

Rpt. 13.

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

No. 9678

20 JAN 1921

Date of writing Report

19

When handed in at Local Office

19

Port of

Belfast

See mech. report.

Last Survey

19

No. in Survey held at

Belfast

Reg. Book.

87931

on the

STEEL TWIN SC.

APAPA

Tons

Gross

Net

Built at

Belfast

By whom built

Harland & Wolff Ltd.

Yard No. 695

When built 1926

Owners

Apacan S.S. Co. Ltd.

Port belonging to

Liverpool

Contract No.

When fitted 1926

Electric Light Installation fitted by Harland & Wolff Ltd.

System of Distribution Two Wire Direct Current to Distributing Boxes. ✓
 Pressure of supply for Lighting 220 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 ✓

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

Yes. Certain generators in Motor Room Forward
 Emergency generator in Emergency House. Upper Deck Aft.

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 ✓

are the prime movers and

Earthing, are the bedplates and frames of the generating plant efficiently earthed

yes ✓

their respective generators in metallic contact

yes ✓

Main Switch Boards, where placed

On Platform Forward End of Motor 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, 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

Current Circuit Breaker with time limits & interlocked equaliser switch for each generator

D.P. Overload Circuit Breaker on S.P. Switch & D.P. Fuses for each outgoing circuit

Instruments on main switchboard

13

ammeters

2

voltmeters arranged

for paralleling purposes.

Earth Testing,

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

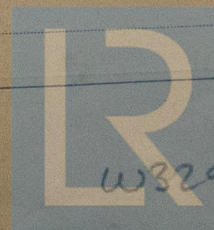
Earth Lamps.

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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W329-0078 (112)

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. Amperes.	Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	BALLAST PUMP	1	.06 ✓	19	.064	80	200	Rubber.	Lead Covered
	MAIN BILGE LINE PUMPS ...	2	.04 ✓	19	.052	48	246	"	"
	FIRE SERVICE PUMP ...	1	.1	19	.083	112	180	"	"
	EMERGENCY BILGE PUMP ...	1	.06 ✓	19	.064	72	540	"	Lead Covered ASB
	SANITARY PUMP	2	.06 ✓	19	.064	72	168	"	Lead Covered
	CIRC. SEA WATER PUMPS ...	4	.06 ✓	19	.064	74	126	"	"
	CIRC. FRESH WATER PUMPS	2	.04 ✓	19	.052	62	273	"	"
	AIR COMPRESSOR	2	.6	91	.093	480	250	"	"
	FRESH WATER PUMP	1	.007 ✓	7	.036	18	228	"	"
	ENGINE TURNING GEAR ...	2	.0225 ✓	7	.064	40	270	"	"
	ENGINE REVERSING GEAR ...	—	—	—	—	—	—	—	—
	LUBRICATING OIL PUMPS ...	4	.2 ✓	37	.083	180	246	"	"
	OIL FUEL TRANSFER PUMP ...	2	.0145 ✓	7	.052	32	238	"	"
	WINDLASS	1	.2	37	.083	220	375	"	Hard Rubber
	WINCHES, FORWARD	1	.1	19	.083	130	108	"	"
	WINCHES, AFT "	2	.06	19	.064	94	105	"	"
	STEERING GEAR	2	.2	37	.083	180	650	"	"
	WORKSHOP MOTOR	2	.003	3	.036	8	130	"	Lead Covered
	VENTILATING FANS	19	.003 ✓	3	.036	12	300	"	Hard Rubber
		1	.01 ✓	7	.044	30	350	"	"
		2	.0225 ✓	7	.064	40	200	"	Lead Covered
	Winches A/H	4	.1	19	.083	130	105	"	Hard Rubber
	" Boat 43.	2	.06 ✓	19	.064	81	142	"	"

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

13/12/26

COMPASSES.

Distance between electric generators or motors and standard compass 100 ft to generators, 30 ft nearest motor.

Distance between electric generators or motors and steering compass 97 " " " 31 " " "

The nearest cables to the compasses are as follows:—

A cable carrying 26 Ampères 6 feet from standard compass 6 feet from steering compass.

A cable carrying 27 Ampères 33 feet from standard compass 32 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

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.

Builder's Signature.

Date

Is this installation a duplicate of a previous case Yes If so, state name of vessel M. V. Accra

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

The electric installation of this vessel has been fitted under special survey and in accordance with the rules. The workmanship and materials are good. Tests made under working and overload conditions were satisfactory. The vessel is eligible, in my opinion, for notation "Electric Light".

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

W.D.
31/1/27

Total Capacity of Generators 650 Kilowatts

The amount of Fee £ 47. 15 : When applied for, 24-1-27
See Mch 7. E. Repat.
Travelling Expenses (if any) £ : When received, 4. 2. 27

R. Lee Amess.
Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUES. 1 FEB 1927

Assigned Elec Light

1m. 921.—Transfer.
(The Surveys are requested not to write on or below the space for Committee's Minute.)



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