

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

21 SEP 1934

Date of writing Report 9/9/34 19 When handed in at Local Office 19 Port of Hamburg
 No. in Survey held at Hamburg Date, First Survey 20/2/34 Last Survey 5/9/34 19
 Reg. Book. 74436 on the Steel Scr. HINDHEAD ex Consul Horn (Number of Visits 2)
 Tons { Gross 3219
 Net 1732
 Built at Kiel By whom built Fried. Krupp Germaniawerft Yard No. 455 When built 1924
 Owners Knoll Line Port belonging to London
 Electric Light Installation fitted by Fried. Krupp Germaniawerft A.G. Contract No. When fitted 1924
 Is the Vessel fitted for carrying Petroleum in bulk no.

System of Distribution Power: 2 wire system. Light: Single wire with hull return.
 Pressure of supply for Lighting 110 volts, Heating - volts, Power 220 volts.

Direct or Alternating Current, Lighting Direct Power Direct

If alternating current system, state frequency of periods per second x

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, are they compound wound yes

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

Where more than one generator is fitted are they arranged to run in parallel yes, 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 Generators Main engine room, port and starboard side

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

x and x, are 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 Engine room, forward bulkhead port side

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 x

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 x and x

are they constructed wholly of durable, non-ignitable non-absorbent materials yes, marble, 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, new made, connections of switches yes

Main Switchgear, description of switchgear for each generator and each outgoing circuit, and arrangement of equalizer switches For each generator:—

A circuit breaker with overload and reversed-current trips, and a single-pole equalizer. For each outgoing power circuit: A fuse and a switch on each pole. Light circuits: A single-pole fuse and switch on the insulated pole.

Instruments on main switchboard 3 + 3 + 1 ammeters 3 + 1 voltmeters 3 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

