



DALMIA CEMENT (B) LIMITED –DPM



MECHANICAL SOP

Issue No. 02	Rev. No: 01	Effective Date: 22.05.2015	SOP/MEC/45
Issued By: S & P		Approved By: Head- Mech	

VRM INSPECTION

Scope: To inspect the Mill internals

Responsibility: Engineer/SH

PPE:

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

TOOLS:

1. spanner set
2. 24v lamp

Hazard Analysis:

Risks associated:

Excess Temperature

Fall of material

Contact of hot bodies

Dusty atmosphere

Mitigating Measures

Maintain atmospheric temperature

clean the pressure frame

use apron

maintain the draft to the required

Procedure:

- a. Stop the mill and take work permit as per LOTO standards
- b. Use PPE's while working.
- c. Ensure from CCR, for roller position to be ZERO.
- d. Open all inspection doors (scraper chamber, main door, torque support pin inspection door, classifier inspection door).
- e. Check the scraper chamber for bend, liner wear and bolts.
- f. Check the gap between scraper and sideler and also gap between scraper and bottom liner.
- g. In order to avoid leakages check the sealing between rotor and liner in scraper chamber.
- h. Clean the table and do wear checking with table template, and also for roller wear checking at different positions if required as per schedule.
- i. Check 'Y' bush and pin are in its position between pressure frame outer straps.
- j. Check the inner and outer stopper plates, bolt and nuts.



DALMIA CEMENT (B) LIMITED –DPM



MECHANICAL SOP

Issue No. 02	Rev. No: 01	Effective Date: 22.05.2015	SOP/MEC/45
Issued By: S & P		Approved By: Head- Mech	

VRM INSPECTION

- k. Check the feed pipe wearing.
- l. Check the roller guard position and its bolt.
- m. Check the all liner housing bolts.
- n. Check the damp ring and nozzle ring gaps. if there is any gap fill it with welding.
- o. Check the water spray nozzles and pipe line guard.
- p. Check the cracks in all the buffer bolt caps and liner plates.
- q. Check the seal air pipeline.
- r. Check the tightness of classifier flange bolts if required.
- s. Check the grease line at classifier shaft bottom dummy plug.
- t. Check the nitrogen pressure in all torque support buffer if required.
- u. Check the nitrogen pressure in all cylinder accumulators if required.
- v. If any abnormality found do the necessary actions as per the OEM manuals
- w. After checking the internals once again check for missed out tools and tackles inside mills, if any remove it.
- x. Close the all inspection doors (classifier, main door, torque support buffer inspection door, scrapper chamber).
- y. Clear the line clearances and inform to the CCR.

Emergency Shut- off:

If body injury is there, First aid will be given and inform to the Safety department or Call Emergency number - 222/9865125176/9865177444.

Records/Annexure:

Refer LOTO standards/permit & JSA is enclosed below.



DALMIA CEMENT (B) LIMITED –DPM



MECHANICAL SOP

Issue No. 02	Rev. No: 01	Effective Date: 22.05.2015	SOP/MEC/45
Issued By: S & P		Approved By: Head- Mech	

VRM INSPECTION

JOB SAFETY ANALYSIS :(JSA)

Job Safety Analysis	Job: inspect the Mill internals	Date: 01 – 06 - 2012	Analysis by SECTION ENGINEER	Reviewed by: SECTION HAED
Title of employee doing job : Section engineer	Supervisor: Section Engineer	Department: Mech	Section:	Approved by: HOD
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	De-pressurizing the Tension Hydraulic pressure	Injury	Ensuring the pressure zero from CCR & then Take Permit	The pressure of oil may injury the person who is opening the pipe	Release airlock or vent out the pressure
2	Opening and closing the manual doors	Body injury	Open the door carefully	If forcedly opened, may hit body	Don't open all the bolts try to keep one bolt loosen
3	Chances of falling inside the Flap valve chute	Fall from height	Barricade to be done around the chute hole/ Hole to be covered with deck sheet	Man may fall at the opening of scraper chamber	Opening should be temporarily closed or barricaded
4	Fall of material	Injury	While working in scrapper chamber, no movement of men in grinding chamber	If other person working at scraper chamber material may fall on them	Care should be taken to allow the persons to work in single area
5	checking of Nitrogen pressure	Hand injury	Ensure the hose fittings are proper	Sudden release of nitrogen	Airlock to be released or venting to be done
6	Planning for height work	Body injury	Ensure that height work permit is taken before start of the job.	Fall of person from height, Fall of material	Skilled and trained manpower is to be deployed



DALMIA CEMENT (B) LIMITED –DPM



MECHANICAL SOP

Issue No. 02	Rev. No: 01	Effective Date: 22.05.2015	SOP/MEC/45
Issued By: S & P		Approved By: Head- Mech	

VRM INSPECTION

		Poor visibility	Ensure illumination more than 50 lux to ensure clear vision while working at night.	Person may fall	Suitable lighting to be provided
7	Use of PPEs and other fall arresting requirement	injury	Use of safety belt above 1.5 mt height is to be mandatory implemented. Only full body double lanyard Safety Belt is to be used .Safety shoes and helmet is also to be worn. All PPEs to be checked before use.	Fall of person from height/falling of object.	Confirm to work at Loto standard Ensure use of fall arrester for vertical movement and lifeline for horizontal movement. Safety net is also to be used as per site conditions

HEAD MECHANICAL

HEAD TECHNICAL