



DALMIA CEMENT (B) LIMITED



ARIYALUR

MECHANICAL

Issue No. 01	Rev. No: 00	Effective Date: 01-11-2019	SOP/MECH/196
Issued By: M.R		Approved By: HOD (Mech)	
SOP-JSA FOR PUMP BEARING GREASING			

Scope : This SOP is applicable to Safe working for PUMP GREASING .

Responsibility : **Section Engineer – Mech.**

Accountability : **Section Manager – Mech.**

PPE:

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

Tools:

1. Box Spanner set.
2. Ring Spanner set.
3. Sharp pin.
4. Grease gun.
5. Waste cloth.



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Hazards:

Risks associated

Electrical shock

Rotating part

Slip and fall

Mitigating Measures

1.Safe and tested tools and tackles

2. on job training

3. LOTO for motor.

1.Mechanical LOTO for inlet valve.

1.Safe usage of grease gun and avoid spilling.

Training needs:

1. Fire fighting.
2. Emergency preparedness.
3. Electrical prevention training.
4. Assembly procedure.
5. Lubricant handling.
6. Safe work near running equipment's.

Procedure:

1. Take the LOTO for motor and outlet valves.
2. The LOTO and permit paper should be with the person who is working in the site.



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3. Release the pressure through drain valve.
4. Remove the cover of step in box.
5. Check for rust on the bearing.
6. Remove the existing old grease and clean the bearing.
7. Re-grease the bearing with new one.
8. Clean the cover edges and close it.
9. Close the drain valve.
10. Clear the electrical and mechanical LOTO.
11. Take the trial check the temperature on step in box and vibration reading.



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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.



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JOB SAFETY ANALYSIS :(JSA)

Job Safety Analysis	Job: PUMP BEARING GREASING	Date: 04— 05 - 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
Rotating parts	Major injury/Fatal	Locking of shaft	Rotation may cause hand injury Tools will be slip	Mechanical locking on shaft.
Electric shocking	Electrical shock	Electrical LOTO	Electrocution may occur	Electrical LOTO has to be ensured.
Lubricant handling	Resource usage/hand injury	Rubber hand glove usage/Usage of proper tools.	May be a slip nad fall/land contamination.	Proper lubricant handling.

Isolation Matrix:



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SL No	Activity			Isolation Matrix for Utility & General Equipment.							
				Isolation Type							
				Electrical Energy				Other Energy			
1	COMPRESOR SPIDER replacing	Fire water pump-700-FYP-6A & 6B Process water pump-700-PFP-5A - 5E Domestic water pump and cement mill cooling pump-700-DWP-1A,1C & 560 WP1 -3 Soft water preparation pump-700-FWP-1A - 1C	Isolate the Related other energy isolation					Isolate or closed the valves			