



## DALMIA CEMENT (B) LIMITED – Ariyalur

### MECHANICAL

Issue No. 02	Rev. No: 00	Effective Date: 01.11.2019	SOP/MEC/139
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Issued By: M.R	Approved By: HOD-Mechanical
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### **SOP-MOTORIZED GATE ERECTION AND OPERATINGWORK**

#### **MOTORIZED GATE ERECTION AND OPERATION WORK**

**Scope:** Motorizes gate erection and operating procedure

**Responsibility:** Maintenance Technician

**Accountability:** Mechanical-Section Engineer

**PPE:**

1. Safety helmet
2. Safety shoe
3. Nose Mask
4. Gloves
5. Goggles

**TOOLS:**

1. D – Spanner Set.
2. Ring Spanner set.
3. Welding machine
4. Cutting machine
5. Grinding machine
6. Chain block 1ton
7. Belt sealing
8. Safety belt

**Hazard Analysis:**

**Risks associated:**

**Mitigating Measures**

**Rotation of the Equipment**

**Electrical Hazard:**

**Can be operated from remote**

**Engagement of clutch:**

**Inter lock to be ensured**

**Training needs:**

1. Usage of tools and Nature of Hazards
2. Usage of PPE's

**Procedure:**

1. Line clearance to be taken for the whole CMBH transport circuit as per DCBL LOTO standard.



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2. Remove the manual damper at silo feed elevator bottom venting line near BE boot area.
3. Lift the motorized gate with help of chain block and fix the correct position
4. Give the power supply of damper
5. Release the LOTO for motorized gate
6. Take trail open and close position
7. Set the opening percentage with auto control from CCR
8. Clear Permits & LOTO Clearance.
9. Give clearance to CCR
10. Whenever silo feed elevator bottom draft getting positive, CCR operator to control the draft with DCS.

#### **Emergency / Emergency Shut OFF:**

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

#### **Records/Annexure:**

1. Silo Extraction Gate Cement Lumps removal procedure
2. JSA is enclosed below.



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### SOP-MOTORIZED GATE ERECTION AND OPERATING WORK

#### JOB SAFETY ANALYSIS : (JSA)

<b>Job Safety Analysis</b>	Job: Motorizes gate erection and operating procedure	Date: 1.11.2016	Analysis by: Section Engineer	Reviewed by: Section Head
Title of employee doing job: Section Engineer	Supervisor: Section Head, Out Sourcing Supply Supervisor	Department: Mechanical	Section: Mills	Approved by: HOD
eq'd/recommended PPE: Helmet, Shoe, Nose mask, Cotton Gloves, Leather gloves, Ear plug, Safety belt, Goggles, Shield				
Sequence of Basic Job Steps	Potential Hazards	Recommended Safe Job Procedure	What Could Go Wrong	Corrective Action
Put on PP	Exposure to fumes due to welding operation	Wear Goggles	Damaged goggl	Periodic replacement, Watch person should ensure
Chain Block lifting	Leg and hand injury	Use proper tools and tackles with certification	Chain block may slip from its lifting position	Check the condition of lifting equipments. 1. Lifting Belts 2. Chain block  Periodical replacement is recommended for belts and ropes. Periodical servicing required for Chain blocks.
Chain Block fixing	Body injury	Use proper PPE (safety belt)	Safety belt failure	Check the condition of PPE Periodical replacement is recommended for belts
Damper flange bolt loosening/tightening	Hand injury	Use proper tools and tackles with certification	Spanner slip /Broken	Check the condition of spanner
Pipe line cutting	Body injury	Use proper cutting set with flash back arrester	Hose pipe damage	Check the condition of hose pipe. Periodical replacement is recommended



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Grinding the pipe and fix flange , positioning the gate	Eye and body injury	1.Use proper guard/locking and tested grinding machine 2.Ensure life of the grinding wheel	.Wheel may slip out from the machine 2.wheel broken	1. To cross check the tightness of wheel 2.check the expiry date of the grinding wheels.
positioning the gate	Hand injury	1. Use proper tools and tackles with certification	Chain block may slip from its lifting position	Check the condition of lifting equipments. 1. Lifting Belts 2. Chain block  Periodical replacement is recommended for belts and ropes. Periodical servicing required for Chain blocks.
Welding operation	Hand and Eye injury	Use proper leather hand gloves and welding shield	Damage the welding shield glass and hand glove	Cross check the Periodical replacement of PPE

SL No	Activity				Tag / Name of the Equipment
					Isolation Type
					<b>Electrical Energy</b> <b>Other Energy</b>

01	Motorizes gate erection and operating procedure	Name and Tag for the Equipment	591 MD1 / silo feed bucket elevator	591 FN7 /591 FN 1,2,3,4,5,6							
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