

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office

23 OCT 1924

Date of writing Report 13th Oct 1924 When handed in at Local Office 22nd Oct 1924 Port of AberdeenNo. in Survey held at Aberdeen
Reg. Book.Date, First Survey 15th September Last Survey October 14th 1924
(Number of Visits 11)

on the S.S. "ANNAGHMORE"

Tons { Gross 582.56
Net 270.90

Built at Aberdeen

By whom built J. Lewis & Sons Ltd Yard No. 75

When built 1924

Owners St Helens Colliery Brick Works & Co Ltd Port belonging to Workington

Electric Light Installation fitted by The Sunderland Forge & Eng. Co Ltd Contract No. When fitted 1924

System of Distribution Two Wire ✓

Pressure of supply for Lighting 110 ✓ volts, Heating None ✓ volts, Power None ✓ volts.

Direct or Alternating Current, Lighting Direct ✓ Power None

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

Where more than one generator is fitted are they arranged to run in parallel not so fitted, is an adjustable regulating resistance fitted in series with each shunt field yes

Are all terminals accessible and clearly marked yes, are they so spaced or shielded that they cannot be accidentally earthed, or short circuited yes Are the lubricating arrangements of the generators as per Rule yes

Position of Generators Engine Room Bottom Platform

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 not so situated and —, are the generators protected from mechanical injury and damage from water, steam or oil yes

are their axis 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 Close to 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 not so fitted

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 not so situated and —

are they constructed wholly of durable, incombustible 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 connected to one pole

insulated from the slab with mica or micanite and the slab similarly insulated from its framework yes, and is the frame effectively earthed yes

Are the following fittings as per Rule, viz.:— 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 and Fuses for Generator. Single Pole Switches and Double Pole Fuses for outgoing circuits.

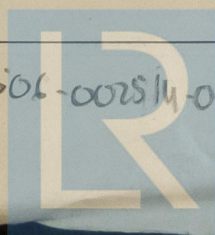
Instruments on main switchboard 1 ammeters 1 voltmeters none fitted synchronising device for paralleling purposes.

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

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

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

002506-002514-0147 1/2



© 2020

Lloyd's Register
Foundation

Insulation of Cables, state type of cables, single or twin Single & Twin are the cables insulated and protected as per Tables III ~~and~~ of the Rules Yes

Fall of Pressure, state maximum between bus bars and any point of the installation under maximum load 3 Volts

Cable Sockets and other connections, are the ends of all cables having a sectional area of 0.007 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 none fitted

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 V.I.R. Braided in Galvanised Pipe

If cables are run in wood casings, are the casings and caps secured by screws not so fitted, are the cap screws of brass none fitted, are the cables run in separate grooves not so fitted. If armoured and lead covered cables are secured by metal clips, are the clips spaced as per Table VI Yes

Refrigerated Chambers, if lights are fitted, are the cables and fittings in accordance with the special requirements none fitted

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

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 Positions, 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 Yes

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 None fitted

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, are separate screens provided for the use of oil and electric side lights Yes, are separate oil lanterns provided for the mast head lights and side lights 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 none fitted, are any fittings placed in spaces where inflammable or explosive dust or gases are liable to be present, if so, how are they protected None fitted, how are the cables led _____

where are the controlling switches situated _____

Searchlight Lamps, No. of None fitted, whether fixed or portable _____, are their fittings as per Rule _____

Arc Lamps, other than searchlight lamps, No. of none fitted, are their live parts insulated from the frame or case _____, are their fittings as per Rule _____

Motors, are their working parts readily accessible None fitted, 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 axis 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 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.		Fuel Used.	Flash Point of Fuel.		
MAIN	1	4.8	110	44	430	Open Type Inverted Steam Engine			
AUXILIARY	None								
EMERGENCY	None								
ROTARY TRANSFORMER	None								

LIGHTING AND HEATING CONDUCTORS.									
Ref. No.	DESCRIPTION.	No. of Conductors.	Effective Area of each Conductor. Sq. Ins.	COMPOSITION OF STRAND.		Total Maximum Current. Ampères.	Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	MAIN GENERATOR	2	.02214	✓	.064	44	20 feet	V.I.R.	Lead Covered in Pipe
	AUXILIARY GENERATOR	None							
	EMERGENCY GENERATOR	None							
	ROTARY TRANSFORMER	None							
	AUXILIARY SWITCHBOARDS	None							
	ENGINE ROOM	2	.00701	✓	.036	6.6	10 feet	V.I.R.	Lead Covered armoured & Braided
	BOILER ROOM								
	Accommodation	2	.00701	✓	.036	5.7	90	V.I.R.	Braided in Pipe
	Navigation	2	.00701	✓	.036	6.8	300	V.I.R.	Braided in Pipe
	Barge Charters	2	.00701	✓	.036	14.3	230	V.I.R.	Sub out below
	WIRELESS	None							
	SEARCHLIGHT	None							
	MASTHEAD LIGHT	2	.00194	✓	.029	1.0	280	V.I.R.	Braided in Pipe
	SIDE LIGHTS	2	.00194	✓	.029	2.0	30	V.I.R.	Lead Covered
	COMPASS LIGHTS	2	.00194	✓	.029	.55	15	V.I.R.	Lead Covered
	POOP LIGHTS	None							
	CARGO LIGHTS	2	.00701	✓	.036	14.3	230	V.I.R.	Braided in Pipe
	ARC LAMPS	None							
	HEATERS	None							

MOTOR CONDUCTORS.									
Ref. No.	DESCRIPTION.	No. of Motors.	Effective Area of each Conductor. Sq. Ins.	COMPOSITION OF STRAND.		Total Maximum Current. Ampères.	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								
	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. LTD.

J. Thompson

Electrical Engineers.

Date 16 OCT '24

COMPASSES.

Distance between electric generators or motors and standard compass ✓

Distance between electric generators or motors and steering compass 96 feet.

The nearest cables to the compasses are as follows:—

A cable carrying 6.8 Ampères feet from standard compass 10 feet from steering compass.

A cable carrying .55 Ampères feet from standard compass led into 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 degrees on course in the case of the standard

compass, and 71/2 degrees on any course in the case of the steering compass.

FOR JOHN LEWIS & SONS, LTD.,

J. J. Donald

Builder's Signature.

Date 21st October/24

Is this installation a duplicate of a previous case? ✓ If so, state name of vessel S.S. Annaghur Abn 13391

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

The various parts of the installation were examined during the fitting on board. The Materials and Workmanship are good, and on completion, the light was tried at full power with satisfactory results.

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

C. E. Wilkes
25/10/24

Total Capacity of Generators 4.8 Kilowatts

The amount of Fee ... £ 5 : When applied for, 22-10-1924

Travelling Expenses (if any) £ : When received, See debit book.

C. E. Wilkes
Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUES. 28 OCT 1924

TUES 25 NOV 1924

Assigned

Im. 3.22.—Transfer.
(The Surveyors are requested not to write on or below the space for Committee's Minute.)



© 2020

Lloyd's Register
Foundation