

# REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Date of writing Report *14<sup>th</sup> Jan. 1933* when handed in at Local Office *18 JAN 1933* Received at London Office

No. in Survey held at *VEGESACK* Date, First Survey *7<sup>th</sup> Oct 32* Last Survey *5<sup>th</sup> Jan. 1933*  
 Reg. Book. *on the STEELTWIN SC. VICTOR ROSS* (Number of Visits *13*)

Built at *VEGESACK* By whom built *BREMER VULKAN* Yard No. *699* When built *1933*  
 Owners *BALTIXH AMER. PETROL. IMPORT G.M.B.H.* Port belonging to *DANZIG*  
 Tons { Gross *12,424*  
 Net *7,098*

Electric Light Installation fitted by *SIEMENS-SCHUCKERTWERKE AG.* Contract No. *When fitted 1933*  
 Is the Vessel fitted for carrying Petroleum in bulk *YES*

System of Distribution *TWO WIRE DIRECT CURRENT*  
 Pressure of supply for Lighting *110* volts, Heating *110* volts, Power *110* volts.

Direct or Alternating Current, Lighting *direct current* Power *direct current*  
 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 aft*, 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 *Engine Room aft on elevated platform*  
 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 *-*, 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*

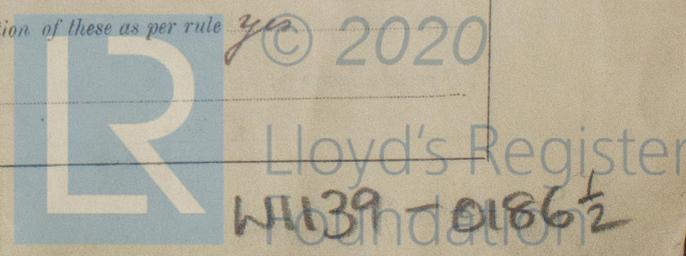
Main Switchgear, description of switchgear for each generator and each outgoing circuit, and arrangement of equalizer switches *For each generator a double pole linked switch and a fuse on each pole. For each outgoing circuit a double pole change over switch and a fuse on each pole*

Instruments on main switchboard *3* ammeters *2* voltmeters *1* 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 *1 Ohmmeter*

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*



The German Standards have been applied

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

**Fall of Pressure,** state maximum between bus bars and any point of the installation under maximum load *about 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 *no paper insulated cables*

**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 *partly led in strong steel cable lead and partly protected by steel iron plating*

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 *yes*

**Joints in Cables,** state if any, and how made, insulated, and protected *in watertight strong joint boxes*

**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 *hard wood*

**Earthing Connections,** state what earthing connections are fitted and their respective sectional areas *none*  
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, in steering house*, 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 stowholds 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 *yes, lower bridge deck*  
*gas sign lamps*  
*gas sign*  
how are the cables led

where are the controlling switches situated *in upper bridge deck*

**Searchlight Lamps,** No. of *1*, whether fixed or portable *fixed*, 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 *—*, 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

**Lightning Conductors,** where lightning conductors are required, are these fitted as per Rule *none, steel mass*

**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.	Amperes.	Revs. per Min.		Fuel Used.	Flash Point of Fuel.
MAIN	2	20	115	174	375	Steam Engine	—	
AUXILIARY								
EMERGENCY								
ROTARY TRANSFORMER								

GENERATOR, LIGHTING AND HEATING CONDUCTORS.

DESCRIPTION.	CONDUCTORS.		COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT AMPERES.		Approximate Length. (Lead and Return.)	Insulated with	HOW PROTECTED.
	No. per Pole.	Total Effective Area per Pole	No.	Diameter.	In Circuit.	Rule.			
MAIN GENERATOR	1	120	61	1.59	174	174	30	RUBBER	LEAD COVERED & ARMOURED
EQUALISER CONNECTIONS									
AUXILIARY GENERATOR									
EMERGENCY GENERATOR									
GYRO COMPASS MOTOR	1	4	19	0.52	15	20	24	—	—
ROTARY TRANSFORMER									
ENGINE ROOM									
BOILER ROOM	1	8 x 1.5	1	1.38	4	7.8	30	—	—
AUXILIARY SWITCHBOARDS									
SHORE CONNECTION	1	120	61	1.59	174	174	36	—	—
STATION I LIGHT	1	70	37	1.55	127	127	234	—	—
II	1	4	19	0.52	5	20	120	—	—
III	1	10	19	0.82	35	37	30	—	—
ACCOMMODATION									
STATION I POWER	1	120	61	1.59	160	174	36	—	—
II	1	50	19	1.83	95	95	80	—	—
GALLEY	1	70	37	1.55	115	127	28	—	—
TODD OIL BURNER INST.	1	70	37	1.55	120	127	97	—	—
WIRELESS	1	10	19	0.82	35	37	20	—	—
SEARCHLIGHT	1	4	19	0.52	18	20	36	—	—
MASTHEAD LIGHT	1	2.5	1	1.78	2	12.9	160	—	—
SIDE LIGHTS	1	1.5	1	1.38	2	7.8	40	—	—
COMPASS LIGHTS	1	1.5	1	1.38	1	7.8	20	—	—
POOP LIGHTS	1	2.5	1	1.78	1	12.9	180	—	—
CARGO LIGHTS	1	2.5	1	1.78	5	12.9	120	—	—
ARC LAMPS									
HEATERS .. STOVE	1	50	19	1.83	100	100	30	—	—

