



MECHANICAL

Issue No. 01	Rev. No: 02	Effective Date: 17.10.2017	SOP/MEC/07
Issued By:		Approved By: HOD-Mechanical	
SOP-JSA SILO EXTRACTION GATE LUMPS REMOVAL WORK			

**SILO EXTRACTION GATE LUMPS REMOVAL WORK**

**Scope:** to remove the cement lumps from silo extraction gate

**Responsibility:** Maintenance Technician

**Accountability:** Mechanical-Section Engineer

**PPE:**

1. Safety helmet
2. Safety shoe
3. Nose Mask
4. Gloves
5. Goggles

**TOOLS:**

1. D – Spanner Set.
2. Ring Spanner set.
3. Poking Tools.

**Hazard Analysis:**

Risks associated:

Mitigating Measures

Rotation of the Equipment

Electrical Hazard:

Can be operated from remote

Engagement of clutch:

Inter lock to be ensured

Training needs:

1. Usage of tools and Nature of Hazards
2. Usage of PPE's

**Procedure:**

1. Line clearance to be taken for the whole silo extraction system and main dozing valve in open condition as per DCBL LOTO standard.
2. Check & Confirm the aeration from each gate and close all the related valves.
3. Close manual slide gate fully.
4. Take the pneumatic gate in local operation mode and keep the gate in open condition.
5. Open the inspection door of the air slide.



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6. Open the manual shut off gate gradually and remove the lumps. After the lumps get cleared fully and starts flashing, close the pneumatic gate.
7. Close the inspection door.
8. Reposition all the manual slide gate & aeration valves.
9. Reposition the Pneumatic gate and put in remote operation mode.
10. Return the line clearance.

**Emergency / Emergency Shut OFF:**

1. If any injury takes place, provide First aid and inform to the Safety department or Call Emergency number 3108/9865152222

**Records/Annexure:**

1. Silo Extraction Gate Cement Lumps removal procedure
2. JSA is enclosed below.

SL No	Activity	Isolation Matrix for Packing Plant									
		Isolation Type									
						<b>Electrical Energy</b>				<b>Other Energy</b>	
8	<b>EXTRACTION GATE CEMENT LUMPS REMOVAL</b>	Name and Tag for the Equipment		All Extraction Dousing valves(in Open condition)							



## DALMIA CEMENT (B) LIMITED – Ariyalur



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### SOP-JSA SILO EXTRACTION GATE LUMPS REMOVAL WORK

#### JOB SAFETY ANALYSIS :(JSA)

<b>Job Safety Analysis</b>	Job: Silo Extraction Gate Cement Lumps removal	Date: 20/08/2014	Analysis by: Section Engineer	Reviewed by: Section Head
Title of employee doing job:	Supervisor: Section Supervisor	Department: Mechanical	Section: Plant	Approved by: HOD-Mechanical
Req'd/recommended PPE: Safety helmet, Safety shoe, Nose mask & Goggle				
Sequence of Basic Job Steps	Potential Hazards	Recommended Safe Job Procedure	What Could Go Wrong	Corrective Action
Opening of inspection door	Flashing of cement.	1) Manual gate should be in closed condition. 2) Ensure the Pneumatic gate in local mode operation and bag filter group are in running condition for ventilation.	1) Eye irritation 2) Dust may flash	1) Use Safety goggles & Nose mask 2) Silo Bag filter fan in running condition. When jam removal job, exhaust fan should be in running condition.
Removal of lumps	Hand/Leg injury	1) Ensure the size of lumps while breaking 2) Handle the poking tool with care	Bigger size lumps may fall down.  Poking tool may fall down	Before removal of lumps confirm the size of lumps  Use appropriate tool handling technique.