



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 tire chair plate Changing			

Scope:

This SOP is applicable for Kiln tire chair plate changing 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, Clinker 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 switched off.
3. Ensure proper cooling of kiln shell temperature.
4. Ensure proper safety harness belt, Gloves, while going for kiln shell top chair plate inspection.
5. Ensure proper welding machine and gas cutting machine safety.
6. Check chair plate, shim plate and air gap conditions as per OEM manual / instructions.
7. Cut chair plate keepers if required by gas cutting equipment.
8. Remove the chair plate.
9. Install new chair plate properly.
10. Install chair plate keepers and weld as per OEM instructions, guide lines properly.
11. Ensure proper cold gap after installation of chair plate as per OEM instructions
12. Provide shim plate if necessary as per OEM instructions.
13. Ensure all checks on chair plate 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 chair plates on top of kiln shell.	Fall of person From height	Proper Job training to be given	Working person may slip and fall from kiln shell top	Ensure wearing PPE's safety harness belt for height work.
Chair plate keepers cutting work	hand & body burn injury	Job training and wearing of PPE's	Person may get burn injury while hot material fall.	Ensure wearing PPE's safety harness belt for height work.
Replacing chair plate	hand & body injury	Use proper clamping /holding tools	Tools/Spanners may get slip and injure the body	Proper job training to be given
Welding of chair plate keepers	Electric shock, hand & body burn injury	Job training and wearing of PPE's	Person may get burn injury while welding	Ensure proper electric connections, PPE's for welding