



DALMIA CEMENT (B) LIMITED



ARIYALUR

MECHANICAL

Issue No. 01	Rev. No: 00	Effective Date: 01-11-2019	SOP/MECH/194
Issued By: M.R		Approved By: HOD (Mech)	
SOP-JSA FOR FRL MAINTENANCE & SERVICING			

Scope : This SOP is applicable to Safe working for FRL Maintenance.

Responsibility : **Section Engineer – Mech.**

Accountability : **Section Manager – Mech.**

PPE:

1. Helmet,
2. Safety shoe,
3. Ear plug,
4. Safety goggles.
5. Rubber hand Gloves.
6. Nose mask.

Tools:

1. Box Spanner set
2. Ring Spanner set
3. Waste oil collecting tray.
4. Waste oil collecting drum
5. Waste for cleaning



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Hazards:

Risks associated

Body injury

Mitigating Measures

1.Safe and tested tools and tackles

2. on job training

Training needs:

1. Fire fighting
2. Emergency preparedness
3. Lubrication handling
4. Assembly procedure

Procedure:

1. Take the Mechanical LOTO for the particular FRL unit
2. The line clearance paper should be with the person who is working in the site.
3. Depressurized the air source of the FRL unit by using of drain valve.



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4. Use PPE'S while working
5. Close compressor air delivery valve
6. Check it if any air pressure is in any stored area.
7. Ensure use of hand gloves & ear plugs
8. Remove the FRL unit bowl & filter cater age.
9. Clean the filter caterage & bowl by using of cleaning liquids like diesel and cotton waste. If required change the caterage.
10. Re-fix FRL unit & open the air source, ensure no leakage.
11. Open delivery valve and close moisture traps (manual)
12. Clear the line clearance and inform to the CCR.
13. Return the permits to the concern engineer.



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Emergency / Emergency Shut OFF:

1. If body injury is there, First aid will be given and inform to the Safety department or Call Emergency number 3108/ 9865152222

Records/Annexure:

1. JSA is enclosed below.
2. Isolation Matrix.

JOB SAFETY ANALYSIS :(JSA)

Job Safety Analysis	Job: FRL maintenance	Date: 04- 04 - 2020	Analysis by: Section Engineer	Reviewed by: Section Head
Title of employee doing job: Section Engineer	Supervisor: Section Engineer	Department: Mech.	Section: UTILITY	Approved by: HOD Mechanical
Req'd/recommended PPE: Safety helmet, Safety shoe, Safety goggles, Ear plug, nose mask & Rubber hand Gloves.				
Sequence of Basic Job Steps	Potential Hazards	Recommended Safe Job Procedure	What Could Go Wrong	Corrective Action
Valve operation	Hand injury / Fatal	Closed the out let valve and open the drain (manual) valve	System will be pressure raised it will blasting the system	Ensure valve condition before start the work
Open the drain valve	Leg and hand injury	Use proper PPE and use the door opening key and spanner	Bowel will be fall down Tools will be slip	Ensure tools and tackles conditions
Removing of Air filter	Leg and hand injury		Air filter will be fall down	Proper handling of air filter
Cleaning of Air filter		First open the lock nut		



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Re fixing of Air filter	Dust emission & oil contamination Leg and hand injury	and use the both hands to remove the filter Use proper PPE and use 2 bar pressure to clean the air filter	Dust inhalation	Ensure using of nose mask and use low pressure air to clean the filter Training to them to handling the material and using of recommended tools
Closed the doors	Leg and hand injury	Use proper tray and funnel for handling the oil use the door opening key and spanner	Slip and oil spillage Door will be fall down Tools will be slip	Use the faunal to fill up the oil Ensure the valve condition after the work completion
Valve operation	Hand injury	open the out let valve and closed the drain (manual) valve	System will be pressurized and material damaged	

Isolation Matrix:

SL No	Activity				Isolation Matrix for Utility & General Equipment.	
					Isolation Type	
					Electrical Energy	Other Energy



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1	FRL inlet valve	<i>Name and Tag for the Equipment</i>	Isolate the Related other energy isolation					Isolate the AIR valve & drain the air.			
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