



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



Issue No. 01	Rev. No: 02	Effective Date: 29.09.2017	SOP/INST/57
Issued By: M.R		Approved By: HOD- Instrumentation	
SOP FOR CHECKING THE METAL DETECTOR			

Scope/Purpose : This SOP is applicable for checking the metal detector healthiness

Responsibility : Inst Engineers/Inst technicians

Accountability : Inst Section In-Charge

PPE:

1. Hand gloves, Nose Mask, Goggles

Tools:

1. Rope with Standard Metal piece

Hazard Analysis:

Risks associated

Hand Injury while handling metal piece
Injury due to Running Belt Conveyor

Mitigating Measures

Use hand gloves to avoid hand injury
Away from Belt Conveyor and Stay beside
of Metal detector panel.

Training needs:

1. Awareness of Metal Detector Operation and Hazard while checking in online.

Procedure:

1. Check the Sensitivity and Micro Amps of the Metal Detector Value as Per the Selection.
2. Ensure the two persons (Engineers or Technicians) presence at site for checking the metal detector operation.
3. In case of any Emergency during checking, operate the pull chord rope which stops the belt conveyor.
4. Put the Standard Metal piece with Tied Rope in the Belt Conveyor which passes through the Metal Detector. Ensure that the metal piece should not Struck between the material/lumps.
5. Check the Metal Detector Operation (Sensing), While the Metal Piece Passing through it.
6. Check the Metal Sense Indication in Controller, if the Metal Detector Sensed and Ensure the Mill Feed Divertor Changeover.
7. Remove the Sample metal piece with Rope slowly on reverse direction and take it out safely.
8. Reset the Metal Sense Fault and Ensure the Healthiness.



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Emergency / Emergency Shut OFF:

1. If any Emergency please call, 3108/9865152222/9750963761.

Records/Annexure:

Job Safety Analysis	Job: Metal Detector Operation Checking	Date: 20-09-2017	Analysis by:	Reviewed by:
Title of employee doing job: Instrument Mechanic & Engineer	Supervisor: Section Engineer	Department: Instrumentation	Section: INST	Approved by:
Req'd/recommended PPE: Hand gloves, Nose Mask , Goggles				
Sequence of Basic Job Steps	Potential Hazards	Recommended Safe Job Procedure	What Could Go Wrong	Corrective Action
While Handling the Standard Metal Piece.	Injury in Hand	Handle the Metal Piece with Hand Gloves.	Metal Piece may damage the Finger	Use PPE During Operation
Due to Clinker/Lime stone Dust	Dust May Come due to Belt Conveyor Running.	Wear Nose Mask, Goggles Before Work Starts.	Coughing, Eye Irritation May Occur.	Check the condition of PPE During Operation
Placing and removing the metal piece with Rope on the belt Conveyor	Injury in Hand /Body	Stand beside of Metal Detector Housing and away from the Belt Conveyor	May Damage the Hand / Body	Activate the Pull Chord during emergency. Work beside of Metal Detector Housing and Away from the Belt Conveyor



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