



HOT WORK

Scope and Applicability Statement

This document provides general safety procedures and regulatory guidance for employers and workers in accordance with U.S. Occupational Safety and Health Administration (OSHA) standards under 29 CFR 1910 and 29 CFR 1926. These procedures apply to all workplaces where they are implemented as part of a comprehensive safety program.

Customization and Compliance Statement

Employers are responsible for ensuring compliance with all applicable local, state, and federal safety regulations. Workers must adhere to established safety protocols to prevent workplace injuries and illnesses.



Purpose

The purpose of this program is to ensure a safe work environment during welding, cutting, and other hot work operations.

Scope

This program applies to all employees involved in or assisting with hot work operations, including welding, brazing, grinding, cutting, and other spark-producing activities.

Definitions

- **Hot Work:** Any activity that produces heat, sparks, or flames, including welding, cutting, grinding, soldering, and pipe thawing.
- **Special Hazard Areas:** Locations containing flammable liquids, dust accumulations, gases, plastics, rubber, and other combustible materials.
- **Fire Watch:** A trained individual assigned to monitor hot work operations to prevent and respond to fire hazards.

Responsibilities

Managers and Supervisors:

- Determine if work areas are safe for hot work operations.
- Establish designated areas for hot work.
- Provide training on safe hot work procedures.
- Ensure proper use of protective equipment and fire prevention measures.
- Issue hot work permits when required.

Employees:

- Follow all hot work procedures and safety requirements.
- Use appropriate personal protective equipment (PPE).
- Inspect tools and equipment before use.
- Report unsafe conditions to supervisors immediately.



Procedures

Hot Work Permits

- A hot work permit must be obtained before beginning any hot work outside designated areas.
- The permit must include:
 - Identification of the hot work location.
 - Precautions to be taken.
 - Supervisor approval.

Fire Prevention Measures

- Combustible materials must be moved at least 35 feet from the work area. If relocation is not possible, flame-resistant covers or shields must be used.
- Ducts, conveyor systems, and augers that may carry sparks must be protected or shut down.
- Work on metal walls, partitions, ceilings, or floors must be monitored to prevent heat transfer ignition.
- Hot work is prohibited in:
 - Areas where flammable atmospheres are present.
 - Buildings with impaired sprinkler systems.
 - Areas with excessive combustible material accumulation.

Fire Watch Requirements

- A fire watch must be provided for at least 30 minutes after hot work completion.
- Fire watch personnel must:
 - Be trained in fire extinguisher use.
 - Know how to activate the facility's alarm system.
 - Have access to fire extinguishers.



Hot Work in Confined Spaces

- Gas cylinders and welding machines must remain outside the confined space.
- Portable ventilation must be provided to remove fumes and gases.
- A trained attendant must be stationed outside confined spaces to monitor operations and provide emergency assistance.

Ventilation Requirements

- Adequate ventilation must be provided to prevent accumulation of toxic fumes.
- Respiratory protection is required when local exhaust ventilation is insufficient.

Personal Protective Equipment (PPE)

- Welders and hot work operators must wear fire-resistant clothing, gloves, helmets, and eye protection.
- Face shields and goggles must meet ANSI Z87.1 standards.
- Hand protection and heat-resistant clothing must be used when handling hot materials.

Compressed Gas Cylinders

- Gas cylinders must be stored upright and secured.
- Cylinders must be kept away from heat sources and flammable materials.
- Valves must be closed and caps secured when cylinders are not in use.
- Flashback arrestors and check valves must be installed on oxy-fuel welding equipment.

Training Requirements

- Employees engaged in hot work must receive training on:
 - Safe operation of welding, cutting, and grinding equipment.
 - Fire prevention and fire watch responsibilities.
 - Proper use and maintenance of PPE.



- Emergency response procedures.
- Training records must be maintained and available for review.