**SAFE OPERATING PROCEDURES**

**TIG Welder**

**DO NOT** use this machine unless you have received authorization from the Shop Manager

- Eye protection must be worn at all times.
- Long and loose hair must be contained.
- Oil-free leather gloves must be worn.
- A hood with the correct shade lens must be worn when welding.
- Appropriate protective clothing must be worn.
- Rings and jewelry must not be worn.
- Respiratory protection may be required.
- Sturdy closed-toe footwear must be worn.
- Pants must not be rolled up nor tucked into boots.

**POTENTIAL HAZARDS AND INJURIES**

- Electric shock
- Fumes (respiratory hazard)
- Radiation (eye & skin damage)
- Molten metal/Hot surfaces (burn hazard)
- Fire

**PRE-OPERATIONAL SAFETY CHECKS**

- Ensure good connection of ground cable to workpiece or table.
- Say “EYES” or “COVER” before initiating arc.
- Ensure the work area is clean and clear of grease, oil and any flammable or combustible materials.
- Ensure the welding equipment, work area, your gloves and other PPE are dry to avoid electric shocks.
- Ensure the fume extraction unit is operating properly before welding. (In some cases, the Fire Marshal has allowed welding in areas without fume extraction.
- Ensure other people are protected from flashes by closing the curtain to the welding bay or erecting screens.
- Turn off the machine and fume extraction unit when work is completed.
- Close the gas cylinder valve.
- Inspect area for fire risk, and label any hot items.

**SAFE OPERATING PRACTICES**

- Ensure machine is correctly set up (e.g., amperage, polarity, tungsten size, and gas flow).

**ENDING OPERATIONS AND CLEANING UP**

- Ensure personal hydration as PPE and direct exposure to heat can increase risk of heat illness.

**DON’T**

- Don’t use faulty equipment; report it immediately.
- Don’t leave the welder running unattended.
- Don’t drape cables over body.
- Don’t lay or roll damaging items across torch cable.
- Don’t weld on drums, tanks, painted or plated materials, etc. without permission.