

Company Name: \_\_\_\_\_ Dept: \_\_\_\_\_ Location: \_\_\_\_\_ Date: \_\_\_\_\_

#39

## WELDING, CUTTING & BRAZING

Safety procedures for welding, cutting, brazing and heating operations based on OSHA Standards 1910 and 1926 should be followed carefully as these are very serious and dangerous operations. Many types of hazards are associated with this type of work and can be made worse by the location of the operation and types of materials involved. Airborne contaminants from welding, cutting, brazing and heating operations can pose health hazards. Most hazardous airborne materials are heavy metals found in welding fumes. Metals are present in paint coatings (chromium and lead), in surface coatings such as zinc on galvanize, and cadmium used to protect surfaces. Very high temperatures that occur during welding, cutting, brazing or heating release these materials in the form of fumes (fine particle smoke). Wherever practical, surfaces shall have coatings removed for at least 4 inches in all directions from the location where the heat or weld will be applied. The backside of the piece shall also be cleaned of coating in the immediate area of the work, if burning this coating will cause hazardous fumes. Removal shall be by means other than burning, i.e. abrasive blasting or grinding. Further, following these guidelines may prevent a potentially fatal accident:

- Only authorized and trained personnel are permitted to use welding, cutting or brazing equipment and those operators should have a copy of operating instructions and be directed to follow them.
- All handling and storage of cylinders, safety valves, relief valves, etc. should be done so with care and away from sources of heat.
- All empty cylinders should be appropriately marked with valves closed and valve caps on.
- Precautions should be taken to prevent the mixture of air or oxygen with flammable gases except at a burner or in a torch.
- Fire extinguishers should be immediately present at all times.
- Signs should be posted reading: NO SMOKING, MATCHES OR OPEN LIGHTS or the equivalent.
- Red should be used to identify acetylene (and other fuel gas), green for oxygen hose and black for inert gas.
- Unless secured on special trucks, regulators should be removed and valve-protection caps put in place before moving cylinders.
- Proper personal protective equipment should be worn at all times when welding, cutting or brazing.

Meeting Conducted By:

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Print Name

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Signature

Meeting Attended By:

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Notes & Suggestions

Document Filing Reference