

ARIYALUR



MECHANICAL

Issue No. 01	Rev. No: 00	Effe	ctive Date : 30.10.2020	SOP/MECH/205
Issued By: M.R			Approved By: HOD (Me	ech)
	SOP-JSA FOR Impo	rted sl	hredder blade hard facing	

Scope : This SOP is applicable to Safe working for Imported shredder blade hard facing

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. Hand Gloves.
- 7. Nose mask.
- 8. Welding helmet

Tools:

- 1. Box Spanner set
- 2. Ring Spanner set
- 3. Welding machine with cables (Direct earth).
- 4. Shaft rotating tools
- 5. Waste for cleaning



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Hazards:

Risks associated

Mitigating Measures

Electrical shock

1. Safe and tested tools and tackles

2. on job training

Training needs:

- 1. Fire fighting
- 2. Emergency preparedness
- 3. Electrical prevention training
- 4. Assembly procedure

Procedure:

- 1. Stop the shredder & put in local mode
- 2. First take the Door opening with hydraulic (local mode operation).lock with mechanical arrangement to lock the door in open condition.
- 3. Take the Mechanical LOTO for imported shredder
- 4. Clean the blades & shaft. Remove the all materials







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- 5. Fix the dummy plate at imported shredder discharge chute
- 6. Make the accessories ready for hard facing like welding electrodes and cables
- 7. Take before measurement reading of shredder blades using with template
- 8. And start the hard facing up to met desired level
- 9. Then again take a measurement with template based
- 10. After finishing the one blade then rotate the shaft and same do above welding in other blades.
- 11. After that, remove all the welding accessories and cables.
- 12. Remove dummy plate, which fixed already.
- 13. Remove LOTO
- 14. Closing the door which operating hydraulic
- 15. Taking trial run and given clearance.
- 16. Electrical supply put on OFF of welding mirror. Clamp the pipes as required.
- 17. Clear the loto for temporarily to take the leakage testing, if the any leakage again same procedure to be followed if not there clear closed the work permits and clear the loto.

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.







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2. Isolation Matrix.

JOB SAFETY ANALYSIS : (JSA)

Job Safety Analysis	Job: Imported shredder blade hard facing	Date: 04- 04 - 2021	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 Machanical
Req'd/recommended PPE:	Safety helmet, Safety s	hoe, Safety goggles, Ear plu	ig, nose mask & Rubbe	er hand Gloves.

Sequence of Basic Job Steps	Potential Hazards	Recommended Safe Job Procedure	What Could Go Wrong	Corrective Action
Door opening	Hand injury	Using correct spanner & lock the door	Tools will be slip	Ensure door condition.
		Use proper PPE and use the door opening key and spanner	Tools will be slip	Ensure tools and tackles conditions
HDPE welding Mirror	Electrical shock	Fitness to be taken for the electrical equipment s	Earth leakage or shock	Rubber hand gloves to b used
Bit rods	Resource usage	Waste electrodes to be removed by properly (hand over to stores)	Land contamination	clean the area

Isolation Matrix:







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SL No	Activity		Ise	Isolation Matrix for Utility & General Equipment. Isolation Type				
			Elect	rical Energy		Oth	er Energy	
1	Imported shredder blade hardfacing	Name and Tag for the Equipment	Isolate the Related other energy isolation			Isolate or closed the valves		

Isolate the Related other energy isolation

- 1. **485SR1 &2**
- 2. 485CBC1
- 3. 485BC3