

# REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Date of writing Report 23/11 1932 When handed in at Local Office  
 Received at London Office 23 FEB 1932  
 Port of Copenhagen  
 Date, First Survey 25/9 Last Survey 20/1 1932  
 (Number of Visits 8)  
 Survey held at Nakskov  
 Reg. Book 237 on the Swedish P. S. "SLASK"  
 Tons { Gross 1385.67  
 Net 734.24  
 When built 1931-2  
 By whom built 9/ Nakskov Skibsvaerk and No. 5/  
 Port belonging to Gdynia  
 Electric Light Installation fitted by 9/ Nakskov Skibsvaerk  
 Contract No. ✓ When fitted 1931-2  
 the Vessel fitted for carrying Petroleum in bulk No.

System of Distribution Two conductors insulated system. ✓  
 Pressure of supply for Lighting 110 ✓ volts, Heating ✓ volts, Power 110 ✓ volts.  
 Direct or Alternating Current, Lighting direct Power direct. ✓  
 Alternating current system, state frequency of periods per second ✓

Are 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 yes.  
 Where more than one generator is fitted are they arranged to run in parallel only one generator., is an adjustable regulating resistance fitted in  
 connection 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 Starboard side of engine room, floor level. ✓  
 Is the ventilation in way of the generators satisfactory yes. ✓, are they clear of all inflammable material yes. ✓  
 Are they 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.

Are the bedplates and frames of the generating plant efficiently earthed yes. ✓ are the prime movers and  
 respective generators in metallic contact yes.

Main Switch Boards, where placed in the engine room, near generator. ✓  
 If the generators and main switchboard are not placed in the same compartment, is each generator provided with  
 a separate earth connection on each insulated pole as near as possible to the terminals of the generator, additional to that provided on the main switchboard ✓  
 Are the 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 of wood. ✓, is all insulation of high dielectric strength and of  
 sufficiently high insulation resistance yes., if semi-insulating material is used, are all conducting parts insulated from the slab  
 mica or mica or other non-hygroscopic insulating material, and the slab similarly insulated from its framework yes. ✓  
 Is the frame effectively earthed yes. ✓ Are the fittings as per Rule regarding:— spacing or shielding of live parts  
yes. ✓, accessibility of all parts yes. ✓, absence of fuses on back of board yes. ✓, proportion of omnibus  
yes. ✓, individual fuses to voltmeter, pilot or earth lamp yes. ✓, connections of switches yes. ✓

Switchgear, description of switchgear for each generator and each outgoing circuit, and arrangement of equalizer switches generator and out. ✓  
circuits: On 266 pole linked switches and a fuse on each pole. ✓

Instruments on main switchboard ✓ ammeters ✓ voltmeters ✓ synchronising device for paralleling purposes.

High Testing, state what means are provided at the main switchboard for indicating the state of the insulation of the system 1 set of earth lamps. ✓

Switches, Circuit Breakers and Fusible Cut-outs, do these comply with the requirements of the Rules yes. ✓  
 Boxes Section and Distribution Boards, is the construction, protection, insulation, material, and position of these as per rule yes. ✓



**Cables:** Single, twin, concentric, or multicore *single twin* are the cables insulated and protected as per Tables IV of the Rules *yo.*

**Fall of Pressure,** state maximum between bus bars and any point of the installation under maximum load *2.5 Volts. (5.3)*

**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 *yo.*

**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 *yo.*

**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 *yo.*

**Support and Protection of Cables,** state how the cables are supported and protected *armoured cables used, supported by galvanised clips, protected by steel plate casing or laid in iron tubes.*

If cables are run in wood casings, are the casings and caps secured by screws *yo.*, are the cap screws of brass *yo.*, are the cables run in separate grooves *yo.* If armoured and lead covered cables are secured by metal clips, are the clips spaced as per Table VIII *yo.*

**Refrigerated Chambers,** if lights are fitted, are the cables and fittings in accordance with the special requirements *yo.*

**Joints in Cables,** state if any, and how made, insulated, and protected *no joints in cables.*

**Watertight Glands and Deck Tubes,** are all cables passing through decks and watertight bulkheads provided with deck tubes or watertight glands *yo.*

