

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL) 14 JUL 1925
Received at London Office

Date of writing Report 6. 7 1925 When handed in at Local Office 10 Port of Rotterdam

No. in Survey held at Rotterdam Date, First Survey 9. 2. 25 Last Survey 27. 6. 1925
Reg. Book. (Number of Visits 10)

on the *Heel Motor Duple* "KATENDRECHT" Tons { Gross Net

Built at Rotterdam By whom built *W. J. J. van der Vliet & Co.* Yard No. 299 When built 1925

Owners *Hooimooy, De Maas* Port belonging to Rotterdam

Electric Light Installation fitted by *N. V. B. B. M. Th. H. G. van der Vliet & Co.* Contract No. When fitted 1925

System of Distribution *Double wire* ✓

Pressure of supply for Lighting *one hundred and ten* volts, Heating _____ volts, Power *one hundred and ten* 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 overload *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 and clearly marked *yes*, are they so spaced or shielded that they cannot be accidentally earthed, or short circuited *yes* Are the lubricating arrangements of the generators as per Rule *yes*

Position of Generators *in the engine room; they are not delivered by us*, 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 axis 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 the engine room near the dynamo*

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, incombustible 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 connected to one pole insulated from the slab with mica or micanite and the slab similarly insulated from its framework *yes*, and is the frame effectively earthed *yes*

Are the following fittings as per Rule, viz.: — 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

There is one main switch to switch the installation on one generator only and twelve switches (one is reserve) for outgoing circuits with a fuse for each circuit

Instruments on main switchboard *one* ammeters *one* 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 *earth lamps*

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

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

A 15 KW deparancey set with 2nd hand ray oil lamp fitted on port side aft 12.41

PARTICULARS OF GENERATING PLANT.

DESCRIPTION OF GENERATOR.	No. of	RATED AT				DRIVEN BY.	WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE.	
		Kilowatts.	Volts.	Ampères.	Revs. per Min.		Fuel Used.	Flash Point of Fuel.
MAIN	1	12	110	110	150	Steam engine		
AUXILIARY	1	3 1/2	110	32	900	Benzine motor		
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. Ampères.	Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
1	MAIN GENERATOR	2	30 sq ins	19	1.85	110	6 cbs	rubber	lead and galvanized
2	AUXILIARY GENERATOR	2	10 sq ins	7	1.35	32	9 cbs	"	"
3	ENGINE ROOM	2	10 sq ins	7	1.35	30	6 cbs	"	"
4	Boiler Room	2	4 sq ins	7	0.86	14	50 cbs	"	"
5	Stk ship	2	6 sq ins	7	1.05	9	70 cbs	"	"
6	Charthouse	2	10 sq ins	7	1.35	30	100 cbs	"	"
7	Bridge house	2	10 sq ins	7	1.35	30	100 cbs	"	"
8	Fore ship	2	1 1/2 sq ins	7	0.67	7 1/2	50 cbs	"	"
9	WIRELESS	2	10 sq ins	7	1.35	25	110 cbs	"	"
11	SEARCHLIGHT	2	1 1/2 sq ins	1	1.38	1/2	120 cbs	"	"
12	MASTHEAD LIGHT	2	1 1/2 sq ins	1	1.38	1/2	30 cbs	"	"
13	SIDE LIGHTS	2	1 1/2 sq ins	1	1.38	1/2	25 cbs	"	"
14	COMPASS LIGHTS	2	1 1/2 sq ins	1	1.38	1/2	250 cbs	"	"
15	POOP LIGHTS	2	1 1/2 sq ins	1	1.38	1/2	40 cbs	"	"
16	CARGO LIGHTS	2	1 1/2 sq ins	1	1.38	1/2	40 cbs	"	"
17	ARC LAMPS								
18	HEATERS								

MOTOR CONDUCTORS.

Ref. No.	DESCRIPTION.	No. of Motors.	Effective Area of each Conductor. Sq. Ins.	COMPOSITION OF STRAND.		Total Maximum Current. Ampères.	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								
1	WORKSHOP MOTOR	1	6 sq ins	7	1.05	25	40 cbs	rubber	lead covered
2	VENTILATING FANS	2	6 sq ins	7	1.05	25	20 cbs	"	and with
3	"	2	1 1/2 sq ins	1	1.38	2	80 cbs	"	steel wire
4	Oil separator motor	1	4 sq ins	7	0.86	15	40 cbs	"	armoured

Insulation of Cables, state type of cables, single or twin are the cables insulated and protected as per Tables III or IV of the Rules *yes*

Fall of Pressure, state maximum between bus bars and any point of the installation under maximum load *five volts*

Cable Sockets and other connections, are the ends of all cables having a sectional area of 0.007 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 *yes*

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 *iron tubes*

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 VI *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 *made in watertight brass 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 Positions, 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, 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, are separate screens provided for the use of oil and electric side lights

are separate oil lanterns provided for the mast head lights and side lights

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 *in pump rooms*

in gas tight fittings, how are the cables led *in iron tubes*

where are the controlling switches situated *in the bridge house*

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 axis 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 as per Rule *not delivered by us*

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 *not supplied*

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.

p. p. Rotterdamsche Electriciteits Mij.
 v/h. H. G. ROON & Co

Electrical Engineers.

Date 18 June 1924

COMPASSES.

Distance between electric generators or motors and standard compass 240

Distance between electric generators or motors and steering compass 220

The nearest cables to the compasses are as follows:—

A cable carrying 1/4 Ampères 14 feet from standard compass 8 feet from steering compass.

A cable carrying 1/4 Ampères 6 feet from standard compass 4 feet from steering compass.

A cable carrying 1/4 Ampères 0 feet from standard compass 6 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 every course in the case of the standard compass, and nil degrees on every course in the case of the steering compass.

Maatschappij voor Scheeps- en Werktuigbouw
 „FIJENOORD”

Builder's Signature.

Date 9.7.25

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 and was found in a good working condition when tried and I am of opinion that this installation merits the approval of the Committee.

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

[Signature]
 20/7/25

Total Capacity of Generators 15 1/2 Kilowatts

The amount of Fee ...	£10200	When applied for,	9/7 1925
Travelling Expenses (if any) £L :		When received,	24.7.1925

[Signature]
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

Im. 9. 22. - Transfer. (The Surveyors are requested not to write on or below the space for Committee's Minute.)



© 2020

Lloyd's Register Foundation