

Rpt. 13.

No. 15788

## REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

31 AUG 1936

Date of writing Report

19

When handed in at Local Office

19

Port of

Middlesbrough  
NEWCASTLE ON TYNE

No. in Survey held at

Middlesbrough

Date, First Survey

26-6-36

Last Survey

10-8-1936

Reg. Book.

on the

M.V. "Jolly Genie"

(Number of Visits.....)

Tons { Gross  
Net

Built at

Middlesbrough

By whom built

Smiths Dock &amp; Co. Ltd.

Yard No. 995

When built

1936

Owners

not in Reg. Book.

Port belonging to

Electric Light Installation fitted by Messrs Pickersgill &amp; Co.

Contract No.

When fitted

1936

Is the Vessel fitted for carrying Petroleum in bulk

No.

System of Distribution

Double Wire

Pressure of supply for Lighting

110

volts, Heating

110

volts, Power

110

volts.

Direct or Alternating Current, Lighting

Direct Current

Power

Direct Current

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 temperature rise

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

No

is an adjustable regulating resistance fitted in

series with each shunt field

Yes

Have certificates of test results for machines under 100 kw. been submitted and

approved

Yes

Have machines over 100 kw. been inspected by the Surveyors during manufacture and testing

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

Starboard Side of Engine room

is the ventilation

in way of the generators satisfactory

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

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

Starboard Side of Engine room

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

is it of an approved type

Yes

if semi-insulating material is used, are all conducting parts insulated from the slab with mica or micanite or other

non-hygroscopic insulating material, and the slab similarly insulated from its framework

Yes

is the non-hygroscopic insulating material of an approved

type

Yes

and is the frame effectively earthed

Yes

Are the fittings as per Rule regarding:— spacing or shielding of live parts

accessibility of all parts

Yes

absence of fuses on back of board

Yes

temperature rise of

omnibus bars

Yes

individual fuses to voltmeter, pilot or earth lamp

Yes

are moving parts of switches alive in the

"off" position

No

are all screws and nuts securing connections effectively locked

Yes

are any fuses fitted on the live side of

switches

Yes

NO

Main Switchgear, description of switchgear for each generator and each outgoing circuit, and arrangement of equalizer switches

Double Pole Main Switch &amp; Double Pole Circuit Breakers &amp; Double Pole Main Switch &amp; Double Pole Circuit Breakers &amp; Double Pole Main Switch &amp; Double Pole Circuit Breakers

Are turbine driven generators fitted with emergency trip switch as per rule

Are cupboards or compartments containing switchboards composed of

fire-resisting material or lined with approved material

Instruments on main switchboard

One

ammeters

voltmeters

—

synchronising device for paralleling purposes. For compound machines is the ammeter connected on the opposite pole to equaliser connection

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

Lamps in Series across Positive &amp; Negative to Earth

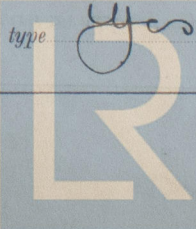
do these comply with the requirements of the Rules

Yes

are the fusible cutouts of an approved type

Yes

have the reversed

Lloyd's Register  
Foundation

W987-0298

current protection devices been tested under working conditions

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

Cables: Single, twin, concentric, or multicore cables are the cables insulated and protected as per Tables IV, V, X or XI of the Rules

If the cables are insulated otherwise than as per Rule, are they of an approved type

3.5V lighting 4.8 power

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

Cable Sockets, are the ends of all cables having a sectional area of 0.04 square inch and above provided with soldering sockets

Paper Insulated and Varnished Cambric Insulated Cables, If conductors are paper or varnished cambric insulated, is the dielectric at the exposed ends of the conductor protected from moisture by being suitably sealed with insulating compound

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

Support and Protection of Cables, state how the cables are supported and protected

If cables are run in wood casings, are the casings and caps secured by screws

Refrigerated Chambers, are the cables and fittings in accordance with the special requirements

Joints in Cables, state if any, and how made, insulated, and protected

Watertight Glands and Deck Tubes, are all cables passing through decks and watertight bulkheads provided with deck tubes or watertight glands

Bushes in Beams and Non-watertight Partitions, where unarmoured cables pass through beams and non-watertight partitions, are the holes efficiently bushed

Earthing Connections, state what earthing connections are fitted and their respective sectional areas

Alternative Lighting, are the groups of lights in the propelling machinery space arranged as per Rule

Emergency Supply, state position and method of control of the emergency supply and how the generator is driven

