



## DALMIA CEMENT (B) LIMITED – DPM



### MECHANICAL SOP

Issue No. 02	Rev. No: 01	Effective Date: 22.05.2015	SOP/MEC/01
Issued By: S & P		Approved By: Head – Mech	

### COOLER WATERSPRAY NOZZLE CLEANING

**Scope:** To clean cooler water spray nozzle

**Responsibility:** Engineer/SH

**PPE:**

1. Safety helmet
2. Safety shoe
3. Mask
4. Safety goggles
5. Gloves

**TOOLS:**

1. Screw driver
2. spanner set
3. Pipe Wrench
4. Bench Vice

**Hazard Analysis:**

**Risks associated:**

Excessive temperature of water

Excess Pressure

Material and hot gas puffing

**Mitigating Measures**

Close the inlet valve

Release Safety Valve

Maintaining draft

**Procedure:**

- a. Close the water line of the spray and take Energy isolation for that valve
- b. Release pressure by opening the safety valve
- c. Remove water hose from nozzle lance
- d. Loose all the wedges of the spray.
- e. While removing the water spray nozzle lances draft to be maintained, because hot dust may puff outside.

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- f. After removing the water spray line, keep a dummy plate in order to avoid false air or temperature drop.**
- g. Connect the water line hose to the spray and open the valve for the flow of water.**
- h. Check for the water flow from nozzle and check for the cracks in the nozzle.**
- i. If the flow is less then open the nozzle by bench vice.**
- j. Clean the nozzle and soak it in acid for 30 minutes.**
- k. Clean it and fit it to the spray and check for the water flow.**
- l. Similarly do it for remaining water spray nozzle also.**
- m. Monitor the change in temperature on work.**

### Emergency Shut- off:

1. In case of belt is moving, Emergency pull chord switch should be activated by the person.
2. If body injury is there, First aid will be given and inform to the Safety department or Call Emergency number 222/555/9865125176/9865177444.

**Annexure:**

**JSA is enclosed below / Isolation Matrix**

[illegible]



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### **COOLER WATERSPRAY NOZZLE CLEANING**

4	<b>Cooler Water Nozzle Cleaning</b>	Name and Tag for the Equipment	Isolate the SOLENOID vale					Isolate the Water valve & Empty the same	Isolate the Air Valve & Empty out the same.
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### **JOB SAFETY ANALYSIS :( JSA)**

<b>Job Safety Analysis</b>	Job: Cooler water spray nozzle cleaning	Date: 01 – 10 - 2013	Analysis by:	Reviewed by: SECTION HEAD
Title of employee doing job : Section engineer	Supervisor: Section Engineer	Department: Mechanical	Section:	Approved by: HOD(MECH)

Reqd./recommended PPE's : Safety Helmet, Safety shoe, Hand Gloves, Safety goggles. Nose mask.

Sl. No	Sequence of Basic Job Steps	Potential Hazards	Recommended Safe Job Procedure	What could go wrong	Corrective action
1	Close the water line	Injury in hand	Use proper PPE	Injury by slip of tools	Allot trained workers to close the inlet valve
2	Release pressure by opening the safety valve	Blow out of pressure	Know the direction release	Sudden release of water	Stand by the side of valve to avoid sudden pressure release
3	Remove water hose from nozzle lance	Blow out of pressure	Ensure closing of inlet valve & opening of safety valve	Blow out of pressure	Use crow bars for opening
4	Loose all the wedges of the spray nozzle lancer.	Injury in hand	Use proper PPE	Injury by slip of tools	Allot trained workers
5	Remove the water spray nozzle lances.	Burn injury	Draft to be maintained. Use proper PPE	Hot dust may puff outside.	Allot trained workers



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6	Keep the dummy plate by locking with wedges.	Injury in hand	Use proper PPE	Injury by slip of tools	Allot trained workers
7	Connect the water line hose to the spray and open the valve for nozzle spray.	Eye/body injury	Ensure other persons not in opposite to the nozzle spray.	Hit of pressurized water.	Open valve slowly.

HEAD MECHANICAL

HEAD TECHNICAL