

Rpt. 13.

No. 17858

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office 10 OCT 1928

Date of writing Report 3 Oct. 1928 When handed in at Local Office

Port of Rotterdam.

No. in Survey held at

Rotterdam

Date, First Survey

26 June

Last Survey

2 October

1928

Reg. Book.

on the

S. S. Kiemwerke.

(Number of Visits 24)

Tons

Gross 6279.43

Net 3722.56

When built 1920.

Built at

Rotterdam

By whom built

P. Smit Jr.

Yard No. 410

Owners

Verenigde Ned. Scheep. W.

Port belonging to

Amsterdam.

Electric Light Installation fitted by

N. V. Elect. Techn. Bure. A. de Vries

Contract No.

When fitted 1920.

System of Distribution

two wire

Pressure of supply for Lighting

110

volts, Heating

volts, Power 110

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 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.

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.

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

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

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

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

Generators and outgoing circuits double pole change over switches and d.p. fuses.

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

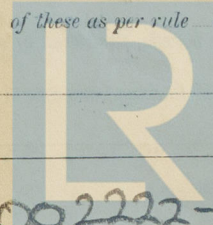
2 earth lamp sets.

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.


 Lloyd's Register
 002222-002228-011314

Cables: Single, twin, concentric, or multicore Single and twin 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 5 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

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

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 *support by metal clips.*

If cables are run in wood casings, are the casings and caps secured by screws yes, are the cap screws of brass yes, are the cables run in separate grooves yes. 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 *no joints*

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 yes. state the material of which the bushes are made lead.

Earthing Connections, *state what earthing connections are fitted and their respective sectional areas*

...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

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 4 ps.

Secondary Batteries, are they constructed and filled as per Rule.....

Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, watertight *YPS*.

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

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 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.....

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.	Ampères.	Rev. per Min.		Fuel Used.	Flash Point of Fuel.
MAIN	2	05	770	700	525	Steam engines		
AUXILIARY	—							
EMERGENCY	—							
ROTARY TRANSFORMER								

LIGHTING AND HEATING CONDUCTORS

[illegible]

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	2	0.30640	34	.103.	110	40	rubber	armoured.
	GENERAL SERVICE PUMP								
	EMERGENCY BILGE PUMP								
	SANITARY PUMP	2	0.06000	19	.064.	80.	150	rubber	armoured
	CIRC. SEA WATER PUMPS	2	0.44020	61	.103.	320.	150	"	"
	CIRC. FRESH WATER PUMPS								
	AIR COMPRESSOR								
	FRESH WATER PUMP								
	ENGINE TURNING GEAR ...	2	0.06000	19	.064	80.	156	"	"
	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	2	0.00702	7	.036.	16.	30.	"	"
	VENTILATING FANS								
	Boiler fan motor	2	0.02440	34	.103.	240.	120	"	"
	Cargo fan motor	2.	0.06000	19.	.064	80	150	"	"
	Purifier	2.	0.00701	7.	.036	16	96	"	"
	Motor Laundry	2	0.03960	19	.052	40.	480	"	"

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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.

N.V. ELECTROTECHNISCH-BUREAU
A. DE HOOP

Electrical Engineers.

Date 14 Sept 1928

COMPASSES.

Distance between electric generators or motors and standard compass

75 ft.

Distance between electric generators or motors and steering compass

69 ft.

The nearest cables to the compasses are as follows:—

A cable carrying 0.5 Ampères 2 feet from standard compass 3 feet from steering compass.

A cable carrying 0.5 Ampères 6 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 — degrees on — course in the case of the standard

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

MACHINEFABRIEK & SCHEEPSWERF
van R. SMIT Jr.

Builder's Signature.

Date 4 October 1928

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 in accordance with the Society's rules was found in good working condition when tried and merits in my opinion the Committee's approval.

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

19/10/28

Total Capacity of Generators 170 Kilowatts.

The amount of Fee ...

£420.00

When applied for,

7/10/1928

When received,

10.1.29

Travelling Expenses (if any) £

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

TUE 23 OCT 1928

Assigned

Elec Light



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Foundation