

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office 29 SEP 1924

Date of writing Report 22-9-24 When handed in at Local Office 10 Port of Rotterdam

No. in Survey held at Reg. Book. Date, First Survey 27.5.24 Last Survey 10.9.1924 (Number of Visits 1)

on the Motor vessel "SLIEDRECHT"

Tons { Gross Net

Built at Rotterdam By whom built J. D. H. Yard No. When built 1924

Owners Jhs. v. Onnemeren Port belonging to Rotterdam

Electric Light Installation fitted by A. de Hoops Rotterdam Contract No. When fitted 1924

System of Distribution Two-wire-system.

Pressure of supply for Lighting 110 volts, Heating 110 volts, Power 110 volts.

Direct or Alternating Current, Lighting Direct current Power same

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 Motorroom

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 near dynamo's

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

Main switch of dynamo change-over-switch 120 Amps A.P. Outg. circuits 6 A.P. switches 60 Amps. 2 of 100 Amps, with A.P. fuses

Instruments on main switchboard 1 ammeters 1 voltmeters No 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 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.



Insulation of Cables, state type of cables, single or twin twinned 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 2%

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
Supported by heavy clips and protected by galv. tubes

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 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 No joints

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
No cables, frame of sv. board and generators are bolted to the ship. are their connections made as per Rule yes

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
No emergency supply

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, are separate screens provided for the use of oil and electric side lights yes
are separate oil lanterns provided for the mast head lights and side lights yes

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 No

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, in pumprooms, protected by airtight glasses, how are the cables led lead covered cables in galv. tubes.
where are the controlling switches situated in Chartroom

Searchlight Lamps, No. of None, whether fixed or portable None, are their fittings as per Rule None

Arc Lamps, other than searchlight lamps, No. of None are their live parts insulated from the frame or case None, are their fittings as per Rule None

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 axis of rotation fore and aft partly
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 open, if not of this type, state distance of the combustible material horizontally or vertically above the motors No woodwork

Control Gear and Resistances, are the generator field and motor speed regulators, starters and controllers constructed 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.	Ampères.	Revs. per Min.		Fuel Used.	Flash Point of Fuel.
MAIN	1	20	110	23	375	Steam engine		
AUXILIARY	1	2.5	110	23	1500	Steam pumps		
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...	2	.1009	7	.003	92	12	rubber	galv. tubes
	AUXILIARY GENERATOR	2	.01462	7	.003	23	30	rubber	armoured
	EMERGENCY GENERATOR								
	ROTARY TRANSFORMER...								
	AUXILIARY SWITCHBOARDS	2	.02808	7	.003	15	360	rubber	lead covered
	ENGINE ROOM	2	.02808	7	.003	15	18	"	armoured
	BOILER ROOM								
	WIRELESS	2	.01462	7	.003				
	SEARCHLIGHT								
	MASTHEAD LIGHT...	2	.004	7	.003	7	240	rubber	galv. tubes
	SIDE LIGHTS...	2	.004	7	.003	7	108	"	armoured
	COMPASS LIGHTS...	2	.0025	7	.003	0.3	18	"	brass tubes
	POOP LIGHTS	2	.004	7	.003	7	480	"	arm. & galv. tubes
	CARGO LIGHTS	2	.004	7	.003	7.25	120	"	armoured
	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	1	.0423	7	.003	80	90	paper	armoured
	ENGINE REVERSING GEAR								
	LUBRICATING OIL PUMPS								
	OIL FUEL TRANSFER PUMP								
	WINDLASS								
	WINCHES, FORWARD								
	WINCHES, AFT								
	STEERING GEAR								
	WORKSHOP MOTOR	1	.01462	7	.003	24	90	rubber	armoured
	VENTILATING FANS								
	Oil separator	1	.00701	7	.003	12	90	"	"

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.

[Signature] Electrical Engineers. Date 10 Sept 24

COMPASSES.

Distance between electric generators or motors and standard compass 150 ft
 Distance between electric generators or motors and steering compass 150 ft
 The nearest cables to the compasses are as follows:—
 A cable carrying _____ Ampères _____ feet from standard compass _____ 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 _____
 Has the effect of switching on and off circuits, motors and other electro-magnetic apparatus within the vicinity of the compasses been noted _____
 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.

ROTTERDAMSCHE DROOGDOEK MAATSCHAPPIJ
 DIRECTEUR

[Signature] Builder's Signature. Date _____

Is this installation a duplicate of a previous case _____ 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 Rules. Material and workmanship good. The whole having been found in a good working condition during a trial. In my opinion that same merits the approval of the Committee.

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

[Signature] 20/9/24

Total Capacity of Generators 12.5 Kilowatts

The amount of Fee ... £ 150.00 { When applied for, 20/9 1924
 Travelling Expenses (if any) £ : : { When received, 9/10/24

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

Committee's Minute FRI. 3 OCT 1924

Assigned _____

Im. 9. 2. 1. — Transfer. (The Surveyors are requested not to write on or below the space for Committee's Minute.)