



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



Issue No. 01	Rev. No: 02	Effective Date: 20.09.2017	SOP/INST/007
Issued By: M.R		Approved By: HOD - INSTRUMENTATION	
SOP for checking for packer spout			

**Scope:** Checking of Packer spout panel.

**Responsibility:** Instrumentation technician.

**Accountability:** Instrumentation - Section Engineer.

**PPE:**

- Safety helmet
- Safety shoe
- Mask
- Goggles
- Hand gloves

**Tools required:**

- Multimeter
- Tester
- Screw Driver
- Hand Blower
- Insulated Gloves

**Hazard Analysis:**

Risks associated

Mitigating Measures

Electrocution

Use Insulated hand glove and Tools

**Procedure:**



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1. Use PPE's like nose mask, goggles.
2. Isolate the Rotary drive operation by activating the EM stop and provide the Lock .
3. Isolate the control supply and Spout motor supply by switching off the MCB/MPCB.
4. Ensure the incoming supply voltage by using multimeter.
5. Clean the panel with hand blower and keep the hand blower one meter away during electronic boards cleaning.
6. Check the tightness of the connections with proper insulated tools.
7. Ensure unwanted gland holes to be closed.
8. Switch on the Isolators/MCB and control supply MCB.
9. Ensure the panel Healthiness and check Spout parameters.
10. After the panel maintenance ensure the door locks are properly locked.
11. Clean/check the Solenoid valve silencers.
12. Check the Solenoid valves and fittings & replace if there is any air leakage.
13. Give the clearance for the operation.

**Emergency / Emergency Shut OFF:**

1. If any unconsciousness is there, give First aid and inform to the Safety department or Call Emergency number 3108/9865152222/9750963761.

**Records/Annexure:**



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1. JSA as enclosed below.

**JOB SAFETY ANALYSIS :( JSA)**

<b>Job Safety Analysis</b>	Job: Checking and Maintenance of Instrumentation panels	Date:20.09.2017	Analysis by: Section Engineer	Reviewed by: Section Head
Title of employee doing job: INST - TECHNICIAN	Supervisor: SECTION ENGINEER	Department: INSTRUMENTATION	Section:PACKING PLANT	Approved by: HOD
Req'd/recommended PPE: SAFETY HELMET, SAFETY SHOES, GOGGLES, DUST MASK, HAND GLOVES				
Sequence of Basic Job Steps	Potential Hazards	Recommended Safe Job Procedure	What Could Go Wrong	Corrective Action
1.ISOLATE THE CONTROL POWER SUPPLY AND SPOUT MOTOR SUPPLY BY SWITCHING OFF THE CONTROL MCB & MPCB	LIVE SUPPLY IS EXPOSED INSIDE THE CONTROL PANEL	AFTER POWER SUPPLY ISOLATION CHECK THE CONTROL POWER SUPPLY (230V AC) AND MPCB (440V AC) SUPPLY WITH MULTIMETER	RESULT IN ELECTROCUTED	USE INSULATED GLOVES AND CHECK THE MULTIMETER PROBE CONDITION BEFORE USE.
2. BLOWER THE PANEL TOP SIDE & THEN OPEN THE PANEL DOOR & BLOWER INSIDE THE PANELS.	DUST MAY COME OUT OF THE PANELS	WEAR GOOGLES, HAND GLOVES & NOSE MASK & BEFORE BLOWERING.	COUGHING, EYE IRRITATION MAY OCCUR	FOLLOW THE PPE MATRIX
3.BLOWER THE ELECTRONIC COMPONENT WITH ONE METER DISTANCE	ELECTRONIC COMPONENT MAY GET DAMAGE	OPERATE THE BLOWER WITH MIN SPEED	CHANCES FOR COMPONENT FAILURE	KEEP THE BLOWER SPEED IN LOW SPEED MODE
4.CHECK THE CONTROL CABLE TIGHTNESS	CHANCES FOR TERMIANL BLOCK DAMAGE	USE PROPER TOOLS BASED ON THE TYPES OF TERMINAL BLOCKS	TERMINALS GET DAMAGE AND NUISENCE OPERATION DURING PANEL STARTUP	ENSURE THE TERMINAL BLOCK TIGHTNESS GENTLY WITH CARE
5.CHANGE THE SOLENOID VALVE IN SPOUT PANEL	COMPRESSOR AIR MAY HIT ON THE BODY	ISOLATE THE COMPRESSOR AIR BEFORE REPLACING THE VALVE	RESULT IN INJURY DUE TO COMPRESSOR AIR	BEFORE REMOVING THE VALVE,DRAIN THE AIR FULLY