



**DALMIA CEMENT (B) LIMITED – CEMENT PLANT
DALMIAPURAM**



Issue No. 01	Rev. No: 00	Effective Date: 01.03.2016	SOP/Elect /27
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Issued By: S & P	Approved By: Elect. & Inst Head
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SOP For Lifting & Shifting of heavy Electrical Equipment

Scope/Purpose : This SOP is applicable for safe lifting and shifting of all heavy electrical equipment's

Responsibility : Section Supervisor – Electrical

Accountability : Section Head - Electrical

PPE:

1. Safety shoe
2. Safety Helmet
3. Nose mask
4. Gloves
5. Goggles
6. Full body harness

Tools:

1. Steel rope
2. De-shackle
3. Lifting & Shifting trolleys
4. Insulated electrical tools

Hazard Analysis:

Risks associated

Mitigating Measures

Injury due to electric shock

Ensure OFF condition of all electric heaters

Injury due to fall of materials

Ensure proper handling mechanism

Training needs:

1. Emergency Preparedness
2. Training of how to fix rope with DE shackle

Procedure:

- a) Get work permit from the concerned Electrical Section Supervisor.
- b) Ensure Power circuit are in Switched OFF condition and remove cable if any



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- c) Check rope and de shackle condition before using.
- d) Choose correct and appropriate rope and de shackle for correct load which is to be lifted and shifted.
- e) Check the steel or nylon rope tested date.
- f) Check the monorail/chain pulley block and its accessories for healthiness and intended load capacity also last tested date.
- g) Check the condition of hydraulic crane/TIL Crane/Fork lift condition with their respective section in charges for the load which is to be lifted/shifted.
- h) Check the accessories like wooden sleeper/Steel sleeper are in good condition in which equipment to be placed.
- i) Check the sleepers are not placed above any trench cement slabs.
- j) After lifting check the safety rope fixed to equipment to avoid rotating during shifting.
- k) Check no person inside the cranes during lifting and shifting of heavy equipment.
- l) Return the work permit to concerned engineer.

Emergency / Emergency Shut OFF:

1. If any injury is there, inform to the Electrical Shift Engineer (251 / 9842994062) or Safety Department (523) or call Emergency number 9865160055

Records/Annexure:

1. JSA is enclosed below.



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JOB SAFETY ANALYSIS: (JSA)

Job Safety Analysis	Job: Lifting and shifting of heavy electrical equipment	Date: 18.11.2015	Analysis by: T.Kandappan	Reviewed by:
Title of employee doing job: Khalasy	Supervisor: Section Supervisor	Department: Electrical	Section:	Approved by:
Req'd/recommended PPE: Safety Shoe, Safety Helmet, Goggles, and Nose Mask & Gloves.				
Sequence of Basic Job Steps	Potential Hazards	Recommended Safe Job Procedure	What Could Go Wrong	Corrective Action
Checking Power circuit	Exposure to Live circuit	Use Rubber Gloves & Insulated tools	Damaged Tools	Periodic inspection & Replacement
Clean the rope and DE shackle	Damaged rope or shackle	Used certified and tested tools and tackles	Fall of equipment	Periodic checking and get tested with concerned departments
Operation of cranes for lifting and shifting	Injury due to Bounce/Slip of handle	Ensuring correct load capacity of crane and condition of cranes	Equipment damage	Training to operators for choosing correct crane for correct load and training to lift and move heavy loads.