



**DALMIA CEMENT (B) LIMITED – CEMENT PLANT
ARIYALUR
ELECTRICAL MANUAL**



Issue No. 01	Rev. No: 01	Effective Date: 07.07.2017	SOP/Elect /029
Issued By:		Approved By: HOD - ELECTRICAL	
SOP For Capacitor Panel Maintenance			

Scope : This Procedure is to establish and ensure safe method of Capacitor Panel Maintenance.

Responsibility : Section Engineer – Electrical

Accountability : Section Head-Electrical

PPE:

1. Safety shoe,
2. Electrical Rubber hand gloves

Tools:

1. Insulated tools
2. Discharging Rod

Hazard Analysis:

Risks associated

Electrical shock

Mitigating Measures

Use of insulated tools & Tested Electrical Rubber Hand Gloves

Training needs:

1. Usage of tools and Nature of Hazards
2. Usage of PPEs
3. Meggers

Procedure:

- 1) Take the LOTO for the particular equipment as per ELEC/SOP/001 and 003
- 2) Get work permit from the concerned Electrical section in-charge.
- 3) Discharge the Capacitor panel / capacitor terminals.
- 4) Clean the capacitor panel / capacitors.
- 5) Clean the bus bars.



**DALMIA CEMENT (B) LIMITED – CEMENT PLANT
ARIYALUR
ELECTRICAL MANUAL**



Issue No. 01	Rev. No: 01	Effective Date: 07.07.2017	SOP/Elect /029
Issued By:		Approved By: HOD - ELECTRICAL	
SOP For Capacitor Panel Maintenance			

- 6) Check the capacitors.
- 7) Measure the capacitance values.
- 8) Check the discharge resistors.
- 9) Check the feeders.
- 9) Return the Work permit.

Emergency / Emergency Shut OFF:

If electrical shock injury or body injury is there, give First aid and inform to the Safety department or Call Emergency number 3108/9865152222/9750963761.

Records/Annexure:

1. JSA is enclosed below.
2. LOTO Electrical Isolation permit



**DALMIA CEMENT (B) LIMITED – CEMENT PLANT
ARIYALUR
ELECTRICAL MANUAL**



Issue No. 01	Rev. No: 01	Effective Date: 07.07.2017	SOP/Elect /029
Issued By:		Approved By: HOD - ELECTRICAL	
SOP For Capacitor Panel Maintenance			

JOB SAFETY ANALYSIS: (JSA)

Job Safety Analysis	Job: Capacitor Panel Maintenance	Date:	Analysis by:	Reviewed by:
Title of employee doing job: Electrician	Supervisor: Section Engineer	Department: Electrical	Section: Plant	Approved by:
Reqd./recommended PPE: Safety shoe & Rubber Gloves, nose mask, safety goggles				
Sequence of Basic Job Steps	Potential Hazards	Recommended Safe Jo.b Procedure	What Could Go Wrong	Corrective Action
Discharge capacitor terminals and panel	Electrical shock	Use Tested Electrical Rubber Hand gloves	Damaged Gloves/ Not checked before use	Periodic replacement/To check for damage before use
		Use Earth rods	Damaged earth rods	Replace it, if not repairable
Clean the capacitor bank Cleaning of capacitor panel and bank	Eye irritation	Wear goggles	Damaged goggles/non standard goggles/ Not wearing goggles/ Heavy dust accumulated	Periodic replacement/Training
	Respiration problem	Wear Nose mask	Damaged nose mask/ Not wearing mask/ Heavy dust accumulated	Periodic replacement /Training
	Body injury	Use proper tools	Nonstandard /damaged tools	Training for tools handling/ Periodic replacement
		Wear safety helmet, safety shoes , hand gloves	Tools and material may fall on human body	Without PPE don't perform the job
Capacitor, discharge resistor, panel checking, terminal tightness and measurement of values	Electric shock	Use the insulation tester with proper probe arrangement	Damaged probe	Check the power probe before connecting to electrical source Replace if damage
		Earth rod to be proper insulated	Insulation may be damaged	To be re-check before use.
	Body injury	Use proper tools	Nonstandard /damaged tools	Training for tools handling/ Periodic replacement
		Wear safety helmet, safety shoes , hand gloves	Tools and material may fall on human body	Without PPE don't perform the job