



DALMIA CEMENT (B) LIMITED –DPM



MECHANICAL SOP

Issue No. 02	Rev. No: 00	Effective Date: 01.09.2016	SOP/MEC/
Issued By: M.R		Approved By: HOD (MECH)	
SOP for Roots blower filter cleaning, belt changing and blower changing			

Scope:

This SOP is applicable for Roots blower filter cleaning, belt changing and blower changing safely.

Responsibility : Section Engineer – Mech

Accountability : Section head – Mech

PPE:

1. Helmet,
2. Safety shoe,
3. Goggles
4. Gloves.
5. Nose mask

Tools:

1. Spanner set
2. Hammer
3. Chain pulley block
4. Coir/steel rope
5. D-shackles.

Hazards:

Risks associated

1. Fall of Material
2. Body injury
3. Leg injury
4. Hand injury
5. Moving equipment

Mitigating Measures

1. Safe and tested tools and tackles
2. On job training
3. Ensure Proper EIP /work permit

Isolation matrix:

1. Energy Isolation of Blower – Respective Blower.
2. Mechanical Isolation/Closing of Valves in the pipe line system.



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Procedure:

1. Take proper work permit and Energy Isolation Permit as per safety work standards.
 2. Ensure EIP and Lock Out and Try Out system.
 3. Dismantle the Filter cartridge /Cover.
 4. Inspect the filter element and clean.
 5. Inspect belt condition as per OEM/suppliers catalogue instructions.
 6. Replace the belt and align properly.
 7. Give proper tension as per supplier manual/catalogue.
 8. Inspect blower as per guide lines/standards.
 9. If required, change blower by dismantle drive belt and other connections, inlet and delivery pipelines as per blower manual.
 10. Install new /reconditioned blower by instructions given in manual.
 11. Install pulley/belt and align as per supplier manual.
 12. Check oil/lubrication and fill if necessary.
 13. Close the guard/cover.
 14. After checking all guide lines as per OEM manual, clear all work permits /EIP.
 15. Take trial/idle run.
 16. Check any abnormality, correct if necessary.
 17. Clean and remove scrap, oil, wastage etc.,
 18. Give line clearance to section Engineer/Section Head.
1. **Emergency Shut- off:**
 2. In case of parts are moving, Emergency switch should be activated by the person. 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.

JOB SAFETY ANALYSIS :(JSA)



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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
Filter Dismantling/Cleaning	hand & body injury	Ensure usage of proper tools	Tools/Spanners may get slip and injure the body	Use standard /Certified tools with work proper instructions.
Replacing Belt	hand & body injury	Ensure skilled persons on the job	While fixing the belt on pulley person may get hand injury	Skilled persons /Job training to be given
Tensioning of belt	hand & body injury	Use proper tensioning tools as per suppliers catalogue	Tools/Spanners may get slip and injure the body	Ensure proper PPE's
Replacing/Installing blower	hand & body injury	Use proper tools as per suppliers catalogue	Tools/Spanners may get slip and injure the body	Use standard /Certified tools with work proper instructions.