

Rpt. 13.

No. 12108

# REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

16 OCT 1924

Received at London Office

Date of writing Report

19

When handed in at Local Office

10.10.24

Port of

Middlesbrough

No. in  
Reg. Book.

Survey held at

Stockton-on-Tees

Date, First Survey

1924

Last Survey

Building 19

(Number of Visits)

on the

Steel Screw Steamer SOUTHBOROUGH

Tons

Gross

Net

Built at

Stockton

By whom built

Richardson Duck &amp; Co.

Yard No.

689

When built

1924

Owners

Humphreys Ltd

Port belonging to

Cardiff

Electric Light Installation fitted by

Sunderland Forge &amp; Engineering 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

0.36

12

Power

None

If alternating current system, state frequency of periods per second

0.36

340

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 situated

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

0.44

, are they clear of 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

0.044

3

0.29

5

20

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 situated

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

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

frame effectively earthed

yes

Are the following fittings as per Rule, viz. :— spacing or shielding of live parts

yes

yes

, absence of fuses on back of board

yes

, proportion of omnibus

bars

yes

, individual fuses to voltmeter, pilot or earth lamp

yes

yes

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 for Generator, Single Pole Switches and Double Pole Fuses for outgoing circuits.

Instruments on main switchboard

ammeters

1

volts

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



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Foundation

1283-00350







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 POWER & ENGINEERING CO. LD.

Electrical Engineers.

Date 6/10/24.

#### COMPASSES.

Distance between electric generators or motors and standard compass 116 feet

Distance between electric generators or motors and steering compass 106 feet

The nearest cables to the compasses are as follows:—

A cable carrying 9 Amperes 20 feet from standard compass 10 feet from steering compass.

A cable carrying 10 Amperes 10 feet from standard compass 10 feet from steering compass.

A cable carrying 1.0 Amperes 10 feet from standard compass 10 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 any course in the case of the standard compass, and Nil degrees on any course in the case of the steering compass.

FOR RICHARDSON, DUCK & CO. LTD.

W.D. Atkin

Builder's Signature.

Date 9<sup>th</sup> Oct. 1924.

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. This installation has been fitted in accordance with the Rules: is of good materials and workmanship and on completion was examined under full working conditions and found satisfactory.

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

W.D. Atkin  
17/10/24

Total Capacity of Generators 8.8 Kilowatts

The amount of Fee ... £ 8-16-0

Travelling Expenses (if any) £

When applied for, 13/11/1924  
When received, 13/11/1924

W.D. Morrison  
Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned



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