

Rpt. 13.

No. 51783

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

18 APR 1934

Date of writing Report 2.7.31

When handed in at Local Office

19

Port of

GLASGOW.

No. in Survey held at

GREENOCK

Date, First Survey

Last Survey

17th Sept. 1931.

Reg. Book.

(Number of Visits.....)

25204 on the

M.V. "KARABAGH"

Tons

Gross 6426.63

Net 3862.93

Built at

GLASGOW.

By whom built

BLYTHSWOOD SHIPBUILDING CO. LTD

No. 32

When built

1931

Owners

BALTIC TRADING CO. LTD

Port belonging to

LONDON

Electric Light Installation fitted by

TROUP CURTIS & CO. LTD

Contract No. 32

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

Engine Room Floor 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 micanite or other non-hygroscopic insulating material, and the slab similarly insulated from its framework

Sindampo

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 out-going circuit.

Instruments on main switchboard

2

ammeters

2

volts

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

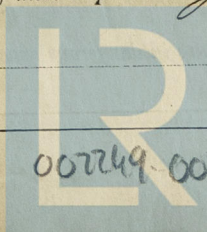
series with centre point earthed

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



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Lloyd's Register
Foundation

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 Fore & Aft Gangway run on galvanneal conduit. Engine Room & Machinery Spaces L.C. & A. 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 *Three V.I.R. main cable joint L.C. and L.C. & A. Cables in Engine Room and Pulpit special cast iron Link 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 metallic sheathing of cables efficiently bonded to earth by means of clips or glands.*

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 *Waterlight. Well Glass and guarded Pendant 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 Tubing

where are the controlling switches situated *Sub-side spaces*

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 *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 *Where possible*

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	8.0	110	72.75	500	Steam Engine	—	—
AUXILIARY	—	—	—	—	—	—	—	—
EMERGENCY	—	—	—	—	—	—	—	—
ROTARY TRANSFORMER	—	—	—	—	—	—	—	—

GENERATOR, LIGHTING AND HEATING CONDUCTORS.

DESCRIPTION.	No. of	CONDUCTORS.		COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT.		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	.06	19	.064	72.75	83	50 feet	Rubber	L.C. & A
EQUALISER CONNECTIONS	—	—	—	—	—	—	—	—	—	—
AUXILIARY GENERATOR	—	—	—	—	—	—	—	—	—	—
EMERGENCY GENERATOR	—	—	—	—	—	—	—	—	—	—
ROTARY TRANSFORMER	—	—	—	—	—	—	—	—	—	—
ENGINE ROOM.	1	1	.01	7	.044	18	31	110 feet	Rubber	L.C. & A
BOILER ROOM.	—	—	—	—	—	—	—	—	—	—
AUXILIARY SWITCHBOARDS	—	—	—	—	—	—	—	—	—	—
ACCOMMODATION	1	1	.007	7	.036	12	24	160 feet	Rubber	L.C. & A
GENERO	1	1	.0225	7	.064	6	46	900 feet	Rubber	L.C. & A and Gal. Tubing
SALOON	1	1	.01	7	.044	16	31	580 feet	Rubber	L.C. & A and Gal. Tubing
WIRELESS	1	1	.007	7	.036	10	24	600 feet	Rubber	L.C. & A and Gal. Tubing
SEARCHLIGHT	—	—	—	—	—	—	—	—	—	—
MASTHEAD LIGHTS (2).	1	1	.002	3	.029	2.5	7.5	250 feet each	Rubber	L.C. & A and Gal. Tubing
SIDE LIGHTS (2).	1	1	.002	3	.029	"	7.5	80 feet each	Rubber	L.C. & A and Gal. Tubing
COMPASS LIGHTS (2).	1	1	.002	3	.029	10 watts	7.5	25 feet each	Rubber	L.C.
POOP LIGHTS (Main Light)	1	1	.002	3	.029	2.5	7.5	650 feet	Rubber	L.C. & A and Gal. Tubing
CARGO LIGHTS	1	1	.0225	7	.064	26	46	590 feet	Rubber	L.C. & A and Gal. Tubing
ARC LAMPS	—	—	—	—	—	—	—	—	—	—
HEATERS	—	—	—	—	—	—	—	—	—	—

MOTOR CONDUCTORS.

DESCRIPTION.	No. of Motors.	CONDUCTORS.		COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT.		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	140 feet	Rubber	L.C. & A
VENTILATING FANS	—	—	—	—	—	—	—	—	—	—
Oil Pumps	1	1	.01	7	.044	10	31	200 feet	Rubber	L.C. & A

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.

Electrical Engineers.

Date 23rd Sept 1931

COMPASSES.

Distance between electric generators or motors and standard compass 255.6"

Distance between electric generators or motors and steering compass 248'

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 5 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 N/E degrees on any course in the case of the standard compass, and N/E degrees on any course in the case of the steering compass.

BLYTHWOOD 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 condition and found satisfactory. The materials and workmanship were found to be good and sound.

On 10th April 1934 the Electrical Installation was examined and tested under full working conditions and found satisfactory.

Noted by
19/4/34

Total Capacity of Generators 16 Kilowatts.

The amount of Fee ... £ 15 : 10 : 6 7 9 31

Travelling Expenses (if any) £ : : 25-1-33

H. Stafford
Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 17 APR 1934

Assigned Elec Light



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