MOTOR CONDUCTORS.

DESCRIPTION.	No. of Motors.	CONDUCTORS.		COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT AMPERES.		Approximate Length. (Lead and Return.)	Insulated with	HOW PROTECTED.
		No. per Pole.	Total Effective Area per Pole	No.	Diameter.	In Circuit.	Rule.			
REFR. MACH	1	1	16	19	1.04	40	46	28	RUBBER	LEAD COVERED & ARMOURED
OIL SEPARATOR	1	1	4	19	0.52	16	20	88	—	—
SMALL LATHE	1	1	2.5	19	1.38	8	64	16	—	—
General Service Pump	1	1	2.5	19	1.38	64	64	24	—	—
BIG LATHE	1	1	2.5	19	1.38	64	64	24	—	—
DRILLING MACHINE	1	1	6	19	0.64	24	30	16	—	—
SHARPING MACHINE	1	1	6	19	0.64	24	30	15	—	—
GRINDING MACHINE	1	1	2.5	1	1.78	16	16	12	—	—
DRINKING WATER PUMP	1	1	2.5	1	1.78	16	16	36	—	—
FRESH WATER PUMP										
ENGINE TURNING GEAR	2	1	2.5	19	1.3	64	64	49	—	—
ENGINE REVERSING GEAR										
LUBRICATING OIL PUMPS										
OIL FUEL TRANSFER PUMP										
WINDLASS										
WINCHES, FORWARD										
WINCHES, AFT										
STEERING GEAR										
ELECTRIC TELENOTOR										
(a) MOTOR GENERATOR	1	1	4	19	0.52	20	20	10	—	—
(b) MAIN MOTOR	2	1	2.5	1	1.78	16	16	8	—	—
WORKSHOP MOTOR										
VENTILATING FANS BOILERS	2	1	10	19	0.82	36	37	30	—	—
TODD OIL BURNERS										
MAIN PUMPS	2	1	2.5	1	1.78	8.5	12.9	6	—	—
AUX. —	2	1	1.5	1	1.38	2.5	7.8	3.5	—	—
TRANSFORMER	1	1	2.5	1	1.78	14	12.9	6	—	—

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.

SIEMENS-SCHUCKERTWERKE

AG

HANSEATISCHE ZWEIGABTEILUNG HAMBURG

in Vollmacht:

*Handwritten signature*

Electrical Engineers.

Date 14.1.33

COMPASSES.

Distance between electric generators or motors and standard compass 8 m

Distance between electric generators or motors and steering compass 6 m

The nearest cables to the compasses are as follows:—

A cable carrying 0.5 Ampères 12 feet from standard compass 6 feet from steering compass.

A cable carrying 20. Ampères 6 feet from standard compass 10 feet from steering compass.

A cable carrying 0.5 Ampères close to feet from standard compass close to 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 course in the case of the standard

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

BREMER VULKAN  
Schiffbau und Maschinenfabrik

*Handwritten signature*

Builder's Signature.

Date 12.1.33

Is this installation a duplicate of a previous case yes If so, state name of vessel F. J. WOLFE

General Remarks (State quality of workmanship, opinions as to class, &c. This electric Installation has

been fitted in accordance with the approved plans and the requirements of the Rules. It has been tested under working condition and found to be in order. The materials used in the construction and the workmanship are of good quality. Regarding conductors the German Standards have been applied generally.

This installation is eligible in my opinion for notation of: "ELECTRIC LIGHT"

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

*Handwritten signature*

18/1/33

Total Capacity of Generators 40 Kilowatts.

The amount of Fee ... £ 45: -

Travelling Expenses (if any) £ :

in London

When applied for.

16.1.1933

When received.

19.12.1933

*Handwritten signature*

Surveyor to Lloyd's Register of Shipping.

Committee's Minute 20 JAN 1933

Assigned

*Handwritten signature*



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Am. 9.00.—Transfer. (The Surveyors are requested not to write on or below the space for Committee's Minute.)