

amms

Rpt. 13.

Slid. No. 29611

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office

Date of writing Report 19 When handed in at Local Office 20 JAN 1928 Port of NEWCASTLE-ON-TYNE & SUNDERLAND

No. in Survey held at Sunderland Date, First Survey 21st Nov 1927 Last Survey 7th Jan 1928
Reg. Book. Supt. (Number of Visits 6)

42028 on the S.S. Hewton Abbot.

Tons { Gross 2689
Net 1614

Built at Sunderland By whom built J. Brown & Sons Ltd. Yard No. 179 When built 1927

Owners J & B. Wilton Port belonging to London

Electric Light Installation fitted by The Sunderland Forge & Eng Co Ltd. Contract No. When fitted 1927.

System of Distribution Double Wire Distribution Box ✓

Pressure of supply for Lighting 110 ✓ volts, Heating _____ volts, Power _____ volts.

Direct or Alternating Current, Lighting Direct ✓ 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 _____ Are the lubricating arrangements of the generators as per Rule Yes

Position of Generators Main 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 _____ 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 _____

Main Switch Boards, where placed Mechanically-Coupled _____

Main 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 Same Compartment

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 micaite 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 each generator and each outgoing circuit, and arrangement of equalizer switches Double Pole

Switch & Fuses on generator mains Single Pole Switch & Double Pole Fuses on each

outgoing circuit _____

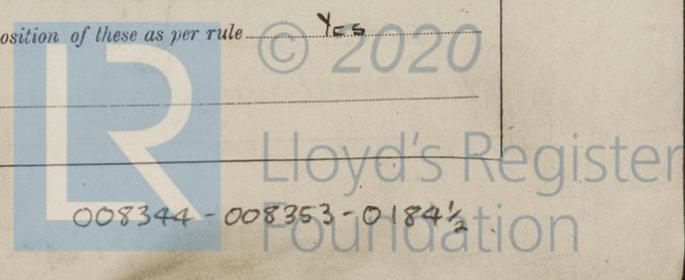
Instruments on main switchboard 1 ammeters 1 voltmeters _____ synchronising device for paralleling purposes.

Earth Testing, state what means are provided at the main switchboard for indicating the state of the insulation of the system _____

Earth Lamp Switch & Fuse on Each Pole _____

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



008344-008353-0184

Cables: Single, twin, concentric, or multicore Single & Twin are the cables insulated and protected as per Tables IV or V of the Rules Yes

Fall of Pressure, state maximum between bus bars and any point of the installation under maximum load 4.18 Volts

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 Mains, V.I.R. run in galv'd W.I. Pipe
In Accommodation Lead Covered & Braided supported 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 _____

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 _____
_____, 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 _____

Fittings, are all fittings on weather decks, in stokeholds and engine rooms and where 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 _____

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 _____

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 _____

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.	Amperes.	Revs. per Min.		Fuel Used.	Flash Point of Fuel.
MAIN	1	8	110	72.7	380	Steam Engine		
AUXILIARY								
EMERGENCY								
ROTARY TRANSFORMER								

LIGHTING AND HEATING CONDUCTORS.

Ref. No.	DESCRIPTION.	No. of Conductors.	Effective Area of each Conductor. Sq. Ins.	COMPOSITION OF STRAND.		Total Maximum Current. Amperes.	Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	MAIN GENERATOR...	2	.06	19	.064	72.7	30	V.I.R.	Lead Covered & Braided
	EQUALISER CONNECTIONS								
	AUXILIARY GENERATOR								
	EMERGENCY GENERATOR								
	ROTARY TRANSFORMER...								
	AUXILIARY SWITCHBOARDS								
	ENGINE ROOM	2	.007	7	.036	5.4	90	V.I.R.	Braided In W.I. Pipe
	BOILER ROOM								
	ACCOMMODATION								
	Enginets & Aft	2	.007	7	.036	9.4	64	V.I.R.	Braided In W.I. Pipe
	Saloon & Ford	2	.007	7	.036	13.1	144	V.I.R.	Braided In W.I. Pipe
	POOP	2	.0025	3	.036	4.2	256	V.I.R.	Braided In W.I. Pipe
	WIRELESS	2	.0224	7	.064	2.5	64	V.I.R.	Braided In W.I. Pipe
	SEARCHLIGHT								
	MASTHEAD LIGHT...	2	.00194	3	.029	.9	384	V.I.R.	Braided In W.I. Pipe
	SIDE LIGHTS...	2	.00194	3	.029	.9	40	"	Lead Covered Braided
	COMPASS LIGHTS...	2	.00194	3	.029	.2	36	"	" " " "
	CASTLE LIGHTS	2	.00194	3	.029	1.8	272	"	Braided In W.I. Pipe
	CARGO LIGHTS	2	.00194	3	.029	1.2	280	"	" " " "
	ARC LAMPS								
	HEATERS								

MOTOR CONDUCTORS.

Ref. No.	DESCRIPTION.	No. of Motors.	Effective Area of each Conductor. Sq. Ins.	COMPOSITION OF STRAND.		Total Maximum Current. Amperes.	Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	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.

p. pro. THE SUNDERLAND FORGE & ENGINEERING CO. LD. Electrical Engineers. Date 12th Jan. 1928.

Stafford

COMPASSES.

Distance between electric generators or motors and standard compass 70 Feet

Distance between electric generators or motors and steering compass 62 Feet

The nearest cables to the compasses are as follows:—

A cable carrying 6.5 Ampères 10 feet from standard compass 5 feet from steering compass.

A cable carrying .2 Ampères 8 feet from standard compass Led Into ~~from~~ steering compass.

A cable carrying .2 Ampères Led Into ~~from~~ standard compass 6 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 All Courses course in the case of the standard

compass, and nil degrees on All Courses course in the case of the steering compass.

Per Pro
JOHN CROWN & SONS, Ltd.

W. J. Gumbel Builder's Signature. Date 16 Jan 1928

Secretary

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 above installation is in accordance with the Society's Rules. The vessel is eligible in my opinion for notation elec light, wireless

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

W. T. Budget
 23/1/28

Total Capacity of Generators 8 Kilowatts.

The amount of Fee £ 8 : - : 12 Jan 19 28
Std. fee.

'Travelling Expenses (if any) £ : : 14 Jan 19 28 *None.*

W. T. Budget
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute _____

Assigned Elec Light

Im. 1. 28. - Transfer. (The Surveyors are requested not to write on or back to the space for Committee's Minute.)



© 2020

Lloyd's Register Foundation