



## DALMIA CEMENT (B) LIMITED – ARIYALUR

### MECHANICAL SOP

Issue No. 02	Rev. No: 00	Effective Date: 01/11/2019	SOP/MEC/089
Issued By: M.R		Approved By: HOD Mechanical	
KILN THRUST ROLLER MAINTENANCE			

#### Scope:

This SOP is applicable for KILN THRUST ROLLER MAINTENANCE.

**Responsibility** : Section Engineer – Mech

**Accountability** : Section head – Mech.

#### PPE:

1. Helmet,
2. Safety shoe,
3. Goggles
4. Gloves.
5. Nose mask
6. Full body harness.

#### Tools:

1. Spanner set
2. Hammer

#### Hazards:

##### Risks associated

1. Body injury
2. Leg injury
3. Hand injury

##### Mitigating Measures

1. Safe and tested tools and tackles
2. On job training

#### Isolation matrix:

Sl: No	Activity	Description	Electrical Energy			Other Energy	
1	kiln THRUST ROLLER CHECK	Name and Tag for the Equipment					
				(461KL1 ) Kiln main drive	(461AD1 ) Kiln aux	Take out DG ISOLATION OR PROVIDE STOPPERS IN BETWEEN TYRE AND ROLLER	

#### Procedure:



## DALMIA CEMENT (B) LIMITED – ARIYALUR

### MECHANICAL SOP

Issue No. 02	Rev. No: 00	Effective Date: 01/11/2019	SOP/MEC/089
Issued By: M.R		Approved By: HOD Mechanical	
KILN THRUST ROLLER MAINTENANCE			

### **SOP for the Maintenance of Kiln thrust roller**

1. Take the line clearance with LOTO system
2. The line clearance paper should be with the person who is working in the site.
3. Take work permit for the work area with the relevant department and allow the people to work.
4. Use ppe's while working.
5. Ensure / release hydraulic pressure to zero for safe working
6. Check the oil level of the bearings
7. Ensure proper tightening of all the hydraulic line fittings.
8. Check the condition of piston seals for any leakages.
9. Check the condition of the roller for free movement.
10. Check and replace the pressure and return line filters if required.
11. Check and fill the nitrogen accumulator for proper functioning.
12. After checking and tightening of all hydraulic accessories clear the pump line clearance and start the pump for 40 bars and check the condition of the cylinder for few minutes for any abnormalities. If found satisfactory release the pressure.



## DALMIA CEMENT (B) LIMITED – ARIYALUR

### MECHANICAL SOP

Issue No. 02	Rev. No: 00	Effective Date: 01/11/2019	SOP/MEC/089
Issued By: M.R		Approved By: HOD Mechanical	
KILN THRUST ROLLER MAINTENANCE			

13. Remove all unwanted and scraps material from the area.

14. After completion clear the line clearance.

#### Emergency / 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:

1. Refer Line clearance/permit in mech department.
2. JSA is enclosed below.

#### JOB SAFETY ANALYSIS :( JSA)

Job Safety Analysis	Job: Kiln Thrust Roller Maintenance.	Date: 01/09/2014	Analysis by: Section Engineer	Reviewed by: Section Head
Title of employee doing job: Section Engineer	Supervisor: Section Head	Department: Mech	Section: PYRO	Approved by: HOD-Mechanical
Req'd/ recommended PPE: Safety helmet, Safety shoe, Gloves, Goggles, Gloves, Nose mask & Full body harness				
Sequence of Basic Job Steps	Potential Hazards	Recommended Safe Job Procedure	What Could Go Wrong	Corrective Action
Opening of the inspection door	hand injury	Use proper tools and tackles so that fasteners will not slip	Fasteners may slip and tools may hit to the hand and leg	Ensure Use/working condition of TOOLS AND TACKLES.
Internal and cone side graphite check	Head and injury	Use proper protection for head to avoid direct intact with kiln shell.	Inaccessible as head and body may hit to the shell	Ensure utmost care while checking the thrust roller.
Close the door	hand injury	Use proper tools and tackles so that fasteners will not slip	Fasteners may slip and tools may hit to the hand and leg	Ensure Use/working condition of TOOLS AND



## DALMIA CEMENT (B) LIMITED – ARIYALUR

### MECHANICAL SOP

Issue No. 02	Rev. No: 00	Effective Date: 01/11/2019	SOP/MEC/089
Issued By: M.R		Approved By: HOD Mechanical	
KILN THRUST ROLLER MAINTENANCE			

				TACKLES.
--	--	--	--	----------