JOB HAZARD ANALYSIS FORM

**COMPLETE BEFORE BEGINNING WORK**

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| **(1) JOB INFORMATION** |
| Date: 8/17/2 | Job # (If Applicable): | Task Name/Description: Electric Welder Use |
| Department: | Supervisor: |
| **(2) JOB/TASK STEPS (Most jobs require 5-10 basic steps)** |
| **Basic Job Step** | **Hazard(s) – (See Sections 3 or EHS Hazard Report)** | **Correct/Safe Work Practice and Hazard Controls/PPE (See Section 4 or EHS Hazard Report)** |
| Perform preoperational check | * None anticipated
 | * Inspect equipment and insulation per manufacturers guide and do not use if damaged.
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| Equipment/area setup and prep | * None anticipated
 | * Remove flammable or combustible materials in the vicinity of the work location.
* Ensure fire extinguisher equipment is near, unlocked, and well maintained.
* Evaluate materials to be welded for flammability and toxicity. Do not weld materials with flame/explosion/toxic or other hazards. Do not weld galvanized material, or material that has been treated with brake cleaner or other chemicals known to produce hazards when burned.
* Clear and secure the work area.
* Apply and maintain proper grounding.
* Use an exhaust system or improve ventilation if working indoors. Consult with EHS to determine ventilation requirements if unsure.
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| Prepare electrode and route wires. | * Trip, fall hazard (extension cord)
* Electrical shock
 | * Keep walking pathways clear of cords/hoses to manage trip hazards.
* Keep wires untangled and away from standing work area.
* Do not handle positive/negative electrodes or grounding sources at the same time. Avoid contact with any uninsulated electrical contacts while welding machine is energized.
* PPE should include electrically insulated footwear.
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| Insert arc welding rod in handle | * Pinch point
* Electrical shock
 | * Keep clear of moving parts. Pull back long hair.
* Do not handle positive/negative electrodes or grounding sources at the same time. Avoid contact with any uninsulated electrical contacts while welding machine is energized.
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| Energize equipment and Preform welding | * Electrical shock
* Arc flash/arc eye
* Burns to skin
* Respiratory hazards
* Overexertion
 | * Wear appropriate eye protection such as welding helmet or goggles and electrically insulative garments or footwear.
* Wear flame resistant clothing or apron.
* Secure and clear work area to prevent exposure to nonparticipants.
* Apply and maintain proper grounding.
* Ensure equipment guards remain in place and intact.
* If toxic environment or fumes are created use engineering controls/ventilation first, then respirators. Contact EHS for guidance.
* Take breaks from welding hourly to prevent overexertion and heat stress.
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| Cool down and clean-up activities | * Burn to skin
* Hammer impact injury
 | * Wear leather gloves.
* De energize welder before setting welding tip down in order to prevent accidental activation.
* Allow finished product and arc welding rod to cool completely in a safe and secure location before continuing work.
* Protect hands and fingers when using a hammer.
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| **Required Training:** **- PPE training*** **Respiratory training (if deemed necessary)**
* **Task and equipment specific training (provided by department)**
 | **PPE:** **- Eye protection/welding goggles or helmet*** **Flame resistant clothes or apron**
* **Respirator (if deemed necessary)**
* **Leather gloves**
* **Electrically insulative shoes or garments**
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