

# REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office...

1 JUN 1946

Date of writing Report... 10-5- 1946 When handed in at Local Office... 19... Port of Rotterdam  
 No. in Survey held at Rotterdam Date, First Survey 5-3-46 Last Survey 10-5- 1946  
 Reg. Book. 35409 on the MV "Van Gelder" Tons { Gross... 325  
 Net... 230  
 Built at Duisburg By whom built Ewald Beraningshaus Yard No. 1914 When built 1914  
 Owners Mrs J Vermeas Schuurmaat Bidaif Port belonging to Rotterdam  
 Electrical Installation fitted by Clyde Electrical Services Contract No. 1941 When fitted 1941  
 Is vessel fitted for carrying Petroleum in bulk no Is vessel equipped with D.F. yes E.S.D. no Gy.C. no Sub.Sig. no

Have plans been submitted and approved yes System of Distribution Two conductor insulated Voltage of supply for Lighting 24-24V

Heating yes Power yes Direct or Alternating Current, Lighting D.C. Power yes If Alternating Current state frequency yes Prime Movers,

has the governing been tested and found efficient when the whole load is suddenly thrown on and off yes Are turbine emergency governors fitted with a

trip switch as per Rule yes Generators, are they compound wound shuntwound working in parallel with a battery, are they level compounded under working conditions yes,

if not compound wound state distance between generators yes and from switchboard ± 9 feet Where more than one generator is fitted are they

arranged to run in parallel yes, are shunt field regulators provided yes Is the compound winding connected to the negative or positive pole

yes Have machines over 100 kw. been inspected by the Surveyors during manufacture and testing yes Have certificates of

test for machines under 100 kw. been supplied yes and the results found as per rule yes Are the lubricating arrangements and the construction

of the generators as per rule yes Position of Generators in engine room forward of main engine

is the ventilation in way of generators satisfactory yes are they clear of inflammable material yes, if situated

near unprotected combustible material state distance from same horizontally yes and vertically yes, are the generators protected from mechanical

injury and damage from water, steam and oil yes, are the bedplates and frames earthed yes and the prime movers and generators in metallic

contact yes Switchboards, where are main switchboards placed in engine room, Starboard side

are they in accessible positions, free from inflammable gases and acid fumes yes, are they protected from mechanical injury and damage from water, steam

and oil yes, if situated near unprotected combustible material state distance from same horizontally yes and vertically yes, what insulation

material is used for the panels current carrying parts are mounted on porcelain insulators, if of synthetic insulating material is it an Approved Type yes, if of

semi-insulating material (slate or marble) are all conducting parts insulated therefrom as per Rule yes Is the frame effectually earthed yes

Is the construction as per Rule yes, including accessibility of parts yes, absence of fuses on the back of the board yes, individual fuses

to pilot and earth lamps, voltmeters, etc., yes locking of screws and nuts yes, labelling of apparatus and fuses yes, fuses on the "dead"

side of switches yes Description of Main Switchgear for each generator and arrangement of equaliser switches yes

generator: a d p switch, d p fuses and an automatic cut in & cut out switch

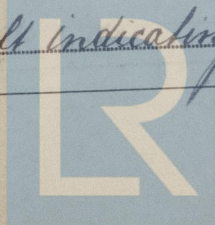
battery: a d p switch + d p fuses

and for each outgoing circuit a d p switch and d p fuses

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule yes Instruments on main switchboard one

ammeters one voltmeters yes synchronising devices. For compound machines in parallel is the ammeter connected on the pole opposite to the

equaliser connection yes Earth Testing, state means provided one pair of earth fault indicating lamps





and where are the controlling switches fitted....., are all fittings suitably ventilated.....

are all fittings and accessories constructed and installed as per Rule..... Searchlight Lamps, No. of....., whether fixed or portable.....

....., are their fittings as per Rule..... Heating and Cooking, is the general construction as per Rule.....

are the frames effectually earthed....., are heaters in the accommodation of the convection type..... Motors, are all motors constructed and

installed as per Rule..... and placed in well-ventilated compartments in which inflammable gases cannot accumulate and free from damage from water,

steam and oil....., if situated near unprotected combustible material state minimum distance from same horizontally..... and vertically.....

Have motors of 100 BHP and over been inspected by the Surveyors during manufacture and testing..... Have certificates of test for motors under

100 BHP intended for essential services been supplied and the results found as per Rule..... Control Gear and Resistances, are they constructed and

fitted as per Rule..... Lightning Conductors, where required are they fitted as per Rule..... Ships carrying Oil having a Flash Point

less than 150° F. Have all the special requirements of the Rules for such ships been complied with....., are all fuses of the cartridge type.....

are they of an approved type..... If portable lamps for use in dangerous spaces are supplied, are they of a self-contained battery-fed flameproof

type..... Spare Gear, if the vessel is for open sea service have spares been provided as per Rule....., are they suitably stored in dry

situations..... Insulation Tests, has the insulation resistance of all circuits and apparatus been megger tested and found satisfactory.....

DESCRIPTION OF GENERATOR.		RATED AT				WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE.		
No. of		Kilowatts.	Volts.	Ampères.	Revs. per Min.	DRIVEN BY	Fuel Used.	Flash Point of Fuel.
MAIN ...	1	1	24/34	41/14	1800	main engine or aux. engines (Bell driven)	oil	above 150°F
EMERGENCY ...								
ROTARY TRANSFORMER								

[illegible]



The Electrical Equipment is installed in accordance with the approved plans and the requirements of the Rules.  
All Insulated Conductors are guaranteed to have been tested at the maker's works as specified in the Rules.  
The foregoing is a correct description.

Electrical Engineers. Date

COMPASSES.

Minimum distance between electric generators or motors and standard compass ± 20 feet

Minimum distance between electric generators or motors and steering compass ± 16 feet

The nearest cables to the compasses are as follows:—

A cable carrying 17 Ampères ✓ feet from standard compass 3 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.

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, whether insulation tests, etc., have been made, opinions as to class, etc.)

*The electric installation have now been overhauled and made in order, the insulation megger tested and was found not less than 100,000 Ω and has been examined under working conditions and was found in order, workmanship good and merits in my opinion the Committee's Approval*

*Noted OK 5.7.46*

Total Capacity of Generators 1-2,476 KW Kilowatts.

The amount of Fee ...	£ <u>760.00</u>	When applied for, <u>19</u>
Travelling Expenses (if any)	£ : :	When received, <u>19</u>

*H. A. Russell*  
Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 19 JUL 1946

Assigned See minute on machinery E.E. npt