Welding, Cutting, and Heating

Additional Resources:

• Complete OSHA Standard

Employers shall instruct employees in the safe use of welding equipment. 1926.350(d) and 1926.351(d)

When a special wrench is required, it shall be left in position on the stem of the valve while the cylinder is in use so that the fuel gas flow can be shut off quickly in case of emergency. 1926.350 (d)(2). Proper precautions (isolating welding and cutting, removing fire hazards from the vicinity, providing a fire watch) for fire prevention shall be taken in areas where welding or other "hot work" is being done. No welding, cutting, or heating shall be done where the application of flammable paints, or the presence of other flammable compounds or heavy dust concentrations creates a fire hazard. 1926.352(a)-(c) and (f)

Arc welding and cutting operations shall be shielded by noncombustible or flameproof screens to protect employees and other persons in the vicinity from direct arc rays. 1926.351(e)

When electrode holders are to be left unattended, the electrodes shall be removed and the holder shall be placed or protected so that they cannot make electrical contact with employees or conducting objects. 1926.351(d)(1)

All arc welding and cutting cables shall be completely insulated and be capable of handling the maximum current requirements for the job. 1926.351(b)(1)

There shall be no repairs or splices within 10' of the electrode holder, except where splices are insulated equal to the insulation of the cable. Defective cable shall be repaired or replaced. 1926.351(b)(2) through (4)

Fuel gas and oxygen hose shall be easily distinguishable and shall not be interchangeable. 1926.350(f)(1).

Hoses shall be inspected at the beginning of each shift and shall be repaired or replaced if defective. 1926.350(f)(1) and (3)

General mechanical ventilation, local exhaust ventilation, air-line respirators, and other protection shall be provided, as required, when welding, cutting or heating:

- Zinc, lead, cadmium, chromium, mercury, or materials bearing, based, or coated with beryllium in enclosed spaces;
- Stainless steel with inert-gas equipment;
- In confined spaces; and
- Where an unusual condition can cause an unsafe accumulation of contaminants. 1926.353(b) through (e)

Employees performing any type of welding, cutting or heating shall be protected by suitable eye protective equipment. 1926.353(e)(2).