



DALMIA CEMENT (B) LIMITED –DPM



MECHANICAL SOP

Issue No. 03	Rev. No: 00	Effective Date: 01.08.2016	SOP/MEC/
Issued By: M.R		Approved By: HOD (MECH)	
SOP for Kiln girth gear spray nozzle changing, pattern checking and cleaning			

Scope:

This SOP is applicable for Kiln girth gear spray nozzle changing, Pattern checking and cleaning safely.

Responsibility : Section Engineer – Mech

Accountability : Section head – Mech

PPE:

1. Helmet,
2. Safety shoe,
3. Goggles
4. Gloves.
5. Nose mask
6. Apron-Heat protection

Tools:

1. Spanner set.
2. Hammer.
3. Torch light.
4. Gas cutting tools.
5. Welding tools.

Hazards:

Risks associated

1. Body injury
2. Leg injury
3. Hand injury

Mitigating Measures

1. Safe and tested tools and tackles
2. On job training

Isolation matrix:

1. Energy Isolation of Kiln main drive and Auxiliary drive.
2. Energy Isolation of All kiln feed group Kiln Feed Elevator, Kiln feed RAV, Preheater Fan.
3. Energy Isolation of Cooler Drives, All cooler fans, Clunker crusher.
4. Energy Isolation of Fuel/Coal Feed Group Coriolis System –Agitator Drive, Multicore, Multi Cell, PA Fan, Turbo Blower.
5. Mechanical Isolation/Closing of Pneumatic Gates of Coal Bin Extraction system.



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Procedure:

1. Take proper work permit and Energy Isolation Permit as per work and safety standards.
2. Ensure Energy Lockout, Tag out, Try out and mains are switched off.
3. Ensure proper safety harness and PPE's.
4. Remove spray nozzle guard.
5. Check nozzle spray while running spray pumps.
6. Check spray pattern on template as per OEM instructions/guidelines.
7. Ensure compressed air supply is off while dismantling spray nozzle.
8. Dismantle all pipe line and hoses connected with spray nozzle.
9. Dismantle the spray nozzle (if necessary) for cleaning.
10. Replace new spray nozzle (if necessary) as per OEM instructions.
11. Refit all pipe line, hoses with spray nozzle and connect properly.
12. Check spray pattern as per OEM guidelines and instructions.
13. Ensure all checks spray nozzle inspection and replacement have done properly.
14. Clear the work permit, Energy isolation and inform to section Engineer/Section Head.

Emergency Shut- off:

1. In case of parts are moving, Emergency 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 555/222/9865155288.

Records/Annexure:

1. Refer Line clearance/permit in mech department.
2. JSA is enclosed below.



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JOB SAFETY ANALYSIS :(JSA)

Job Safety Analysis	Job:	Date:	Analysis by:	Reviewed by:
Title of employee doing job: Section Engineer	Supervisor: Section Head	Department: Mech	Section: PYRO	Approved by:
Req'd/ recommended PPE: Safety helmet, Safety shoe, Gloves, Goggles, Gloves& Nose mask				
Sequence of Basic Job Steps	Potential Hazards	Recommended Safe Job Procedure	What Could Go Wrong	Corrective Action
Inspection of spray nozzle	Compressed air/lube may injure Health, hand or body	Proper wearing of PPE's for safety	Compressed, air may injure hand or body	Ensure wearing of recommended PPE's
Inspection of spray pattern	Health, hand or body injury	Proper wearing of PPE's for safety	Grease may spill on body and hand	Ensure wearing of recommended PPE's
Spray nozzle replacement	Hand and leg injury	Use proper recommended tools and tackles	Tools may slip while changing nozzle	Ensure proper tools handling and job training