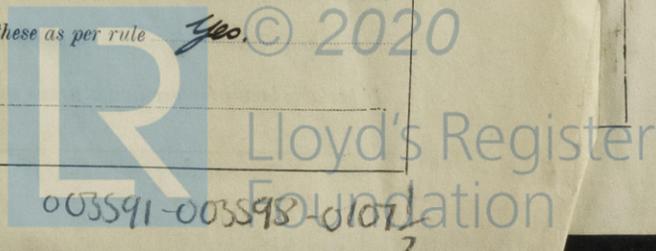
Main Switchgear, description of switchgear for each generator and each outgoing circuit, and arrangement of equalizer switches 200 amp D.P. main Switch and Fuses for each Generator and D.P. Change-over switches and fuses for each outgoing circuit.

Instruments on main switchboard 2 ammeters 2 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 Two Lamps in series with centre point earthed.

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 Single 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 4 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 fitted

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 Main cables along Top & Offi Gangways run in galvanized conduit. Engine Room & Machinery Spaces L.C.A. & B. Accommodation L.C.

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 VIII Yes

Refrigerated Chambers, if lights are fitted, are the cables and fittings in accordance with the special requirements None

Joints in Cables, state if any, and how made, insulated, and protected These V.I.R. cables join L.C. and L.C.A. & B. in Engine Room and Machinery. special lead cover joint boxes are fitted.

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 All metal sheathing of cables
efficiently bonded to earth by means of clips or glands.
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.

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 Watertight, well glass and guarded standard fittings.
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
Special Gaslight fittings with heavy glasses and guards.
In Gaslight lighting
where are the controlling switches situated Out-side spaces.

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

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 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 —, 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 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 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.	Amps.	Revs. per Min.		Fuel Used.	Flash Point of Fuel.
MAIN	2	12.5	110	113	1400	Steam Engines		
AUXILIARY								
EMERGENCY								
ROTARY TRANSFORMER								

GENERATOR, LIGHTING AND HEATING CONDUCTORS.

DESCRIPTION.	CONDUCTORS.		COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT. AMPERES.		Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
	No. per Pole.	Total Effective Area per Pole Sq. Ins.	No.	Diameter.	In Circuit.	Rule.			
MAIN GENERATOR	1	.1	19	.083	113	118	38 feet	Rubber	L.C.A. & B.
EQUALISER CONNECTIONS									
AUXILIARY GENERATOR									
EMERGENCY GENERATOR									
ROTARY TRANSFORMER GENERATOR									
ENGINE ROOM (2 Circuits)	1	.007	4	.036	7 and 13	24	106 1/2 + 10 1/2 ft	Rubber	L.C.A. & B.
BOILER ROOM									
AUXILIARY SWITCHBOARDS									
ACCOMMODATION Engines	1	.007	7	.036	14	24	140 ft	Rubber	L.C.A. & B.
" Gear	1	.01	7	.044	10	31	82 ft	Rubber	L.C.A. & B.
" Saloon	1	.0225	7	.064	15	46	500 ft	Rubber	L.C.A. & B., and Gal. Tubing
X WIRELESS	1	.007	7	.036	10	24	530 ft	Rubber	L.C.A. & B., and L.C. & Gal. Tubing
SEARCHLIGHT									
X MASTHEAD LIGHT S. (A)	1	.002	3	.029	3 each	7.8	250 ft each	Rubber	Gal. Tubing
SIDE LIGHTS (B)	1	.002	3	.029	" "	7.8	50 ft each	Rubber	L.C.
COMPASS LIGHTS (B)	1	.002	3	.029	10 wts	4.8	24 and 24	Rubber	L.C.
X POOP LIGHTS (Ship Light)	1	.002	3	.029	2 each	7.8	650 ft	Rubber	L.C. & Gal. Tubing
X CARGO LIGHTS	1	.04	19	.082	26	64	750 ft	Rubber	L.C.A. & B., and Gal. Tubing.
ARC LAMPS									
HEATERS									

Note: Circuit marked with X has V.I.R. cables run in galvanized conduit on deck and are connected to L.C. & B. cables in Engine Room and L.C. cables in accommodation by means of link boxes.

MOTOR CONDUCTORS.

DESCRIPTION.	No. of Motors.	CONDUCTORS.		COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT. AMPERES.		Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
		No. Per Pole.	Total Effective Area per Pole Sq. Ins.	No.	Diameter.	In Circuit.	Rule.			
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—										
(a) MOTOR GENERATOR										
(b) MAIN MOTOR										
WORKSHOP MOTOR	1	1	.0145	7	.052	27	37	230 ft	Rubber	L.C.A. & B.
VENTILATING FANS										
Oil Purifiers	2	1	.0225	7	.064	25	46	260 ft	Rubber	L.C.A. & B.

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 TROUP, CURTIS & CO. LTD.

[Signature]

Electrical Engineers.

Date 23 September 1931

COMPASSES.

Distance between electric generators or motors and standard compass 310' 6"

Distance between electric generators or motors and steering compass 303'

The nearest cables to the compasses are as follows:—

A cable carrying 1 Ampères 2 feet from standard compass 2 feet from steering compass.

A cable carrying 4 Ampères 8 feet from standard compass 8 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 any course in the case of the standard compass, and NIL degrees on any course in the case of the steering compass.

BLYTHSWOOD SHIPBUILDING CO., LTD.

John W. Stewart

Builder's Signature.

Date 3rd Oct 1931

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 materials and workmanship were found to be good and sound.

10/10/31

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

*Elec. Light
J.M. 157107 31*

Total Capacity of Generators 26 Kilowatts.

The amount of Fee ... £ 20 : 0 : 0 24/8/31
When applied for,
Travelling Expenses (if any) £ _____ 1-10-31
When received,

W. Haggard
Surveyor to Lloyd's Register of Shipping.

Committee's Minute **GLASGOW 13 OCT 1931**

Assigned Elec Light

Im. 9. 90.—Transfer.
(The Surveyors are requested not to write on or below the space for Committee's Minutes.)



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