



**DALMIA CEMENT (B) LIMITED – CEMENT PLANT  
ARIYALUR  
INSTRUMENTATION DEPARTMENT**



Issue No. 01	Rev. No: 02	Effective Date: 20.09.2017	SOP/INST/04
Issued By: MR		Approved By: HOD-INSTRUMENTATION	
SOP for Maintenance of Field Instruments			

**Scope/Purpose** : This SOP is applicable for Maint. Of Field Instruments

**Responsibility** : Instrument Mechanic / Supervisor

**Accountability** : Section In-Charge

**PPE:**

1. Hand gloves
2. Safety Shoes

**Tools:**

1. Insulated Spanners / Tools
2. Multimeter / Ammeter / Calibrators

**Hazard Analysis:**

**Risks associated**

Electric shock  
Hot Surface  
Back Fire

**Mitigating Measures**

Usage of Insulated tools and Safety shoes.  
Usage of Hand Gloves.  
Sufficient negative pressure to be maintained, line clearance to be ensured from CCR.

**Training needs:**

1. Emergency preparedness
2. First aid procedure
3. Calibration procedures

**Procedures**

1. Use PPE's like goggles, nose mask.
2. Instruments located more than 1.5 meters height use safety belt.



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3. Carry proper tools in tool bag
4. Clean the field instrument with hand blower.
5. Use the Digital Multimeter with insulated probes and Insulation tester
6. Ensure the interlocks and block the interlock if necessary.
7. Check the input and out put signals.
8. Replace the faulty units.
9. Ensure the instrument is working condition.
10. Retrieve the blocked signal.
11. confirm the healthiness of the signal for operation.

## **RECORDS**

Register for Maintenance of Field Instruments

## **Emergency / Emergency Shut OFF:**

1. If electric shock or burn injury due to heat surface is there, First aid will be given and inform to the Instrumentation department or Safety department or Call Emergency number 3108 / 3123 & 9 In Case of PA System

## **Records/Annexure:**

1. Refer Line clearance in Instrumentation department.



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2. JSA is enclosed below.

**JOB SAFETY ANALYSIS: (JSA)**

<b>Job Safety Analysis</b>	Job: Maint. of Field Instruments	Date: 20.09.2017	Analysis by:	Reviewed by:
Title of employee doing job: Instrument Mechanic	Supervisor: Section Engineer	Department: Instrumentation	Section: Instrument Lab	Approved by:
Req'd/recommended PPE: Insulated Tools, Safety shoes				
Sequence of Basic Job Steps	Potential Hazards	Recommended Safe Job Procedure	What Could Go Wrong	Corrective Action
Switch ON the connected circuit	Electric shock	Ensure proper wiring & connections	Wrong connections	Wiring as per the drawing & ensure trip protection
Touching the connected probes / instruments	Electric shock	Switch OFF the circuit before touching	Electrostatic discharge / Improper electrical insulation	Discharge time to be maintained for capacitors / Use of proper instruments
Touching the Hot surface or back fire.	Burn Injury	Use the appropriate PPE(High temp withstanding gloves)  Sufficient negative pressure to be maintained.	Skin rashes & irritation.	Ensure the quality & condition of PPE.  Line clearance to be ensured from CCR.