



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



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| Issue No. 02 | Rev. No: 01 | Effective Date: 22.05.2015 | SOP/Elect /06 |
| Issued By: S & P | | Approved By: Elect. & Inst Head | |
| SOP For Overhauling of LT Motors | | | |

Scope/Purpose : This Procedure to establish and ensure safe method of Overhauling of LT Motors

Responsibility : Section Supervisor – Electrical

Accountability : Head-Electrical

PPE:

1. Safety helmet,
2. Safety shoe,
3. Rubber Gloves.

Tools:

1. Insulated tools
2. Lifting Equipments
3. EOT Hoist

Hazard Analysis:

Risks associated

Injury
Electric shock

Mitigating Measures

Use of proper Handling equipments
Use of Proper Testing procedure & Insulated tools

Training needs:

1. Usage of tools and Nature of Hazards
2. Usage of PPEs

Procedure:

- a) Get work permit from the concerned Electrical section in-charge.
- b) Ensure Proper Lifting / Handling Equipments.
- c) Ensure presence of Fire fighting equipments near the work place.
- d) Use proper tools to dismantle the motor.
- e) Use proper Heating method to remove / re-fix the bearings.



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- f) Use proper space heaters to heat winding.
- g) Ensure Protection circuit for Tripping before Trial run.
- h) Ensure Motor Earthing before Trial run.
- i) Use Rubber Mat & Gloves for Trial run.
- j) Use proper measuring tools for Trial run.
- k) Switch off the electrical circuit after Trial run.
- l) Discharge the Motor after Trial run.

Emergency / Emergency Shut OFF:

1. If any injury is there, and inform to the safety department or call Emergency number 251 / 254 / 568 /9842994062.

Records/Annexure:

1. Overhauling of LT Motors
2. JSA is enclosed below.



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JOB SAFETY ANALYSIS: (JSA)

| Job Safety Analysis | Job: Overhauling of LT Motors | Date: | Analysis by: | Reviewed by: |
|--|-------------------------------------|--------------------------------|--|--|
| Title of employee doing job: Electrician | Supervisor: Section Supervisor | Department: Electrical | Section: Plant | Approved by: |
| Req'd/recommended PPE: Safety helmet, Safety shoe & Rubber Gloves. | | | | |
| Sequence of Basic Job Steps | Potential Hazards | Recommended Safe Job Procedure | What Could Go Wrong | Corrective Action |
| Shifting of Motor | Fall of object | Proper shifting method | Slip during shifting | Double holding method |
| Dismantling of motor | Injury due to striking | Proper dismantling methods | Slip of tools during striking | Usage of proper tools |
| Heating of Bearings | Burn of old grease | Proper Heating method | Improper heating method | Usage of proper heating instruments |
| Applying Varnish | Unconsciousness | Proper Varnishing method | Release of Toxic gases during varnishing | Usage of quality varnish & Proper Varnishing method |
| Heating of Winding | Electric Shock | Proper heating method | Open ended terminals | Proper heating method |
| Trial Run of Motor | Electric shock | Proper method for Trial run | Open ended terminals / Improper Earthing | Usage of proper trial methods & Ensuring proper earthing |
| Trial Run of Motor | Motor dis-positioning / Run through | Proper method for Trial run | Un fixed motor base | Usage of fixing bolts |

HEAD E & I

HEAD TECHNICAL