

CONSTRUCTION GUIDELINE**WELDING AND CUTTING PRACTICES**

The following rules shall be followed as a means of avoiding accidents and fires during welding and cutting operations:

1. Welding or cutting should never be started in restricted areas until permission is secured from the proper person, who, in turn, has established that the operation can be performed safely.
2. All combustibles should be removed from the work area, where possible. If combustibles cannot be removed, they should be covered with fire resistant or fire retardant covers, or a fireproof or fire retardant partition should be installed.
3. Cracks and floor openings should also be covered with fire resistant or fire retardant covers.
4. Welding or cutting should never be conducted in the presence of flammable liquids, vapors, lint, or dust.
5. Never cut or weld on a vessel that has previously held flammable liquids or vapors until it has been thoroughly cleaned, purged, or filled with water.
6. Provide a fire watcher during the cutting or welding operation at the point of operation, and on opposite sides of walls when heat may be conducted to the far side of such walls. Fire watchers should be equipped with an operating fire extinguisher.
7. CO₂ extinguishers that have been used to the extent of ten percent, of their contents must be replaced, according to Fire Department regulations.
8. Only electrode holders of adequately rated current capacity, insulated against shock and against shorting or flashing when laid on conductive material should be used.
9. All welding machines must be turned off at the completion of the job.
10. Oxygen and acetylene or other compressed gas cylinders should be secured in an upright position at all times, and when in use they should preferably be chained in a welding cart.
11. Never use oil or grease as a lubricant on valves or attachments of oxygen cylinders, and keep the cylinders and fittings away from oil and grease.
12. All gauges should be attached tightly and should be rechecked at the beginning and end of each day. Gases used in cutting or welding operations should be shut off at the cylinders as well as at the torches at the completion of the job, or at the end of the shift. Hoses should be inspected frequently for breaks, burns, abrasions and other damage, and when not in use should be coiled neatly. Hoses should not be wrapped around cylinders.
13. Cylinders and hoses should be protected at all times from sparks, slag and molten metal and should never be put near a source of heat or energized electrical equipment.
14. Whenever possible, welding and burning operations should be isolated or screened in to avoid exposing other workers to either direct or reflected rays.
15. Because of noxious and toxic fumes, the work area should be well ventilated. In confined areas, welders should wear approved respiratory protective equipment.
16. Goggles must be worn when exposed to glare or harmful rays created by welding and cutting operations.

ORIGINATOR

Jim S. Horn

STANDARDS COORDINATOR

Charles L. Shaffer

STANDARDS SUPERVISOR

John C. Skinner

UNIT DIRECTOR

Harold J. Juy