



DALMIA CEMENT (B) LIMITED – ARIYALUR

MECHANICAL SOP

Issue No. 02	Rev. No: 00	Effective Date: 01.11.2019	SOP/MEC/091
Issued By: M.R		Approved By: HOD Mechanical	
KILN Shell Maintenance			

Scope:

This SOP is applicable for kiln shell maintenance safely.

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
3. Feeler gauge
4. Wire or nylon rope

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 shell maintenance	Name and Tag for the Equipment	(461KL1) Kiln main drive	(461AD1) Kiln aux drive	Take out DG ISOLATION OR PROVIDE STOPPERS IN BETWEEN TYRE AND ROLLER- (During rotation for checking of shell ovality remove stopper & rotate with DG)



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SOP FOR Maintenance of Kiln Shell

1. Take the energy isolation permit as per the above matrix
2. The line clearance paper should be with the person who is working in the site.
3. Take the work permit from the relevant department and allow the people to work.
4. Use ppe's while working.
5. Provide life line over the Kiln properly.
6. Provide staging for the respective areas for checking if required.
7. Check the condition of the shell for any ovality.
8. Check all shell joints welding for any cracks with ultrasonic testing.
9. Check shell condition at tyres position for any abnormality.
10. After completion all the maintenance activities take out all unwanted and scrap material from the area.
11. Clear the line clearance



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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 Shell Maintenance	Date: 1/09/2014	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
Providing life line over the tyre	Body and hand injury	Use proper tools and tackles so that person will not slip	person may slip and fall	Ensure Use/working condition of TOOLS AND TACKLES.
Check for shell joints, thickness & condition	Body injury, hand injury & leg injury	Use life line & full body harness	Over the kiln shell person may slip & fall	Ensure Use of life line & full body harness
Checking of ovality	Body injury, hand injury & head injury	Ensure no one working inside kiln, cooler & in cyclone area while rotate by DG	Any other separate work may go inside or other area during rotation	Ensure no one is working inside kiln, cooler & in cyclone area while rotate by DG & get



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			accidents may happen	the clearance from respective dept before rotation
Checking of ovality	Body injury, hand injury & head injury	Use proper protection for head to avoid direct intact with kiln shell during rotation kiln for checking ovality reading in different location	Inaccessible as head, hand and body may hit or stuck to the shell gap during DG rotation	Ensure utmost care while checking the thrust roller.
Removal of the life line	Body and hand injury	Use proper tools and tackles so that person will not slip	person may slip and fall	Ensure Use/working condition of TOOLS AND TACKLES.