



DALMIA CEMENT (B) LIMITED – Ariyalur

MECHANICAL

Issue No. 02	Rev. No: 00	Effective Date: 01.11.2019	SOP/MEC/16 2
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Issued By: _____ Approved By: HOD-Mechanical

SOP-JSA FOR STAND BY FAN ERECTION AND OPERATINGWORK

STAND BY SEAL AIR FAN 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 Seal air fan as per DCBL LOTO standard.



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2. Erected the pipe line from existing line to stand by fan with help of chain block and fix
3. Give the power supply of isolation valve
4. Erected the fan as per specified location
5. Motor has to be fix
6. Motor and fan aliment has to be done
7. Connected the motor to fan
8. Electrical connection has to be done
9. After connecting trail has to be taken
10. Put the LOTO for new stand by seal air fan
11. Connected the pipe line with expansion joint stand by seal air fan
12. In between isolation valve has to fix in both fan pipe line .
13. Give power supply to isolation valve
14. Take trail open and close position
15. Give the logic modification for seal air fan trips stand by fan has to be run immediate.
16. Clear Permits & LOTO Clearance.
17. Give clearance to CCR
18. Whenever seal air fan trips stand by fan has to be run immediate 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. Stand by fan erection work
2. JSA is enclosed below.



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JOB SAFETY ANALYSIS :(JSA)

Job Safety Analysis	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
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 of valve	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 expansion joint	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
					Electrical Energy
					Other Energy

01	Motorizes gate erection and operating procedure	Name and Tag for the Equipment	561 FN3 / seal air fan	Stan by seal air fan							
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