

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL) 28 JUL 1927

Received at London Office

Date of writing Report 6th July 1927. When handed in at Local Office 19 Port of Belfast.

No. in Survey held at Belfast. Date, First Survey 15th June Last Survey 14th July 1927
Reg. Book. (Number of Visits 7)

on the TWIN SCREW S.S. BERTA.

Tons { Gross
Net

Built at BELFAST By whom built Harland & Wolff Yard No. 798 When built 1927

Owners Curacaosche Scheepvaart Mij Port belonging to Willemstad

Electric Light Installation fitted by Harland & Wolff Ltd. Contract No. 798 When fitted 1927.

System of Distribution Two wire direct current to distribution boxes.

Pressure of supply for Lighting 110 volts, Heating — volts, Power 110 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 —, is an adjustable regulating resistance fitted in series with each shunt field no.

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 In engine room - aft on starboard side.

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 In engine room - On angle iron frame beside 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 —

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, 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. Generator is connected to bus bars by double pole, overload and time limit circuit breaker and each outgoing circuit has double pole switches & fuses.

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 indicator lamps connected to bus bars through double pole switch & fuses.

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



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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.

Electrical Engineers.

Date July 22nd '27.

COMPASSES.

Distance between electric generators or motors and standard compass 164 FEET

Distance between electric generators or motors and steering compass 160 FEET

A cable carrying 14.4 Amperes 18 feet from standard compass 12 feet from steering compass.

A cable carrying 8.2 Amperes 18 feet from standard compass 12 feet from steering compass.

A cable carrying — Amperes — feet from standard compass — 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.

Builder's Signature.

Date July 22nd '27.

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 now been efficiently fitted in accordance with the Rules. The materials & workmanship are good and when tested under full working load the installation worked satisfactorily.

In my opinion the installation is eligible to have notation "Electric Light".

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

JWD
29/7/27

Total Capacity of Generators 8 Kilowatts

The amount of Fee ... £ 8 : 0 : 25 July 27

Travelling Expenses (if any) £ : : 20.9.27

H. F. Southwell
Surveyor to Lloyd's Register of Shipping.

Committee's Minute WED. 3 AUG 1927

Assigned *Electric Light*

Im. 9.24. - I. ansier. (The Surveyors are requested not to write on or below the space for Committee's Minute.)



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