

Forge Operations – Safe Work Procedure

Purpose: To provide SD 64 staff, with a list of procedures to ensure they are protected against potential hazards associated with Forge Operations.

Hazards: Work involving Forges & Furnaces produce high temperatures and heat & can create fires, and cause burns to workers. In addition, inhalation hazards due to exposures to flammable & toxic vapors inherent in the Forging or Heating processes.

WARNING: DO NOT use this machine unless you have been trained in its safe use and operation. Failure to comply could result in severe injury and even death.

General Safety

- Never start work without proper authorization & training.
- **Personal Protective Equipment (PPE):** leather or fire-retardant gloves, eye & face protection, including protective helmet with protective lenses rated at a minimum of #6 shade, long pants (leather or fire-retardant), leather apron. Any other PPE required as per current SDS of any hazardous product(s) being used.
- Tie back and cover hair, no loose clothing and no jewelry should be worn.

Before FORGE OPERATIONS

- Ensure all combustible and flammable liquids and materials have been moved away or covered.
- Always have fire-fighting equipment (fire extinguisher) on hand before starting.
- Inspect equipment, ensure they are protected, labeled and secure.
- Inspect the Forge, or Furnace device check refractory, interior and exterior of device for any damage.
- Inspect Electrical cables, gas connections, shut offs and connections.
- Ensure standard grounding is provided.
- Ensure screens are in place around work areas
- Ensure ventilation is provided and operational.

During FORGE OPERATIONS

- Keep people away from operation who are not wearing PPE.
- Protect all connections and equipment.
- Ensure areas of operation moving of equipment, pots and other devices are always kept clear.
- Take particular care to avoid metal splash and contact with other materials.
- Do not leave machine running while unattended.
- Once work is completed shut down equipment, forge & disconnect power supply.

After FORGE OPERATIONS has been Completed

- Ensure walkways and workspaces are clear and clean of any accumulated materials, slag, etc.
- Collect all combustibles/waste/debris and place in appropriate containers.
- Allow the equipment to cool down before handling.
- Inspect equipment to ensure no damage has occurred, guards and other devices are in good condition and in place. Record any damage as per the Technology Education Safety Manual.
- If equipment is damaged or inoperable follow lockout procedures.