DalmiaBHARAT CEMENT

DALMIA CEMENT (B) LIMITED-Ariyalur



MECHANICAL SOP

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.



DALMIA CEMENT (B) LIMITED-Ariyalur



MECHANICAL SOP

Issue No. 01	Rev. No: 02	Effective Date:	SOP/MEC/019
		17.10.2017	

Issued By: M.R Approved By: HOD Mechanical

LS CRUSHER ROTOR BEARING REPLACEMENT

- 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.
- I. 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



DALMIA CEMENT (B) LIMITED—Ariyalur



MECHANICAL SOP

Issue No. 01 Rev. No: 02 Effective Date: SOP/MEC/019 17.10.2017

Issued By: M.R Approved By: HOD Mechanical

LS CRUSHER ROTOR BEARING REPLACEMENT

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.

SI. 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