



**DALMIA CEMENT (B) LIMITED – CEMENT PLANT
ARIYALUR
MECHANICAL DEPARTMENT**



Issue No. 01	Rev. No: 02	Effective Date: 17/10/2017	SOP/MECH/093
Issued By: M.R		Approved By: HOD Mechanical	
SOP FOR ASSEMBLY OF KILN BURNER PIPE			

Scope : This SOP is applicable to Safe working for Assembly of Kiln burner pipe.

Responsibility : **Section Engineer – Mech**

Accountability : **Section Manager - Mech**

PPE:

1. Helmet,
2. Safety shoe,
3. Safety belt,
4. Safety goggles.
5. Asbestos Gloves.

Tools:

1. 10T chain block-2nos
2. 5T chain block -2 nos
3. Nylon belt slings-4Nos.
4. Max puller -10T
5. Grinding machine
6. Box Spanner set
7. Ring Spanner set

Hazards:

Risks associated

Body injury

Mitigating Measures

- 1.Safe and tested tools and tackles
2. on job training

Training needs:

1. Fire fighting
2. Emergency preparedness
3. Max puller operation
4. Assembly procedure

Procedure:

1. Use Proper PPE & tools



**DALMIA CEMENT (B) LIMITED – CEMENT PLANT
ARIYALUR
MECHANICAL DEPARTMENT**



Issue No. 01	Rev. No: 02	Effective Date: 17/10/2017	SOP/MECH/093
Issued By: M.R		Approved By: HOD Mechanical	
SOP FOR ASSEMBLY OF KILN BURNER PIPE			

2. Take work permit from safety dept as per the work condition.
3. Check the tools working condition before start up the job.
4. Use proper deshackles before putting into operation
5. Ensure availability of Puller pin for locking.
6. Check the lubrication condition of the wire rope slings
7. Lock properly at both ends of the machine
8. Apply load equally on both ends
9. Ensure Push and Pull load condition
10. Don't stand beside the loading slings
11. Pull out the material carefully by applying equal load with max puller
12. Take out the material carefully and place on safety blocks in proper manner
13. Check the condition of the stoppers if requires grind and adjust the radial gap carefully.
14. Push the internal pipe to the required position and then check the radial gap as required.
15. After final check up tighten all the fasteners to the required torque.
16. Place the burner aside carefully and take out all chain blocks and max puller.
17. Ensure cleaning of working area after completion of the assembly.
18. Return the permits to the concern engineer.



**DALMIA CEMENT (B) LIMITED – CEMENT PLANT
ARIYALUR
MECHANICAL DEPARTMENT**



Issue No. 01	Rev. No: 02	Effective Date: 17/10/2017	SOP/MECH/093
Issued By: M.R		Approved By: HOD Mechanical	
SOP FOR ASSEMBLY OF KILN BURNER PIPE			

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: burner pipe assembly	Date: 01 – 09 - 2014	Analysis by: Section Engineer	Reviewed by: Section Head
Title of employee doing job: Section Engineer	Supervisor: Section Engineer	Department: Mech	Section: PYRO	Approved by: HOD-Mechanical.
Req'd/recommended PPE: Safety helmet, Safety shoe, Safety goggles & Asbestos Gloves.				
Sequence of Basic Job Steps	Potential Hazards	Recommended Safe Job Procedure	What Could Go Wrong	Corrective Action
Shifting of Castable burner pipe to the assembling area	Leg and hand injury	Use trolley to shift the castable burner pipe to the working spot 2.use max puller for pulling to the assembling point	Burner pipe may rotate/unbalance and may fell down	1.Ensure Use/working condition of burner pipe shifting trolley or template supporting structure 2.Use max puller of 10T capacity only with suitable pin and locking system
Position of the chain blocks to lift the burner pipe for levelling	Leg and hand injury	Use correct lifting Tackles Teflon/wire rope slings	Chain block may slip and fall while positioning	1.Check the condition of the ropes and slings 2.Check the correct size of slings to operate/actual capacity and ensure certificate of clearance.
Grinding the stoppers and adjustment of the central body screws for radial gap	Eye and body injury	Use proper guarding/locking and tested grinding machine	1.Wheel may slip out from the machine	1. Check the guarding /certificate of clearance before start up the job



DALMIA CEMENT (B) LIMITED – CEMENT PLANT
ARIYALUR
MECHANICAL DEPARTMENT



Issue No. 01	Rev. No: 02	Effective Date: 17/10/2017	SOP/MECH/093
Issued By: M.R		Approved By: HOD Mechanical	
SOP FOR ASSEMBLY OF KILN BURNER PIPE			

Position of the Max puller to pull out the inside pipe	Body injury	<p>2.Ensure life of the grinding wheel</p> <p>Do not apply excess load when takes more load while pulling</p> <p>2.Use max puller of 10T Capacity only</p>	<p>2.Electrical shock</p> <p>Wire sling may get slip/cut while load exceeds.</p>	<p>2.check the expiry date of the grinding wheels</p> <p>Check whether it is locked on both sides equally or not and also ensure fixing of pin</p>
Position of the Max puller for pushing the pipe inside.	Body injury	<p>Do not apply excess load when takes more load while pushing</p> <p>2.Use 10T max puller only</p>	<p>Wire rope may get slip/cut while applying load</p>	<p>1.Check whether it is blocked with any foreign material</p> <p>2.Check the Condition of the internal surface before assembly</p> <p>3.donot stand beside the max puller</p>
Position of the burner pipe after assembly with the proper safety blocks	Leg injury	<p>Provide safety blocks around the support</p>	<p>Burner pipe may rotate and unbalance</p>	<p>1.Ensure suitable template blocks are available or not</p> <p>2.Lock the assembled burner pipe with lifting tackles additionally</p>