

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

20 OCT 1926

Received at London Office

Date of writing Report 19 When handed in at Local Office *Oct. 19th 1926* Port of *Newcastle-on-Tyne*No. in Survey held at *Newcastle.* Date, First Survey *July 21st* Last Survey *Sept. 8th 1926.*
Reg. Book. *Suth.* (Number of Visits... *13*...)89963 on the *Mernoo* Tons { Gross *2417.*
Net *1408.*Built at *Newcastle.* By whom built *Swan Hunter & Wigham Redden* Yard No. *1220* When built *1926*Owners *Melbourne S. S. Co Ltd* Port belonging to *Melbourne*Electric Light Installation fitted by *J. H. Holmes & Co. Newcastle-on-Tyne* Contract No. *1220* When fitted *1926*

System of Distribution *Double wire*

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 *Yes*

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 *Engine room 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 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 *Yes*

Main Switch Boards, where placed *Engine room starboard side*
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, 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*

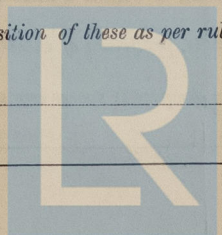
Main Switchgear, description of switchgear for each generator and each outgoing circuit, and arrangement of equalizer switches *Double pole tandem switch fuses on dynamo main + on each outgoing circuit*

Instruments on main switchboard *one* ammeters *one* 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 lamps coupled to earth through switches & fuses*

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*



If portable lamps for use in dangerous spaces are supplied, are they of a type approved by the Home Office _____

| MOTOR CONDUCTORS. | | | | | | | | | |
|-------------------|-----------------------------|----------------|--|------------------------|------------|----------------------------------|--|----------------|----------------|
| Ref. No. | DESCRIPTION. | No. of Motors. | Effective Area of each Conductor. Sq. Ins. | COMPOSITION OF STRAND. | | Total Maximum Current. "m. amp." | 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 | | | | | | | | |
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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.

FOR J. H. HOLMES & CO

J. H. Holmes

Electrical Engineers.

Date 8/10/26

COMPASSES.

Distance between electric generators or motors and standard compass 140 feet

Distance between electric generators or motors and steering compass 130 feet.

The nearest cables to the compasses are as follows:—

A cable carrying 28 Amperes on the feet from standard compass 8 feet from steering compass.

A cable carrying 28 Amperes 8 feet from standard compass on the feet from steering compass.

A cable carrying 10 Amperes 6 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 each course in the case of the standard compass, and nil degrees on each course in the case of the steering compass.

FOR
SWAN, HUNTER & WIGHAM RICHARDSON, LTD.

G. J. Ducey
DIRECTOR

Builder's Signature.

Date 18 Oct. 1926

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 electric light, wireless

It is submitted that
this vessel is eligible for
THE RECORD

elec. light

M. J. J. J.

Total Capacity of Generators 6.5 Kilowatts.

The amount of Fee ... £ 6:10 : When applied for, 1 Sept. 1926

Travelling Expenses (if any) £ : : When received, 3 Sept. 1926

W. T. Badger

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned