



## DALMIA CEMENT (B) LIMITED – Ariyalur

### MECHANICAL

Issue No. 02	Rev. No: 00	Effective Date: 01.11.2011	SOP/MEC/013
Issued By: M.R		Approved By: HOD-Mechanical	

### CIRCULAR / COAL / ADDITIVE RECLAIMER CHAIN CONVEYOR LINK / CHAIN / BUCKET REPLACEMENT.

**Scope:** To replace chain bucket of Reclaimer

**Responsibility:** Engineer/SH

**PPE:**

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

**TOOLS:**

1. spanner set
2. Tensioning tool
3. Crowbar
4. Lamp
5. Hydraulic pusher

**Hazard Analysis:**

**Risks associated:**

**Mitigating Measures**

Fall of material

lock the chain with chain block/ turn buckle

**Procedure:**

- a. Position the damaged portion of the link/chain/bucket.
- b. Stop the Reclaimer chain drive and take the work permit as per LOTO standards.
- c. Use PPE'S while working.
- d. Loose the tensioning arrangement of the conveyor.
- e. Dismantle the damaged bucket / pin / chain with hydraulic pusher & chain block.
- f. Fix the new pins / chain / bucket with the hydraulic pusher & chain block.
- g. Tension the chain as per the requirement.
- h. Arrange to check the tightness of all the fasteners with lock nut.
- i. Tack weld the bucket fasteners and ensure that the locking 'G' clips are intact.
- j. Clear LOTO & permit
- k. Lubricate the chain & Ensure all links & buckets are in condition.



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#### Emergency Shut- off:

If any injury takes place, provide First aid and inform to the Safety department or Call Emergency number 3108/9865152222.

#### Records/Annexure:

#### **JOB SAFETY ANALYSIS :( JSA)**

<b>Job Safety Analysis</b>		Job: Reclaimer chain bucket replacement.	Date: 27/04/2013	Analysis by: Section Engineer	Reviewed by: Section Head
Title of employee doing job : Section engineer		Supervisor: Section Engineer	Department: Mechanical	Section:	Approved by: HOD-Mechanical
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	Removal of Bucket	Hand Injury	Ensure equipment not in tension.	Slip/fall of bucket	Hold with proper arrangement.
2	Removal of Pin	Hand injury	Use proper tools	Struck of hand	Competent person to perform.
3	Tensioning of chain	Injury	Release tension & apply LOTO	Mechanically may struck up /tension	Release the same with proper tools before start.
4	Tack weld the bucket fasteners	Electrocution	Proper direct earthing to the equipment Use of leather hand gloves		



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### **CIRCULAR / COAL / ADDITIVE RECLAIMER CHAIN CONVEYOR LINK / CHAIN / BUCKET REPLACEMENT.**

<b>RMH Isolation Matrix</b>								
<b>SL No</b>	<b>Activity</b>		<b>Isolation Type</b>					
			<b><i>Electrical Energy</i></b>			<b><i>Other Energy</i></b>		
<b>1</b>	<b><i>Circular reclaimer maintenance</i></b>	<i>Name and Tag for the Equipment</i>	<b><i>reclaimer harrow drive</i></b>		<b><i>scraper chain drive</i></b>		<b><i>circular traveling drive</i></b>	<b><i>chain tensioning device pump pressure to be made zero and pump to be locked</i></b>