



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



Issue No: 01	Rev. No: 02	Effective Date: 17.10.2017	SOP/MECH/125
Issued By: M.R		Approved By: HOD - Mechanical	
SOP FOR LATHE MACHINE OPERATION			

Scope:

To operate lathe machine for the given job

Responsibly:

Engineer/SH

PPE:

Safety helmet
Safety shoe
Safety Goggles

Tools:

Chuck key
Spanner set
Surface gauge
Coolant
Lighting
Cutting tools
Brush
Spanner set

Hazard Analysis:

Risks associated:

1. Hot chips
2. Moving parts

Mitigating Measures

1. Goggles & gloves
2. Maintain distance from machine



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Procedure:

1. Clean the machine and lubricate on required parts
2. Get the approval requisition form for doing the job
3. Load the job between the chuck and tail stock
4. Tighten the job firmly between the chuck and tail stock
5. Set the job by using surface gauge / dial gauge
6. Use appropriate tool as per the job and with proper ration of coolant
7. Check all the bolts tightness before starting the job , '
8. Use chip breakers for tools to avoid continued chips
9. While checking the dimensions switch off the machine
10. Don't allow unauthorized persons inside the machining zone while operation is going on.
11. At any point of time do not stop the machine with hands, let the machine stop on its own.
12. Do not change the gears or levers while the machine is under operation.
13. Use proper coolant on the machining surface
14. Clean the chips with use of brushes
15. Do not hold the job or machined chips with bare hands
16. Stop the coolant before completion of the job
17. After completion of the job, keep all the gears and levers in neutral position
18. Switch of the main when the machine is not under operation
19. Remove the chips from the lathe bed and ground.
20. Check for the dimensions and check it with the required / drawing.
21. Fill the register for with the operation and other requirement

Emergency / Emergency Shut OFF:

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



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Records/Annexure:

1. JSA as enclosed below.

JOB SAFETY ANALYSIS: (JSA)

Job Safety Analysis	Job: lathe operation	Date: 20.11.2014	Analysis by: Section Engineer	Reviewed by: Section Head
Title of employee doing job: Section Engineer	Supervisor: Section Head	Department: Mechanical	Section: all area	Approved by: HOD Mechanical
Req'd/recommended PPE: Helmet, Shoe, Nose mask, Cotton Gloves, Ear plug, Safety belt, Goggles				
Sequence of Basic Job Steps	Potential Hazards	Recommended Safe Job Procedure	What Could Go Wrong	Corrective Action
Tools handling	Hands injury	Use Hand Gloves	Hands may injury	Use type of gloves accordingly.
Fall of small objects	Equipment damage.	Use proper Holding ropes other than lifting	Holding tool may failure..	Check physically before use
Fall of object from base/ Hanging	Equipment damage	Check the base capability for handling the same.	Hooks welding may failure	Check before hanging / using.