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. | | |
| 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. | | |
| 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. | | |
| 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. | | |
| 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. | | |
| 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. | | |
| **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** |