

# REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office 4 JUN 1925

Date of writing Report

10

When handed in at Local Office

3/6/25 Port of

NEWCASTLE-ON-TYNE

No. in Survey held at

Newcastle.

Date, First Survey

20<sup>th</sup> March/24

Last Survey

23<sup>rd</sup> April

1925

Reg. Book

(Number of Visits 38)

on the

"Ascania"

Tons

Gross

Net

Built at

Newcastle.

By whom built

Sir W. G. Armstrong Whitworth &amp; Co. Ltd.

Card No.

971

When built

1925

Owners

The Cunard S. S. Co. Ltd.

Port belonging to

Liverpool

Electric Light Installation fitted by Sir W. G. Armstrong Whitworth &amp; Co. Ltd.

Contract No.

971

When fitted

1925

System of Distribution Three wire with earthed neutral

Pressure of supply for Lighting

110

volts, Heating

220

volts, Power

220

volts.

Direct or Alternating Current, Lighting

Direct

Power

Direct

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

Where more than one generator is fitted are they arranged to run in parallel

yes

series with each shunt field

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 aft end on centre line

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 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

Engine room aft, above dynamo on platform. Emergency board in dynamo room

on boat deck.

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

are they constructed wholly of durable, incombustible non-absorbent materials

yes

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

frame effectively earthed

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

mechanically & electrically interlocked with overload & time limit, 1-1500 Amp S.P.C.B. hand operated with overload & time limit & reverse current release.

Outgoing circuits 1-500 Amp A.P. overload & time limit C.B., 7-200 Amp B.P., 7-150 Amp dist., 6-75 Amp S.P. knife switch, 6-75 Amp S.P. C.O.S., 3-25 Amp S.P. C.O.S.

Instruments on main switchboard

2

ammeters

1 with C.O.S. voltmeters

{Paralleling plugs &amp; sockets}

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

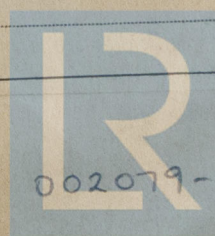
Earth breaker with ammeter

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



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002079-002084-0085

[illegible]

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.

Sir W. G. Armstrong Whitworth & Co. Ltd.

Electrical Engineers.

Date 3/6/25.

#### COMPASSES.

Distance between electric generators or motors and standard compass From generators 19.5 feet nearest motor 27 feet

Distance between electric generators or motors and steering compass " " 19.5 feet " " 25 feet

The nearest cables to the compasses are as follows:—

A cable carrying .27 Ampères 1 feet from standard compass 4 feet from steering compass.

A cable carrying .27 Ampères 10 feet from standard compass 1 feet from steering compass.

A cable carrying 1.8 Ampères 12 feet from standard compass 4 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 course in the case of the standard compass, and nil degrees on all course in the case of the steering compass.

SIR W. G. ARMSTRONG, WHITWORTH & CO. LTD.

W. G. Armstrong

Builder's Signature.

Date 3/6/25.

Is this installation a duplicate of a previous case Yes If so, state name of vessel "Aurionis."

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

The above installation is in accordance with the Society's Requirements. The vessel is suitable in my opinion for notation etc light wireless

Blue light.  
W. T. Badger  
5/6/25

Total Capacity of Generators 600 Kilowatts

The amount of Fee ... £ 47: 6

When applied for,

4/5/25

When received,

30/5/25

Travelling Expenses (if any): £

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

Committee's Minute

Assigned

Elec Lt.

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



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