

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office... 29 MAR 1934

Date of writing Report 27.3.1934 When handed in at Local Office 27.3.1934 Port of Middlesbrough

No. in Survey held at 17817 on the Mr Traw Date, First Survey 1st Feb Last Survey 24 Feb 1934
 Reg. Book. 17817 (Number of Visits... 7)

Built at South Bank By whom built Smiths Dock Co Ltd Yard No. 965 When built 1934

Owners Oddsson & Co Ltd Port belonging to Hull

Electric Light Installation fitted by RICHARD PICKERSGILL & SONS, LTD Contract No. _____ When fitted 1934

Is the Vessel fitted for carrying Petroleum in bulk ✓

System of Distribution Double Wire ✓

Pressure of supply for Lighting 110 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, 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 _____, is an adjustable regulating resistance fitted in series with each shunt field _____

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

Position of Generators Starboard Side of Engine Room, are they clear of all inflammable material Yes
 is the ventilation in way of the generators satisfactory 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 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 after Starboard Side of Engine Room
 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, 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 _____, 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 Double Pole Main Switch + Fuses + Double Pole Switches + Fuses for Outgoing Circuits

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 2 lamps in series across positive + negative to earth.

Switches, Circuit Breakers and Fusible Cut-outs, do these comply with the requirements of the Rules _____

Joint Boxes Section and Distribution Boards, is the construction, protection, insulation, material, and position of these as per rule _____



003679-003680-0061 1/2

Lead Armoured
Cables: Single, twin, concentric, or multicore *Single Lead* the cables insulated and protected as per Tables IV or V of the Rules

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

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

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
Lead + Armoured cable with galvanised clips + Lead covered cable with brass 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
Yes

Joints in Cables, state if any, and how made, insulated, and protected
None

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
2 conductors in Deck
sealing with 19/044 (soldered terminals) are their connections made as per Rule
Yes

Alternative Lighting, are the groups of lights in the propelling machinery space arranged as per Rule

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

Navigation Lamps, are these separately wired, controlled by separate switch and separate fuses, are the fuses double pole, are the switches and fuses grouped in a position accessible only to the officers on watch, has each navigation lamp an automatic indicator as per Rule
Yes *Yes* *Yes* *No Indicator*

Secondary Batteries, are they constructed and fitted as per Rule

Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, watertight, 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, are any fittings placed in spaces where inflammable or explosive dust or gases are liable to be present, if so, how are they protected, 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

Are 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

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

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.	Amps.	Revs. per Min.		Fuel Used.	Flash Point of Fuel.
MAIN	2	4	110	37	450	<i>Superheated Steam Engine</i>		
AUXILIARY								
EMERGENCY	2	<i>Motors with change over switches on Board.</i>						
ROTARY TRANSFORMER								

GENERATOR, LIGHTING AND HEATING CONDUCTORS.

DESCRIPTION.	CONDUCTORS.			COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT. AMPERES.		Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
	No. per Pole.	Total Effective Area per Pole Sq. Ins.	No.	Diameter.	In Circuit.	Rule.				
MAIN GENERATOR	1		19	.044	35		23	43R.	Lead	
EQUALISER CONNECTIONS										
AUXILIARY GENERATOR										
EMERGENCY GENERATOR										
ROTARY TRANSFORMER MOTOR GENERATOR	2		3	.036	3.5		10	43R.	Lead	
ENGINE ROOM										
BOILER ROOM										
AUXILIARY SWITCHBOARDS										
ACCOMMODATION	2		1	.036	10		150	43R.	Lead	
<i>apt</i>	2		1	.029	1		40	43R.		
WIRELESS	2		1	.044	15		"	"		
SEARCHLIGHT										
MASTHEAD LIGHT	2		1	.044	100 watt		170	"	Lead covered	
SIDE LIGHTS	2		1	.044	15		60	"		
COMPASS LIGHTS	2		1	.044	15		20	"		
POOP LIGHTS										
CARGO LIGHTS										
ARC LAMPS										
HEATERS										

MOTOR CONDUCTORS.

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

per pro.
RICHARD PICKERSGILL & SONS, LTD. Electrical Engineers.
a H. Spencer Secretary

Date *March 23rd 1934*

COMPASSES.

Distance between electric generators ~~or motors~~ and standard compass *about 50'*

Distance between electric generators ~~or motors~~ and steering compass *about 50'*

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 *nil* degrees on *each* course in the case of the standard compass, and *nil* degrees on *each* course in the case of the steering compass.

J. W. Cairns Builder's Signature.

Date *26th March 1934*

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 materials and workmanship are good. This electric light installation has been fitted aboard under special survey in accordance with the Rules; it has been tested under working conditions with satisfactory results and is, in my opinion, suitable for a classed vessel.

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

29/3/34

Im. 1129.—Transfer. (The Surveymen are requested not to write on or below the space for Committee's Minute.)

Total Capacity of Generators *8. Kilowatts.*

The amount of Fee ... £ *8-0-0* { When applied for, *27.2.1934*

Travelling Expenses (if any) £ : : { When received, *1/5/34*

P. J. McA...
Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

Elec. Lt.



© 2020

Lloyd's Register Foundation