## **Gas/Cutting Welding Safety**

- 1. Wear personal protective equipment. Wear welding gloves, helmet, leather apron, welding chaps, leather shoes, welding goggles, and other personal protective equipment to help prevent weld burns and injury. Make sure the welding goggles or face shield have at least a No. 4 filter lens. Do not wear clothing made of synthetic fibers while welding.
- 2. **Fasten cylinders securely.** Do not handle cylinders roughly. Chain cylinders in an upright position to a wall or cart. When regulators are not on cylinders, keep safety caps in place. Caps will prevent damage to cylinder valves.
- 3. Never use oil on welding equipment. Oil and grease may ignite spontaneously, when in contact with oxygen.
- 4. **Open cylinder valves correctly.** Open the valve on the acetylene cylinder no more than three-fourths of a turn so it can be closed quickly in case of emergency. Open the valve on the oxygen tank fully. While welding or cutting, leave the valve wrench in position.
- 5. Keep the tip pointed away from your body. Do not saturate your clothing with oxygen or acetylene. Before and while lighting the flame, keep the tip pointed away from your body.
- 6. Light the flame with an approved lighter. Using matches to light the torch brings fingers too close to the tip.
- 7. Set the operating pressure carefully. Never use acetylene at a pressure over 15 psi.
- 8. **Treat the flame with respect.** Keep the flame and heat away from the cylinder, hoses, and people. Never lay down a lighted torch. Be sure the flame is out before laying down the torch. Never walk around with a lighted torch.
- 9. **Control flashbacks and backfires.** Make certain that reverse flow-check valves and flash arrestors are installed on the oxygen and acetylene lines.
- 10. Do not leave the work area until the cylinder valves are closed. Be sure the cylinder valves are closed and pressure is relieved from the hoses before you leave the work area.
- 11. Never stand in front of a regulator while you are opening a tank valve.
- 12. Do not weld or cut on containers that have held flammable materials.
- 13. Remove regulators and replace protective caps before transporting cylinders.
- 14. **Store oxygen cylinders away from acetylene cylinders.** A non-combustible wall at least 5 feet high should be used to separate cylinders.
- 15. **Handle hot metal with pliers or tongs.** Do not leave hot metal on the welding table because unsuspecting persons may touch it and be burned.
- 16. Check connections for leaking gases. To prevent fires or explosions, use soapy water to check connections for leaks.