



DALMIA CEMENT (B) LIMITED–Ariyalur

MECHANICAL SOP

| | | | |
|-----------------------|--------------------|--------------------------------------|--------------------|
| Issue No. 02 | Rev. No: 00 | Effective Date: 1.11.2019 | SOP/MEC/019 |
| Issued By: M.R | | Approved By: HOD Mechanical | |

LS CRUSHER ROTOR BEARING REPLACEMENT

Scope: To replace crusher rotor bearing

Responsibility: Engineer/SH

PPE:

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

TOOLS:

6. Screw driver
7. spanner set
8. Hydraulic puller.
9. Hydraulic jack
10. Hydra.

Hazard Analysis:

Risks associated:

Fall of Pulley/ringleader
Fall of tools;
Struck on rotor

Mitigating Measures

Use correct methods to remove
Carry the tools in tool bags
Lock the rotor

Procedure:-

- a. Take the line clearance for the drive.
- b. The line clearance paper should be with the person who is working in the site.
- c. Take the confined work area from the relevant department and allow the people to work.
- d. Use PPE'S while working.



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- e. Removal of the drive guard.
- f. Removal of V-Belts
- g. Removal of ring feeder.
- h. Removal of V. pulley.
- i. Dismantling of bearing housing-foot bolts.
- j. Lift the rotor with the help of hydraulic jack.
- k. Opening of bearing housing and exposing of withdraw sleeve threads.
- l. Arrange the two high pressure hand pumps and pulling out the withdrawal sleeve during further screwing on of the pull-off nut with the striking face wrench.
- m. Dismantling of self-aligning roller bearing from bearing housing.
- n. Removal of self-aligning roller bearing from bearing housing.
- o. Place the bearing & sleeve.
- p. Place the Housing and Cover.
- q. Place the Drive guard.

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:

The maintenance history to be maintained in the common drive



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JOB SAFETY ANALYSIS :(JSA)

| Job Safety Analysis | | Job: LS Crusher Rotor Bearing replacement. | Date: 01 – 09 - 2012 | Analysis by: Section Engineer | Reviewed by: Section Head |
|--|-----------------------------|--|--|----------------------------------|---|
| Title of employee doing job : Section engineer | | Supervisor: Section Engineer | Department: Mechanical | Section: RMH | Approved by: HOD |
| Reqd./recommended PPE's : Safety Helmet, Safet 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 | Removal of Drive guard | Major Injury | Use proper PPE | Slip/fall of guard | Allot trained workers |
| 2 | Removal of V belts | Hand injury | Use proper tools | Struck of hand | Remove from small pulley first by loosening the motor base. |
| 3 | Removal of ring feeder | Major injury | Use proper tools & PPE | Sudden release of ring feeder | Don't stand opposite to ring feeder & use a stopper. |
| 4 | Lifting of rotor | Major injury | Use proper tested hydraulic jack & PPE | Injury by slip of jack | Allot trained workers |
| 5 | Removal of sleeve. | Body injury | Use proper tools | Fall of sleeve | Allot trained workers |