

# REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office 20 AUG. 1930

Date of writing Report 13<sup>th</sup> Aug., 1930 When handed in at Local Office

Port of Hamburg

No. in Survey held at Lübeck  
Reg. Book.Date, First Survey 23<sup>rd</sup> June, Last Survey 31<sup>st</sup> July, 1930  
(Number of Visits 2)

on the Steel Sc. LASBEK.

Tons { Gross 2159  
Net 1263

Built at Lübeck

By whom built Liebsch &amp; Maschbau. Gesellschaft. Yard No. 302 When built 1930

Owners Knöhr &amp; Burchard Nachf.

Port belonging to Hamburg

Electric Light Installation fitted by Siemens-Schuckertwerke A.G. Contract No. When fitted 1930

## System of Distribution

Single wire with hull return.

## Pressure of supply for Lighting

110

volts, Heating

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

Generators, do they comply with the requirements regarding rating

are they compound wound

are they over compounded 5 per cent.

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, clearly marked, and furnished with sockets

are they so spaced or shielded that they cannot be accidentally earthed,

short circuited, or touched

Are the lubricating arrangements of the generators as per Rule

## Position of Generators

main engine room, lower platform starb. side.

is the ventilation in way of the generators satisfactory

are they clear of all inflammable material

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

are their axes of rotation fore and aft

Earthing, are the bedplates and frames of the generating plant efficiently earthed

are the prime movers and

their respective generators in metallic contact

Main Switch Boards, where placed main engine room, lower platform, starb. side.

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

are they protected from mechanical injury and damage from water, steam or oil

woodwork or other combustible material, state distance of same horizontally from or vertically above the switchboards

are they constructed wholly of durable, non-ignitable non-absorbent materials

permanently high insulation resistance

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

and is the frame effectively earthed

Are the fittings as per Rule regarding:— spacing or shielding of live parts

accessibility of all parts

absence of fuses on back of board

proportion of omnibus

connections of switches

individual fuses to voltmeter, pilot or earth lamp

Main Switchgear, description of switchgear for each generator and each outgoing circuit, and arrangement of equalizer switches

for the generator:

a single pole fuse and a single pole switch on the insulated pole

Instruments on main switchboard

ammeters

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

Switches, Circuit Breakers and Fusible Cut-outs, do these comply with the requirements of the Rules

Joint Boxes Section and Distribution Boards, is the construction, protection, insulation, material, and position of these as per rule



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the German Standards have been applied generally  
Cables: Single, twin, concentric, or multicore *single* 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 *2 volt*  
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  
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, uptakes or other hot objects, or to avoidable risk of mechanical damage  
Support and Protection of Cables, state how the cables are supported and protected *armoured cables supported by clips, where exposed to mechanical risk, protected by sheet 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  
Refrigerated Chambers, is 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 *water-tight joint boxes*  
Watertight Glands and Deck Tubes, are all cables passing through decks and watertight bulkheads provided with deck tubes or watertight glands  
Bushes in Beams and Non-watertight Partitions, where unarmoured cables pass through beams and non-watertight partitions, are the holes efficiently bushed, state the material of which the bushes are made *lead and insulating material*  
Earthing Connections, state what earthing connections are fitted and their respective sectional areas *main conductor engine box plate, dia. of screw 3/8", lamps to ships structure*, are their connections made as per Rule  
Alternative Lighting, are the groups of lights in the propelling machinery space arranged as per Rule  
Emergency Supply, state position and method of control of the emergency supply and how the generator is driven  
Navigation Lamps, are these separately wired, controlled by separate switch and separate fuses, are the fuses double pole, are the switches and fuses grouped in a position accessible only to the officers on watch, has each navigation lamp an automatic indicator as per Rule  
Secondary Batteries, are they constructed and fitted as per Rule  
Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, watertight, 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, are any fittings placed in spaces where inflammable or explosive dust or gases are liable to be present, if so, how are they protected, 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  
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, 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 axes 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 and fitted as per Rule  
Lightning Conductors, where lightning conductors are required, are these fitted as per Rule *steel masts*  
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  
If portable lamps for use in dangerous spaces are supplied, are they of a type approved by the Home Office

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	1	8	115	70	450	single cyl. 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.				
	MAIN GENERATOR	1	38.7	19	1.23	70	8		
	EQUALISER CONNECTIONS								
	AUXILIARY GENERATOR								
	EMERGENCY GENERATOR								
	ROTARY TRANSFORMER								
	AUXILIARY SWITCHBOARDS								
	ENGINE ROOM								
	BOILER ROOM	1	1.38	1	1.38	6	70		
	ACCOMMODATION	1	1.38	1	1.38	6	22		
	Fore Ship	1	6.0	19	0.67	27.5	35		
	Aft Ship	1	16.0	19	1.04	27.5	30		
	Bridge Deck	1	10.0	19	0.82	21	60		
	After ship	1	15.0	1	1.38	6	50		
	WIRELESS	1	10	19	0.82	25	30		
	SEARCHLIGHT								
	MASTHEAD LIGHT	2	15	1	1.38	1	90		
	SIDE LIGHTS	2	15	1	1.38	1	40		
	COMPASS LIGHTS	2	15	1	1.38	1	30		
	POOP LIGHTS	1	15	1	1.38	0.5	60		
	CARGO LIGHTS	3	2.5	1	1.38	4.5	30		
	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								
	(a) MOTOR GENERATOR								
	(b) MAIN MOTOR								
	WORKSHOP MOTOR	1	6	18	0.64	20	8	rubber	lead covered and armoured
	VENTILATING FANS								
	Refrigerating engine	1	16	19	1.21	22	45		
	Cooling water pump	1	4	19	0.52	13	36		



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  
AKTIEGESELLSCHAFT  
HANSEATISCHE ZWEIGNIEDERLASSUNG HAMBURG  
in Vollmacht

Electrical Engineers.

Date 14/8/30

#### COMPASSES.

Distance between electric generators or motors and standard compass 30 m.

Distance between electric generators or motors and steering compass 32 m.

The nearest cables to the compasses are as follows:—

A cable carrying 0.5 Ampères close to feet from standard compass close to feet from steering compass.

A cable carrying Ampères feet from standard compass 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 with

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

Libbecker  
Maschinenbau-Gesellschaft

Builder's Signature.

Date 14/8/30

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.)

Workmanship and material of this installation are of good quality. As the conductors used are of the German Standards, the Society's Rules respecting conductors have been applied generally. The installation has been fitted under special Survey in accordance with the approved plans and the Secretary's letters and otherwise in conformity with the requirements of the Rules and the installation is eligible in my opinion for record of "Electric Light."  
The approved plans will be transmitted after completion of the sister vessel "SCHIFFBEH"

It is submitted that  
this vessel is eligible for  
THE RECORD

Elec. Light  
J.A. Wright  
22/8/30

Total Capacity of Generators 8.- Kilowatts.

The amount of Fee ... £ 8 : -

When applied for,  
12.8.1930

Travelling Expenses (if any) £

When received,  
21.8.30

Surveyor in Lloyd's Register of Shipping.

Committee's Minute

Assigned

Elec. Light

Im. 228. - Transfer.  
(The Surveyors are requested not to write on or below the space for Committee's Minute.)

TUE. 2 SEP 1930



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