pilot 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

PARTICULARS OF GENERATING PLANT.										
DESCRIPTION OF GENERATOR.	No. of	RATED AT				DRIVEN BY	WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE.			
		Kilowatts.	Volts.	Amperes.	Revs. per Min.		Fuel Used.	Flash Point of Fuel.		
MAIN	2	120 each	230	465	275	Ans. Oil Engine	Gas oil	above 150° F		
AUXILIARY	1	30	230/110	139	360	Small Ans. Oil Engine	Gas oil	"		
EMERGENCY										
ROTARY TRANSFORMER	1	7.5	110	65	1800	9-KW motor				
Generator, Lighting and Heating Conductors.										
DESCRIPTION.	CONDUCTORS.		COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT. AMPERES.		Approximate Length. (Lead and Return.) Feet. m.	Insulated with	HOW PROTECTED.	
	No. per Pole.	Total Effective Area per Pole Sq. Ins. mm.	No.	Diameter. mm.	In Circuit.	Rule.				
MAIN GENERATOR	1	240	91	1.84	465	272	30	Rubber	Lead covered and armoured.	
EQUALISER CONNECTIONS	1	120	61	1.59		177	30			
AUXILIARY GENERATOR	1	95	37	1.81	139	152	25			
EMERGENCY GENERATOR										
ROTARY TRANSFORMER	1	16	19	1.04	49.5	49	10			
ENGINE ROOM	1	25	19	1.3	65	63	10			
BOILER ROOM										
AUXILIARY SWITCHBOARDS										
Navigation lamps	1	4	19	0.51	6	22	40			
Oil ship's engine room upper part	1	4	19	0.51	6	22	15			
Plug sockets	1	4	19	0.51	8	22	40			
Plug sockets	1	4	19	0.51	8	22	40			
ACCOMMODATION										
Mid. ship	1	4	19	0.51	8	22	12			
Bridge house	1	4	19	0.51	10	22	20			
Engine room	1	4	19	0.51	6	22	30			
Alley ways	1	4	19	0.51	6	22	12			
WIRELESS	1	25	1	1.78	8	16	30			
SEARCHLIGHT										
MASTHEAD LIGHT	1	15	1	1.38	2	9	60 60			
SIDE LIGHTS	1	15	1	1.38	2	9	6 6			
COMPASS LIGHTS	1	15	1	1.38	2	9	6 4			
POOP LIGHTS	1	25	1	1.78	2	16	75			
CARGO LIGHTS	1	25	1	1.78	4	16	80			
ARC LAMPS										
HEATERS										
MOTOR CONDUCTORS.										
DESCRIPTION.	No. of Motors.	CONDUCTORS.		COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT. AMPERES.		Approximate Length. (Lead and Return.) Feet. m.	Insulated with	HOW PROTECTED.
		No. Per Pole.	Total Effective Area per Pole Sq. Ins. mm.	No.	Diameter. mm.	In Circuit.	Rule.			
BALLAST PUMP	1	1	16	19	1.04	62	40	12	Rubber	Lead covered and armoured.
MAIN BILGE LINE PUMPS	1	1	10	19	0.32	34.5	38	16		
Fuel Oil GENERAL SERVICE PUMPS	2	1	25	1	1.78	12	16	12 12		
EMERGENCY BILGE PUMP	1	1	10	19	0.32	12	38	16		
SANITARY PUMP										
CIRC. SEA WATER PUMPS	1	1	16	19	1.04	66	49	14		
CIRC. FRESH WATER PUMPS										
AIR COMPRESSOR	1	1	25	1	1.78	12	16	32		
FRESH WATER PUMP	1	1	4	19	0.32	11	22	14		
ENGINE TURNING GEAR	1	1	10	19	0.32	28-48	38	30		
ENGINE REVERSING GEAR	1	1	25	1	1.78	6-6	16	32		
LUBRICATING OIL PUMPS	1	1	10	19	0.32	30	38	28		
OIL FUEL TRANSFER PUMP	1	1	10	19	0.32	37.5	38	12		
WINDLASS	1	1	70	37	1.88	139/269	124/151	118		
WINCHES, FORWARD	4	1	95	37	1.81	320	132	80		
Lub. Oil Purifier	1	1	25	1	1.78	11	16	18		
WINCHES, AFT	4	1	95	37	1.81	320	152	80		
" Mid. Ship	2	1	35	19	1.53	160	78	90		
STEERING GEAR										
(a) MOTOR GENERATOR	1	1	35	19	1.53	21.5	78	140		
(b) MAIN MOTOR	1	1	35	19	1.53	21.5	78	12		
WORKSHOP MOTOR	1	1	25	1	1.78	7	16	12		
VENTILATING FAN Boiler	1	1	25	1	1.78	12.5	16	28		
Capstan, aft	1	1	35	19	1.53	100	78	140		
Galley (vent. fan)	1	1	4	19	0.32	15	22	52		
Vent. Fan provision store	1	1	4	19	0.32	6	22	14		

Cables approved 26. 7. 34.

All Conductors are of annealed copper conforming to British Standard Specification No. 7. *German Standards*
The Insulated Conductors are guaranteed to withstand the immersion and resistance tests specified in the Rules.
The foregoing is a correct description.

Electrical Engineers.

Date

COMPASSES.

Distance between electric generators or motors and standard compass *35 m*

Distance between electric generators or motors and steering compass *35 m*

The nearest cables to the compasses are as follows:—

A cable carrying *5* Ampères *close to* feet from standard compass *close to* 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 *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 *nil* degrees on course in the case of the steering compass.

Builder's Signature.

Date

Is this installation a duplicate of a previous case *yes* If so, state name of vessel *Pine Court ex Henry Horn*

General Remarks (State quality of workmanship, opinions as to class, etc.)

This electric installation has been examined throughout, all circuits megger tested and found satisfactory. It was found to be in accordance with the submitted plan. To meet the requirements of London Letter E 26/4/34 and enclosure, the leads of the 100 kW dynamo, windlass, ballast pump and cooling water pump have been specially examined for deterioration and were found in order. Individual fuses to existing earth testing lamps and voltmeters have now been fitted. In my opinion this installation is eligible to be placed in the Register Book with notation of "Electric Light"

Noted

True

22.9.34

Total Capacity of Generators *234* Kilowatts.

The amount of Fee ... £

When applied for.

When received.

Travelling Expenses (if any) £

Committee's Minute

TUE 25 SEP 1934

Assigned

See 7th Rpt



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