

METHOD STATEMENT FOR FETTELING WORK

A

Job Description: Fettling Work- Job Work	
Area/ Location: Plant: LPDC- Fettling area	
Aux Permit Type:	NA

B

Major hazards associated with the job: <ol style="list-style-type: none"> 1. Electric Shock 2. Fire and Explosion 3. Slip, Trip and Fall hazard 4. Fall from height (if height work is carried out) 5. Falling Object. 	<ol style="list-style-type: none"> 6. Burn injury during Hot work 7. Eye and Cut injury During cutting work 8. Dust Fumes inhalation during drilling work.. 9. eye irritation. 10. Human Injury 11. Any Other.
What Worst can Happen? <ol style="list-style-type: none"> 1. Fatality or permanent disability due to Electric Shock, Amputation etc. 	

C

PPE's Required for Jobs: Safety Shoes, Safety glasses, Hand Gloves , Ear Plug etc.
Resources /Tools Required for the Job: Hand Tools, Chisel, and Hammer etc.

D

Activities Sequence: (What, Who & How?)				
S. No	Activity	Who Will do	Risk involved	Risk Mitigation / Control Measure
FETTLING OPERATION				
1	Collect the castings after heat treatment by trolley	Operator	Sprain due to manual pushing/pulling of the trolley Falling of material at working level on the level	Safe Material handling, dedicated trolley, trained person etc.
2	Fixing the casting inside the bench vice	Operator	STF. Material Hazards, material fall down, foot	Material handling training, OJT, etc.



			injury, Body injury etc. Sharp edges that may be contact with skin	
3	Removal of the unwanted material with the help of file and chisel	Area Owner	Slip Trip Fall etc. Deafness, Mental stress, eye injury, Body injury	Adherence of required PPE – Hand gloves, Ear plug, goggle etc. Trained person, Closed supervision etc.
4	After completion of filing Keep the casting in the designated bin.	Approved Contractor	Trip hazard due to improper handling Equipment's and machines. Body injury, Material hazards	Ensure the PPE adherence, closed supervision, proper stacking etc.
5	Collect the chips	Trained and experienced persons from contractor	Burr may contact with skin, Hand Injury.	Ensure that all work must be done by train person. Ensure the PPE adherence
6	Disposal of chips	Contract Employees	Burr may contact with skin. Hand Injury	Ensure that all work must be done by train person. Ensure the PPE adherence
MELTING OPERATION				
	Receiving of ingots and rej from stores	Trained and experienced persons from contractor	Sprain due to manual handling of the trolley.	Ensure that all work must be done by train person.
	Charging into the melting furnace.	Trained and experienced persons from contractor	Sprain due to manual handling of the trolley.	Ensure the PPE adherence
	Melting operation	Trained and experienced persons from contractor	Smoke that may inhale Fire & explosion High noise	Ensure that all work must be done by train person.
	Temperature measurement	Trained and experienced persons from contractor	Exposure to heat radiation Exposure to electrical energy Manual handling of the burner Hot laddle may contact with skin	Ensure the PPE adherence
	Tapping of the liquid metal	Trained and experienced persons from contractor	Exposure to heat radiation Exposure to heat radiation Fall of molten metal	Ensure that all work must be done by train person.
	Degassing	Trained and experienced persons from contractor	Fall of cylinder Explosion of the cylinder Fall of dross on body	Ensure the PPE adherence



Density checking machine(Vaccum tester)	Trained and experienced persons from contractor	Exposure to electrical energy Manual handling of the lid Fall of molten metal	Ensure that all work must be done by train person.
Degassing rotor changing	Trained and experienced persons from contractor	Exposure to hot environment Manual handling of the damaged rotor(Hot rotor)	Ensure the PPE adherence
Lining of the melting furnace	Trained and experienced persons from contractor	1)Fall of bricks on working level	Ensure that all work must be done by train person.
Storage of consumables(fluxes)	Trained and experienced persons from contractor	Fall of consumables Residue may contact with skin	Ensure the PPE adherence
Disposal .	Trained and experienced persons from contractor	Residue may ingest through mouth	Ensure that all work must be done by train person.
Power hack saw operation	Trained and experienced persons from contractor	Sharp edges may contact with skin	Ensure the PPE adherence
Dross Reclamation	Trained and experienced persons from contractor	Falling of dross Exposure to heat radiation	Ensure that all work must be done by train person.

E

Special Instructions/Note:

1. Follow all the work instructions strictly as per ETL Policy.
2. No Tobacco, Gutkha, allowed in premises
3. Follow HSE Golden Rule and ECOC policy.
4. Close Supervision while performing the work.

