



DALMIA CEMENT (B) LIMITED – Dalmiapuram



MECHANICAL SOP

Issue No. 02

Rev. No: 01

Effective Date: 22.05.2015

SOP/MEC/14

Issued By: S & P

Approved By: Head – Mech

Scaffolding work in Cyclone

**SAFETY STANDARDS
On
Scaffolding work in Cyclone**

**PREPARED BY
DCBL - DALMIAPURAM**

Scope : This SOP is applicable to Safe working for Cyclone scaffolding

Responsibility : CCR executive.

Accountability : Section Head – Pyro.

PPE:

1. Goggles
2. Nose mask,
3. Helmet
4. Safety Shoe
5. Safety belt

Tools:

1. Box Spanner set
2. Ring Spanner set
3. Scaffolding pipes, clamps and scaffolding grits
4. 24v halogen lamp.

Hazards:

Risks associated

Mitigating Measures

Fall from height

Use Proper safety belt.

Scaffolding pipe may slip

Tie with rope.

Scaffolding clamp, grit may slip from hand

don't allow any person in downstream.

Scaffolding may collapse

Use proper clamps and check the tightness

Training needs:

1. Fire fighting
2. Emergency preparedness
3. Air blaster operation
4. Confined space entry

Procedure:

1. Take proper work permit from the department.
2. Check the oxygen level in the cyclone.
3. First-aid box should be available.
4. All first-aid medicines are to be readily available in the box.
5. Isolate the NLG for all cyclones.
6. All Air blasters should be de-energized and residual air must be vent out and all airline valves must be closed fully without leakage.
7. Before entering in to the particular cyclone, check all the cyclones. If there is any coating formation in any cyclone, Remove the coating or build up.
8. Person who is going to work in the cyclone should be certified to work at height.
9. Dummy the feed pipe which is feeding to the particular cyclone.
10. Dummy the cone portion of the particular cyclone.
11. Use safety belt and rope ladder for dummying the cyclone.
12. All the work should be supervised by process person.
13. After completion of the scaffolding, it should be certified as per DCBL scaffolding standard.

Emergency / Emergency Shut OFF:

1. If burn injury is there, give First aid and inform to the Safety department or Call Emergency number 222/9865125176/9865177444.
2. If any hose pipe got punctured or busted, then stop UT pump with the Emergency switch.

Records/Annexure:

1. Refer Line clearance certificates.

2. JSA as enclosed below.

JOB SAFETY ANALYSIS:(JSA)

Job Safety Analysis	Job: Scaffolding work in cyclones	Date: 25/02/2013	Analysis by: Section Engineer	Reviewed by: Section Head
Title of employee doing job:attendants.	Supervisor: Section Engineer	Department: Production	Section: PYRO	Approved by: Department Head

Req'd/recommended PPE: Safety helmet, Safety shoe, Mask, safety goggles & Asbestos Gloves.

Sequence of Basic Job Steps	Potential Hazards	Recommended Safe Job Procedure	What Could Go Wrong	Corrective Action
Put on PPE	Dust emission	Check the cyclones before entering.	Coating may collapse from Roof and raiser ducts.	Inspect all cyclones before entering in to kiln, if there is any coating remove the coating.
Closing the air blaster valves	Body Injury	Close the Air line inlet valve to the canon. Empty air canon and ensure that it is emptied by opening the vent line or from the pressure gauge No other persons should be permitted near the door area (3m distance). Open the door after the above slowly.	If any air blaster operates if the person inside the cyclone, it leads to injure the person.	Close all air blasters, vent out the residual air if any. Keep the vent valve open
Dummy the feed entry and exit area	Person may fall , material may fall.	Remove the coating, accumulation above the cyclone. Dummy the feed pipe,conical portion with MS sheet	Material or bricks fall from height	Ensure all coating, accumulations removed from the cyclones.
Entering in to the cyclone	Material may flush from cyclones	Check all pre heater cyclones and raiser ducts before entering in to the cyclone.	If there is any coating accumulation in the cyclone, it may collapse.	Clear the coating or accumulation before entering in to the cyclone
Making scaffolding	Scaffolding may collapse Scaffolding pipe may slip	Make scaffolding as per DCBL standard. Tie the pipe with nylon rope to avoid the pipe fall	Scaffolding may collapse Scaffolding pipe may hit the person	Cross check the scaffolding as per the standard. Hazards to be explain to the workers through PEP talk.

Inspection of the kiln	Coating may collapse inside the kiln	If the coating is abnormal, remove the coating with experts then only inspect.	Coating may fall on the person	Check the coating thickness, how strong it is.if it is weak, remove the coating and check the kiln.
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HEAD MECHANICAL

HEAD TECHNICAL