Navigation Lamps, are these separately wired

are the switches and fuses grouped in a position accessible only to the officers on watch

has each navigation lamp an automatic indicator as per Rule

Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, watertight

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

are any fittings placed in spaces where inflammable or explosive dust or gases are liable to be present, if so, how are they protected

are all fittings suitably ventilated

Heating and Cooking Appliances, are they constructed and fitted as per Rule

are air heaters constructed and fitted as per Rule

Searchlight Lamps, No. of

Arc Lamps, other than searchlight lamps, No. of

Motors, are their working parts readily accessible

are the brushes, brush holders, terminals and lubricating arrangements as per Rule

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 axes 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

have machines of over 100 BHP been inspected by the Surveyors during manufacture and testing

Control Gear and Resistances, are the generator field and motor speed regulators, starters and controllers constructed and fitted as per Rule

Lightning Conductors, where lightning conductors are required, are these fitted as per Rule

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

are all fuses of the filled cartridge type

are they of an approved type

If portable lamps for use in dangerous spaces are supplied, are they of a self-contained, battery-fed type approved by the Home Office

Spare Gear, if the vessel is for open sea service have spares been supplied as per Rule

PARTICULARS OF GENERATING PLANT.

RATED AT

DESCRIPTION OF GENERATOR. No. of Kilowatts. Volts. Amperes. Revs. per Min. DRIVEN BY WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE. Fuel Used. Flash Point of Fuel.

MAIN ... 1 26 110 236

AUXILIARY ... 1 10 110 99

EMERGENCY ...

ROTARY TRANSFORMER

GENERATOR, LIGHTING AND HEATING CONDUCTORS.

DESCRIPTION. CONDUCTORS. COMPOSITION OF STRAND. TOTAL MAXIMUM CURRENT. AMPERES. Approximate Length. (Lead and Return.) Feet. Insulated with HOW PROTECTED.

MAIN GENERATOR ... 1 2 37 .083 180 190 24 4.5R Lead

EQUALISER CONNECTIONS ...

AUXILIARY GENERATOR ... 1 12 37 .064 15 130 10 4.5R Lead

EMERGENCY GENERATOR ...

ROTARY TRANSFORMER MOTOR GENERATOR ...

ENGINE ROOM ...

BOILER ROOM ... 1 1 1 .036 4 12 8 4.5R Lead

AUXILIARY SWITCHBOARDS ...

ACCOMMODATION ... 1 7 .025 10 24 140 4.5R in spec.

150 Watt Radiator Navigation ... 1 3 .036 1.6 12 200 4.5R in spec.

WIRELESS ...

SEARCHLIGHT ...

MASTHEAD LIGHT ... 1 1 .044 17 140 4.5R in spec.

SIDE LIGHTS ... 1 1 .044 17 30 Leadboard do.

COMPASS LIGHTS ... 1 1 .044 17 30 do do.

POOP LIGHTS ...

CARGO LIGHTS ...

ARC LAMPS ...

HEATERS ...

MOTOR CONDUCTORS.

DESCRIPTION. No. of Motors. CONDUCTORS. COMPOSITION OF STRAND. TOTAL MAXIMUM CURRENT. AMPERES. Approximate Length. (Lead and Return.) Feet. Insulated with HOW PROTECTED.

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 ...

All Conductors are of annealed copper conforming to British Standard Specification No. 7 (or International Electro-technical Commission Publication No. 28).

The Insulated Conductors are guaranteed to withstand the immersion and resistance tests specified in the Rules.

The foregoing is a correct description.

*Richard Dickersoll & Sons, Ltd.*

Electrical Engineers.

Date

#### COMPASSES.

Distance between electric generators or motors and standard compass

76 feet

Distance between electric generators or motors and steering compass

The nearest cables to the compasses are as follows:—

A cable carrying 4 Ampères 6 feet from standard compass feet from steering compass.

A cable carrying Ampères feet from standard compass 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

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.

FOR SMITH'S DOCK CO. LTD.

*J. W. Davies*

Builder's Signature.

Date 19<sup>th</sup> Aug 1936

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 insta. has been fitted out under special survey. The materials used and workmanship are good. The insulation resistance is good. On completion the dynamos, governors, main board, fuses, cables & fittings were examined & tested under working conditions & found suitable for a classed vessel.

Noted

Yours

31.8.36

Total Capacity of Generators 36 Kilowatts.

The amount of Fee ...

£ 24

When applied for,

4.8.1936

Travelling Expenses (if any) £

When received,

2.10.1936

5/10

*W. T. Badger*

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

TUE. 1 SEP 1936

Assigned

See Mah. I.C. 15767



© 2019

Lloyd's Register  
Foundation