**Bushes in Beams and Non-watertight Partitions,** where unarmoured cables pass through beams and non-watertight partitions, are the holes efficiently bushed *yo.* state the material of which the bushes are made *lead.*

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

**Alternative Lighting,** are the groups of lights in the propelling machinery space arranged as per Rule *yo.*, are their connections made as per Rule *yo.*

**Emergency Supply,** state position and method of control of the emergency supply and how the generator is driven *yo.*

**Navigation Lamps,** are these separately wired *yo.*, controlled by separate switch and separate fuses *yo.*, are the fuses double pole *yo.* are the switches and fuses grouped in a position accessible only to the officers on watch *yo.* has each navigation lamp an automatic indicator as per Rule *yo.*

**Secondary Batteries,** are they constructed and fitted as per Rule *yo.*

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

are any fittings placed in spaces where inflammable or explosive dust or gases are liable to be present, if so, how are they protected *yo.*

how are the cables led *yo.*

where are the controlling switches situated *yo.*

**Searchlight Lamps, No. of** *1*, whether fixed or portable *portable*, are their fittings as per Rule *yo.*

**Arc Lamps,** other than searchlight lamps, No. of *yo.*, are their live parts insulated from the frame or case *yo.*, are their fittings as per Rule *yo.*

**Motors,** are their working parts readily accessible *yo.*, are the coils self-contained and readily removable for replacement *yo.* are the brushes, brush holders, terminals and lubricating arrangements as per Rule *yo.* are the motors placed in well-ventilated compartments in which inflammable gases cannot accumulate and clear of all inflammable material *yo.*

are they protected from mechanical injury and damage from water, steam or oil *yo.* are their axes of rotation fore and aft *at an angle, for workshop shaft etc. watertight.* 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 *yo.* if not of this type, state distance of the combustible material horizontally or vertically above the motors *yo.*

**Control Gear and Resistances,** are the generator field and motor speed regulators, starters and controllers constructed and fitted as per Rule *yo.*

**Lightning Conductors,** where lightning conductors are required, are these fitted as per Rule *yo.*

**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 *yo.*

If portable lamps for use in dangerous spaces are supplied, are they of a type approved by the Home Office *yo.*

**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	10	110	91	580	1 cyl steam engine		
AUXILIARY								
EMERGENCY								
ROTARY TRANSFORMER								

**GENERATOR, LIGHTING AND HEATING CONDUCTORS.**

DESCRIPTION.	CONDUCTORS.		COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT AMPERES.		Approximate Length. (Lead and Return.)	Insulated with	HOW PROTECTED.
	No. per Pole.	Total Effective Area per Pole Sq. In.	No.	Diameter.	In Circuit.	Rate.			
MAIN GENERATOR	1	50	19	1.83	91	78	4	India	laid in iron tubes
EQUALISER CONNECTIONS								rubber	laid in iron tubes
AUXILIARY GENERATOR									laid in iron tubes
EMERGENCY GENERATOR									laid in iron tubes
ROTARY TRANSFORMER									laid in iron tubes
ENGINE ROOM									
BOILER ROOM									
AUXILIARY SWITCHBOARDS									
ACCOMMODATION									
WIRELESS	1	10	7	1.38	38	38	56	India	laid in iron tubes
SEARCHLIGHT	1	6	7	1.05	15	28.6	60	India	laid in iron tubes
MASTHEAD LIGHT	1	1.5	1	1.38	0.5	10	66-72	India	laid in iron tubes
SIDE LIGHTS	1	1.5	1	1.38	0.5	10	16-11	India	laid in iron tubes
COMPASS LIGHTS	1	1.5	1	1.38	0.25	10	12-8	India	laid in iron tubes
POOP LIGHTS	1	1.5	1	1.38	0.5	10	100	India	laid in iron tubes
CARGO LIGHTS									
ARC LAMPS									
HEATERS									

**MOTOR CONDUCTORS.**

DESCRIPTION.	No. of Motors.	CONDUCTORS.		COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT AMPERES.		Approximate Length. (Lead and Return.)	Insulated with	HOW PROTECTED.
		No. Per Pole.	Total Effective Area per Pole Sq. In.	No.	Diameter.	In Circuit.	Rate.			
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	1	6	7	1.05	12	28.6	15	India	laid in iron tubes
VENTILATING FANS										

