# **Dalmia**BHARAT CEMENT

#### **DALMIA CEMENT (B) LIMITED, Ariyalur**

#### **Mechanical SOP**



Issue No:01 Rev No:02 Effective Date: 17/10/2017 SOP/MEC/25

ISSUED BY: (MR) APPROVED BY: HOD Mech.

#### SOP FOR CLEARING ROTARY AIR LOCK

**Scope**: This SOP is applicable for Safe working of Mill Feed rotary air lock jam clearing Work

**Responsibility:** Section Engineer.

Accountability: Section Head

PPE:

1. Safety helmet

2. Safety shoe

3. Dust mask

4. Cotton Knitted hand Gloves

5. Ear Plug

6. Full Body harness

7. Goggles

**Tools:** 

1. Spanner set-1 no

2. 10 Ton Jack -1no

**Hazards:** 

Risks associated Mitigating Measures

Hot gas and Fine Dust Wear Goggles and Dust Mask

**Training needs:** 

1. Emergency preparedness

2. On job training

#### **Isolation Required:**

Rotary air lock

#### **Procedure**

- 1. Ask CCR people to keep RAL in local mode.
- 2. Rotate RAL in reverse/forward direction wherever it trips with wet/lump material.
- 3. If it does not rotate, take LOTO permit.
- 4. Lock the rotor blade with locking bolt (locking bolts are in casing).
- 5. Open RAL side door and remove accumulated material.
- 6. Don't send persons inside RAL casing.
- 7. After removing the jam material, check the RAL blades condition and gap.
- 8. Clear LOTO permit and rotate in reverse direction in local mode.
- 9. Check the current at empty load.
- 10. When RAL is free, close the man whole door and ask the CCR people to take it in sequence.

## **Emergency / Emergency Shut OFF:**



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

#### **Records/Annexure:**

- 1. Refer Line clearance certificates.
- 2. JSA as enclosed below



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## **Job Safety Analysis:**

Job Safety	Job: RAL Jam	Date: 01/09/2014	Analysis by: Section	Reviewed by:
Analysis	Clearing		Engineer	Section Head
Title of employee doing job: <b>Fitter</b>	Supervisor: Section Sr. Engineer (Mech.)	Department: Mechanical	Section: VRM'S	Approved by: HOD mech.

## Req'd /recommended PPE:

Sequence of Basic Job Steps			What Could Go Wrong	Corrective Action		
Rotate RAL in reverse/forward direction wherever it trips with wet/lump	Minor Injury	Ensure the inspection door & coupling guard is in closed condition	To remove choke work men may open the inspection door & operate the RAL	Engage trained workmen.  Continuous supervision of site engineer is required		
material			Contact of body parts with rotating equipment.			
Open RAL side door and remove	Injury / fracture	Ensure LOTO procedure	Slippage of tools.	Engage trained workmen.		
accumulated material.		& rotor is locked at blades to casing to avoid movement		Use PPE		
Rotate in reverse /forward direction in local mode.	Minor Injury	Ensure the inspection door is in closed condition	To remove choke work men may open the inspection door & operate the RAL	Engage trained workmen.		
			Contact of body parts with rotating equipment.	supervision of site engineer is required		



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# solation Matrix:

S. N o	Activity	Tag / Name of the Equipment							
		Isolation Type							
		Electrical Energy	Other Energy						

1 RING ROTA RY AIR	CLEA RING ROTA	Name and Tag for the Equipment	361MD2 / Mill Main Motor	361SR1 / Clasifier	361FN3/ Raw Mill Fan			
		Name and Tag for the Equipment	371FN3 / Booster fan					