

Rpt. 13.

No.

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Date of writing Report 25/4/47 19 When handed in at Local Office 14/5 1947 Port of GENOA Received at London Office 20 MAY 1947

No. in Survey held at GENOA Date, First Survey 30/12/46 Last Survey 12/2/1947
Reg. Book.

✓ on the SINGLE SCREW VESSEL "KERSTIN" (Number of Visits... 6) Tons { Gross 299.51 Net ✓

Built at GENOA-SESTRI By whom built S.A. ANSALDO-CANTIERI NAVALI Yard No. 857 When built 1947

Owners A.B. GLUCKSMANN Port belonging to PANAMA.

Electric Light Installation fitted by S.A. ANSALDO-CANTIERI NAVALI Contract No. ✓ When fitted 1947

Is the Vessel fitted for carrying Petroleum in bulk No.

System of Distribution PARALLEL SYSTEM- TWO WIRES WITH CONSTANT PRESSURE

Pressure of supply for Lighting 24 volts, Heating ✓ volts, Power ✓ volts.

Direct or Alternating Current, Lighting DIRECT CURRENT 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, is it shunt wound YES

are they over compounded 5 per cent. ✓, if not compound wound state distance between each generator ✓

Where more than one generator is fitted are they arranged to run in parallel ✓, 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 Generator PORT SIDE OF 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 no unprotected woodwork or other combustible material near 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 ON PORT SIDE OF ENGINE ROOM, NEAR GENERATOR.

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 no unprotected woodwork or other combustible material near

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 YES

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 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 the generator and each outgoing circuit, and arrangement of equalizer switches FOR THE GENERATOR:

a double pole circuit breaker with overload and reverse current trips - FOR EACH OUTGOING CIRCUITS: an automatic circuit breaker.

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: AN EARTH-INDICATING SYSTEM USING TWO LAMPS.

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



© 2020

Lloyd's Register
Foundation

003075-003082-0054

Cables: Single, twin, concentric, or multicore YES are the cables insulated and protected as per Tables IV, V, XI or XIII of the Rules YES

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

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 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 NO PAPER INSULATED CABLES USED.

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: ALL CABLES SUPPORTED BY STEEL GALVANISED CLIPS.

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 VIII YES

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

Joints in Cables, state if any, and how made, insulated, and protected JOINT 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 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: FRAME OF GENERATOR AND OF SWITCHBOARD EFFICIENTLY EARTHED BY METALLIC CONTACT.

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 YES

Secondary Batteries, are they constructed and fitted as per Rule 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 NO, 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 ✓

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 axes 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 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.	Revs. per Min.		Fuel Used.	Flash Point of Fuel.
MAIN ...	ONE	2	24	83	1500	MAIN ENGINE through rubber belt - or paraffin engine of 3 HP	DIESEL OIL	ABOVE 150° F
AUXILIARY ...	✓						PARAFFIN	"
EMERGENCY ...	✓							"
ROTARY TRANSFORMER	✓					Removed from vessel 8.48 at Voreau		

GENERATOR, LIGHTING AND HEATING CONDUCTORS.

DESCRIPTION.	CONDUCTORS.		COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT.		Approximate Length (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
	No. per Pole.	Total Effective Area per Pole Sq. Ins.	No.	Diameter. In.	In Circuit.	Rule.			
MAIN GENERATOR ...	1	41.8	37	1.2	83	89	6.5	copper and tin	All cables lead covered, red - over lead two layers of tapes of impregnated vulcanized paper, one tape of rubber - cotton impregnated jute tape.
EQUALISER CONNECTIONS ...									
AUXILIARY GENERATOR ...									
EMERGENCY GENERATOR ...									
ROTARY TRANSFORMER MOTOR GENERATOR ...									
ENGINE ROOM ...	1	1	1	1.15	1.6	5	20		wire braiding.
BOILER ROOM ...									
AUXILIARY SWITCHBOARDS ...	1	21	37	0.25	30	53	14		
To the battery									
ACCOMMODATION ...	1	7.2	7	1.15	20	31	24		All terminal circuits in accommodation: SINGLE or TWIN cables of 1 1/2" in section, lead covered only.
distribution board									
terminal circuit	1	1	1	1.15	1.6	5	20		
WIRELESS ...									
SEARCHLIGHT ...	1	1	1	1.15	1.6	5	20		
MASTHEAD LIGHT ...	1	1	1	1.15	1.6	5	14		
SIDE LIGHTS ...	1	1	1	1.15	1.6	5	3		
COMPASS LIGHTS ...	1	1	1	1.15	1.6	5	35		
POOP LIGHTS ...	1	4.96	7	0.95	8	25	70		
CARGO LIGHTS (BARN) ...									
ARC LAMPS ...									
HEATERS ...									

MOTOR CONDUCTORS.

DESCRIPTION.	No. of Motors.	CONDUCTORS.		COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT.		Approximate Length (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
		No. Per Pole.	Total Effective Area per Pole Sq. Ins.	No.	Diameter. In.	In Circuit.	Rule.			
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 ...										
VENTILATING FANS ...										

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.

ANSALDOS.A.
CANTIERI NAVALI
A. Direttore
Handwritten signature

Electrical Engineers.

Date

1/5/47

COMPASSES.

Distance between electric generators or motors and standard compass

✓

Distance between electric generators ~~or motors~~ and steering compass

8 m.

The nearest cables to the compasses are as follows:—

A cable carrying 6 Amperes ✓ feet from standard compass 3 feet from steering compass.

A cable carrying 1 Amperes ✓ feet from standard compass 2 feet from steering compass.

A cable carrying ✓ Amperes ✓ 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 NIL degrees on ✓ course in the case of the standard compass, and ✓ degrees on ✓ course in the case of the steering compass.

ANSALDOS.A.
CANTIERI NAVALI
A. Direttore
Handwritten signature

Builder's Signature.

Date

1/5/47

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.)

THE ELECTRICAL EQUIPMENT HAS BEEN CONSTRUCTED UNDER SPECIAL SURVEY AND IS IN ACCORDANCE WITH THE SECRETARY'S LETTERS, APPROVED PLANS AND RULE REQUIREMENTS. THE MATERIALS AND WORKMANSHIP ARE GOOD: ON COMPLETION THE INSTALLATION HAS BEEN TRIED UNDER WORKING CONDITION AND TESTED IN ACCORDANCE WITH THE RULES AND FOUND SATISFACTORY.

Note. Encl. 11/6/47.

Total Capacity of Generators 2 Kilowatts.

The amount of Fee ... £1. 7500.-
When applied for, 25/2/47
When received, 28/4/47
Travelling Expenses (if any) £ ✓

Handwritten signature
for the Surveyor to Lloyd's Register of Shipping.

FRI. 20 JUN 1947

Committee's Minute

Assigned See F.E. mch. rpt.